CHAPTER 1

The problems of historical chronology

"One often comes across accounts of a steel chisel found in the external masonry of the Great Pyramid of Cheops (Khufu, the beginning of XXX century B.C.); however, it is indeed most probable that said tool got there during a later age, when the pyramid stones were pillaged for building purposes."

Michele Giua. *The History of Chemistry.*
Moscow, 1975, page 27, comment 23.

1.
ROMAN CHRONOLOGY AS THE FOUNDATION OF EUROPEAN CHRONOLOGY

Let us give a concise preliminary account of the current state of ancient and mediaeval chronology. The importance of chronology for historical science is all the greater since this discipline allows for the determination of the time interval between the historical event and the current era (provided it can be adequately translated into terms of contemporary chronology, that is to say, it is given a corresponding B.C./A.D. dating). Nearly all the fundamental historical conclusions depend on the dating of the events described in the source that is being studied. An altered or imprecise dating of an event defines its entire interpretation and evaluation. The current global chronology model has evolved owing to the labour of several generations of chronologists in the XVII-XIX century and has Julian calendar datings ascribed to all the major events of ancient history.

The datings of events referred to in some freshly discovered document are predominantly based on the Roman chronology, since it is considered that "all the other ancient chronological datings can be linked to our calendar via direct or indirect synchronisms with the Roman dates" ([72], page 77). In other words, Roman chronology and history are the "spinal column" of the consensual global chronology and history. This is why Roman history shall have to enjoy our very special attention.

2.
SCALIGER, PETAVIUS, AND OTHER CLERICAL CHRONOLOGERS
The creation of contemporary chronology of the ancient times in the XVI-XVII century A.D.

The chronology of ancient and mediaeval history in its present form had been created and, for the most part, concluded in a series of fundamental works of the XVI-XVII century that begins with the writings of Iosephus Iustus Scaliger (1540-1609), called "the founder of modern chronology as a science" by the modern chronologist E. Bickerman ([72], page 82).

Fig. 1.1. Portrait of the chronologer Joseph Scaliger. The caption in [35] reads as follows: "Portrait of Iosephus Iustus Scaliger (1540-1609), the famous philologist and critic of the XVI-XVII century. Engraving from the book by Johannes Mercius titled *Athena Batavia*, page 167." Taken from [35], ill. 8.

Fig. 1.2. The title page of *Rationarium Temporum* by D. Petavius, published in 1652. Taken from [1338]. Mark that the Latin letters *U* and *V* were often subject to flexion in XVI-XVIII century texts.

The mediaeval portrait of I. Scaliger can be seen on fig. 1.1. This is an etching from *Athena Batavia*, a book by Johannes Mercius ([35], page 25).

Scaliger's principal works on chronology are as follows:

1) Scaliger I. *Opus novum de emendatione temporum.* Lutetiac. Paris, 1583 ([1387]).

2) Scaliger I. *Thesaurum temporum.* 1606 ([1387]).

For the most part, the body of Scaliger's work was concluded by Dionysius Petavius (1583-1652). The best-known book of the latter is titled *De doctrina temporum,* Paris, 1627 ([1337]). Figs. 1.2, 1.3, and 1.4 show the title page of his *Rationarium Temporum,* published in 1652 ([1338]), and the titles of the first two volumes.

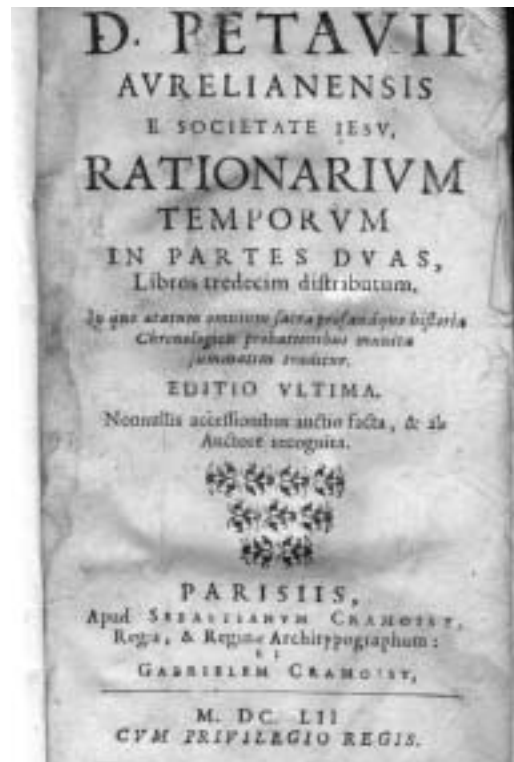Gerhard Friedrich Miller (1705-1783) "revised" the Russian history and chronology in the XVIII century in accordance with Scaliger's scheme. His portrait can be seen on fig. 1.5. See more about the endeavours of Miller and his German colleagues in CHRON4.

Let us mention the works of the XVIII-XIX century, which contain a great array of factual chronological data, such as [1155], [1205], [1236] and [1275]. They are of great value to us since they provide a snapshot of the state of chronology during the epoch of a greater proximity to Scaliger and Petavius. This material is thus of a more primordial nature, not "painted over" by latter cosmetic layers. It must be noted that this series remains incomplete as well as several other similar chronological works. To quote the prominent contemporary chronologist E. Bickerman: "*There has been no chronological research ever conducted that could be called exhaustive and conforming to modern standards*" ([72], page 90, comment 1).

Hence it would be correct to call the modern consensual chronology of the Classical period and the

Fig. 1.3. The title of the first volume of *Rationarium Temporum* by D. Petavius, published in 1652. Taken from [1338].
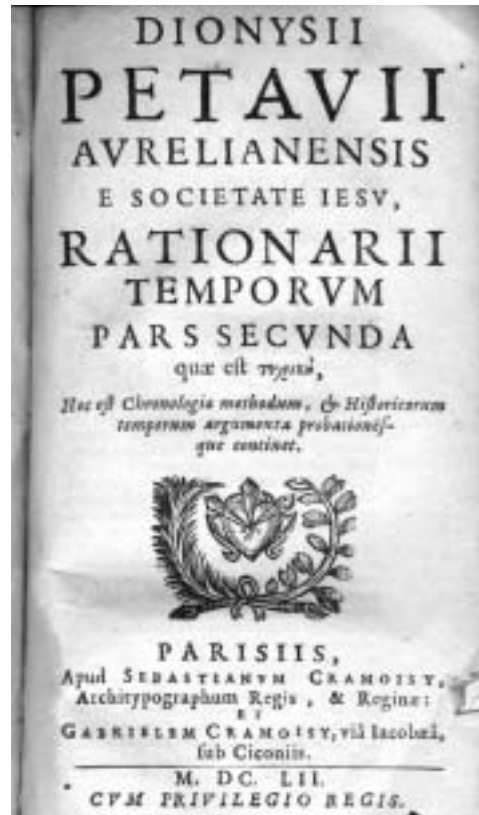

Fig. 1.4. The title of the second volume of *Rationarium Temporum* by D. Petavius, published in 1652. Taken from [1338].

Middle Ages the Scaliger-Petavius version. We shall simply refer to it as "Scaligerian Chronology". As will be pointed out, this version wasn't the only one existing in the XVII-XVIII century. Its veracity has been questioned by eminent scientists.

The groundlaying works of Scaliger and Petavius of the XVI-XVII century present the ancient chronology as a table of dates given without any reasons whatsoever. It is declared to have been based on ecclesiastical tradition. This is hardly surprising, since "history has remained predominantly ecclesial for centuries, and for the most part, was written by the clergy" ([217], page 105).

Today it is believed that the foundations of chronology were laid by Eusebius Pamphilus and Saint Hieronymus, allegedly in the IV century A.D. On fig. 1.6 we have a mediaeval painting of Eusebius Pamphilus of Caesarea dated 1455 ([140], page 80).

It is worth noting that Eusebius of Caesarea is painted in typically mediaeval attire of the Renaissance epoch. Most probably because he had lived in that period of time and not any earlier.

Despite the fact that Scaligerian history ascribes Eusebius to the IV century A.D., during the years 260-340 ([936], vol. 1, page 519), it is interesting to note that his famous work titled *The History of Time from the Genesis to the Nicaean Council,* the so-called *Chronicle,* as well as the tractate by St. Hieronymus (Jerome) weren't discovered until very late in the Middle Ages. Apart from that, historians say that "the Greek original (of Eusebius – A. F.) is only available in fragmentary form nowadays, and is complemented by the ad libitum translation made by St. Hieronymus" ([267], page VIII, Introduction). Mark the fact that Nicephorus Callistus attempted to write the new history of the first three centuries in the XIV century, or "revise" the *History* of

Fig. 1.5. Portrait of the German historian Gerhard Friedrich Miller (1705-1783). Taken from the *Russian Academy of Sciences Courier* ([129], page 880).

Fig. 1.6. "Eusebius of Caesarea, the Chronicler and the Companion of Constantine the Great. A fragment of the mural by Piero della Francesca in the Cathedral of St. Francisco (Frezzo, Italy). 1455." ([140], page 80). One should note that the gap between the Scaligerian dating of the life of Eusebius (the alleged IV century A.D.) and the time of the portrait's creation exceeds a thousand years. This is most probably a result of a chronological shift by roughly 1053 years that transferred Eusebius of Caesarea, who lived in the XV century, into the phantom IV century. Taken from [140], page 80.

Eusebius, but "he could not do more than repeat that which was written by Eusebius", ([267], page XI). However, since the work of Eusebius was only published in 1544 (see [267], page XIII), that is, much *later* than the writing of Nicephorus, one has reason to wonder: Could the "ancient" Eusebius have based his work on the mediaeval tractate by Nicephorus Callistus?

On fig. 1.7 we can see a painting by Cesare Nebbia and Giovanni Guerra that was allegedly created in 1585-1590. According to historians, it depicts a scene "of St. Jerome and his pet lion visiting the library of Eusebius (whose *Chronicle* was translated by Jerome) in Caesarea" ([1374], page 45). What we see here, however, is a typically mediaeval scene of the Renaissance epoch, or maybe even the epoch of the XVI-XVII century. The library shelves are filled with books that look basically the same as those of the XVIII-XIX century,

in hard covers with wide fastening straps. The artists of the XVI-XVII century have most probably painted recent mediaeval events and characters that were cast into the "dark ages" by the latter XVII-XVIII century chronologists of the Scaligerian tradition.

It is assumed that Scaligerian chronology was based on the interpretations of assorted numeric data collected from the Bible. Certain "basis dates" that were used as reference points originated as results of scholastic exercises with numbers. For instance, according to the eminent chronologist J. Usher (Usserius), the world was created on Sunday, 23 October 4004 B.C., in the small hours of the morning ([76]). Mind-boggling precision. One is to bear in mind that the "secular" chronology of the present days is largely based on the scholastic biblical chronology of the Middle Ages. E. Bickerman, a contemporary histo-

rian, is perfectly right to note that "the Christian historians have made secular chronography serve ecclesial history… The compilation made by Hieronymus is the foundation of the entire edifice of occidental chronological knowledge." ([72], page 82).

Although "I. Scaliger, the founding father of modern chronology as a science, had attempted to reconstruct the entire tractate of Eusebius", as E. Bickerman tells us, "the datings of Eusebius, that often got transcribed erroneously in manuscripts (! – A. F.), are hardly of any use to us nowadays" ([72], page 82).

Due to the controversy and the dubiety of all these mediaeval computations, the "Genesis dating", for instance, varies greatly from document to document. Let us quote the main examples:

5969 B.C. – the Antiochian dating according to Theophilus, see other version below;

5508 B.C. – the Byzantine dating, also known as "The Constantinople version";

5493 B.C. – Alexandrian, the Annian era, also 5472 B.C. or 5624 B.C.;

4004 B.C. – according to Usher, a Hebraic dating;

5872 B.C. – the so-called "dating of the seventy interpreters";

4700 B.C. – Samarian;

3761 B.C. – Judaic;

3491 B.C. – according to Hieronymus;

5199 B.C. – according to Eusebius of Caesarea;

5500 B.C. – according to Hippolytus and Sextus Julius Africanus;

5515 B.C., also 5507 B.C. – according to Theophilus;

5551 B.C. – according to Augustine ([72], page 69).

As we can see, this temporal reference point, considered fundamental for the ancient chronology, fluctuates within the span of 2,100 years. We have only quoted the most famous examples here. It is expedient to know that there are about two hundred various versions of the "Genesis date" in existence. On fig. 1.8 you can see an ancient painting of the seventy Bible translators commonly referred to as "the seventy interpreters" today.

The "correct Genesis dating" issue was far from being scholastic, and had been given plenty of attention in the XVII-XVIII century for good reason. The matter here is that many ancient documents date events in years passed "since Adam" or "since the Genesis". This is why the existing millenarian discrepancies between the possible choices of this reference point substantially affect the datings of many ancient documents.

I. Scaliger together with D. Petavius were the first ones to have used the astronomical method for proving – but not examining critically, the late mediaeval version of the chronology of the preceding centuries. Modern commentators consider Scaliger to have ipso facto transformed this chronology into a "scientific"

Fig. 1.7. Painting by Cesare Nebbia and Giovanni Guerra allegedly dated 1585-1590. Depicts St. Jerome visiting the library of Eusebius Pamphilus in Caesarea. We see a typically mediaeval scene of the Renaissance epoch or, possibly, of an even later age. Modern history assures us that all of this happened about a thousand years earlier, in the alleged IV century A.D. Taken from [1374], page 45.
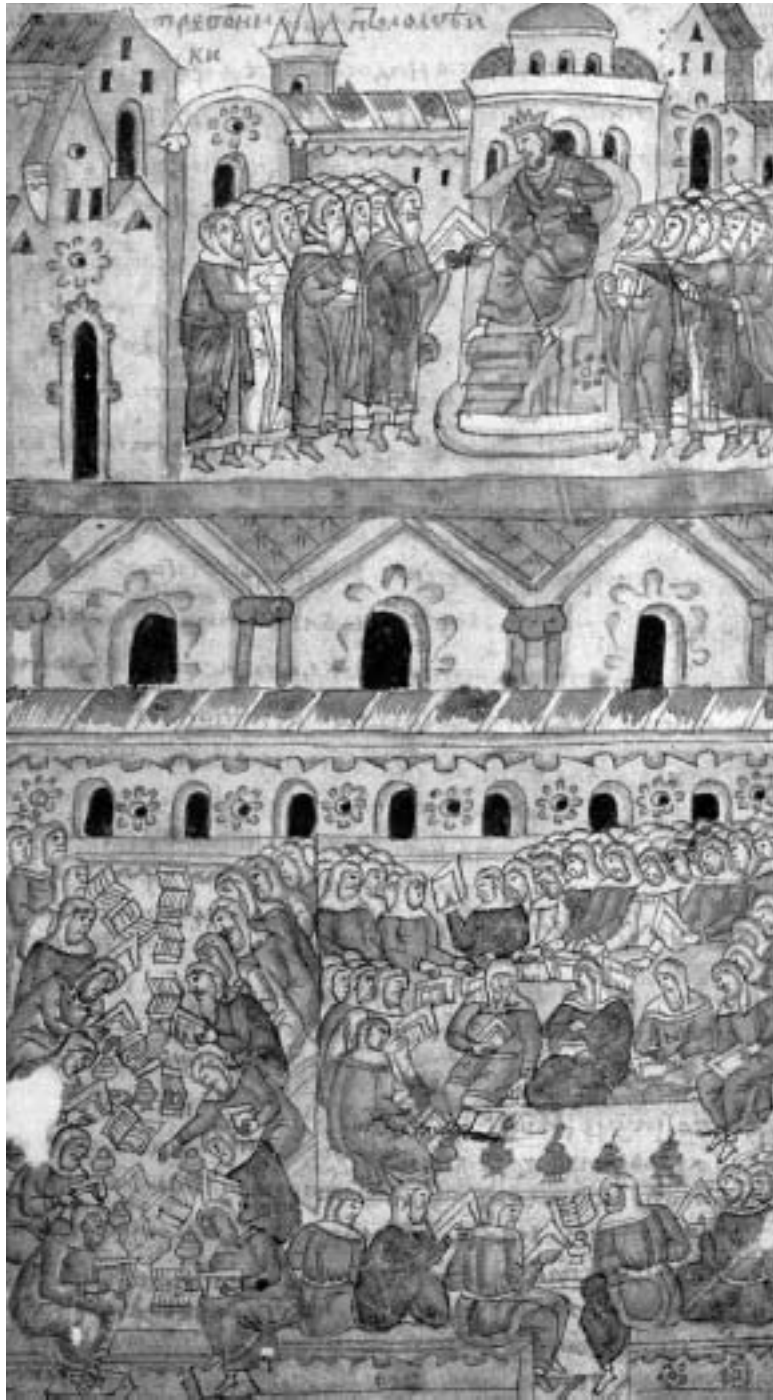
Fig. 1.8. Ancient miniature from the Ostrog Bible, allegedly dated 1581, showing the Bible's translators and interpreters, commonly referred to nowadays as "the 70 interpreters." It is assumed that they were responsible for dating Genesis to 5872 B.C. Taken from [623], page 165. Also see [745], Volume 9, page 17.

one. This "scientific" veneer proved sufficient for the chronologists of the XVII-XVIII century to have invested unquestioning belief in the largely rigidified chronological date grid that they had inherited.

It is very significant that Scaligerian chronology was initially created within the paradigm of the Western European Catholic Church, which had remained in its firm control for a great amount of time. A. Oleinikov wrote, "The mediaeval theologians had often tried to calculate the age of the Earth interpreting assorted data contained in the Holy Writ." On having studied the text of the Bible, *Archbishop* Hieronymus had come to the conclusion that the world had been created 3,941 years prior to the beginning of modern chronology. His colleague Theophilus, the *Bishop of Antiochia,* had extended this period to 5,515 years. St. Augustine had added another thirty-six years; whilst the Irish *Archbishop* James Usher, who had obviously nurtured a fondness for precise numbers, had made the assumption that the world had been created in the early morning hours on 23 October 4004 B.C. ([616], page 8). Many eminent Western European chronologists of the XVI-XVII century have belonged to the clergy. I. Scaliger (1540-1609), for instance, was a theologian; Tischendorf (1815-1874), the founding father of paleography, was a Doctor of Divinity; Dionisius Petavius (1583-1652) – a Jesuit and an author of several theological writings ([82], page 320, comment 5).

Their absolute trust in the infallibility of what the ecclesial chronology told them, determined their entire Weltanschauung. Hence their attitude to the data offered by other disciplines was determined by whether or not it could serve the advocacy of this a priori assumption or the other, invariably based on the mediaeval ecclesial chronology that was later rechristened "scientific".

The fact that the clerical chronologists of the Occidental church have deified the endeavours of their predecessors of the XV-XVI century, excluded the very possibility of criticizing the foundations of chronology in any way at all, even minutely.

I. Scaliger, for instance, could not even conceive of such heresy as running a check on the chronological materials of the holy fathers (Eusebius and others): "Scaliger calls this work by Eusebius (the *Evangelical Preparation* – A. F.), *divine*" ([267], page VIII, Introduction). Trusting the authority of their predecessors

unconditionally, the chronologists reacted at external criticisms very bitterly. The same I. Scaliger makes a perfect demonstration of his attitude toward objective scientific criticisms in the following episode: "The eminent philologist Joseph de Scaliger, the author of the chronology that has received such high scientific acclaim, had turned into a keen quadraturist" ([458], page 130). Let us remind that a "quadraturist" was someone who tried to build a square equalling a given circle (disc) in area, using nothing but a pair of compasses and a ruler. This mathematical problem is insoluble as a principle, which is proven by geometry. However, I. Scaliger had published a book where he claims to have proved the "true quadrature" – which solved the problem, "The best mathematicians of the epoch – Viète, Clavius… have tried their hardest to prove to him that… his reasoning was incorrect – all in vain" ([458], page 130). The point here is that Scaliger's erroneous "proof" made the easy corollary, that the perimeter of an equilateral polygon with 196 angles being greater than that of the circle *circumscribing* it, which is, naturally, quite absurd. Nevertheless, "Scaliger and his supporters, who had a habit of defending their opinions vehemently, didn't want to acknowledge anything… replying… with maledictions and scornful epithets, and finally calling all the geometricians complete ignoramuses in what concerned geometry" ([458], page 130).

One might imagine how these people reacted towards attempts of analyzing their version of chronology critically.

Few are aware that Scaliger and Petavius had brought chronology to "perfection" and "absolutely precise datings" quoting the year, day, month, and sometimes even the time of day for all the principal events in history of humankind. For whatever reason, modern monographies and textbooks usually only quote the years of events according to Scaliger-Petavius, coyly omitting the month, day, and hour. It is verily a step backwards that deprives the chronology calculated in the XVII-XVIII century of its former splendour and fundamentality.

By the XIX century, the accumulated volume of chronological material grew to the extent of inducing respect a priori by its sheer scale, so the chronologists of the XIX century saw their objective in making minor corrections and not much else.
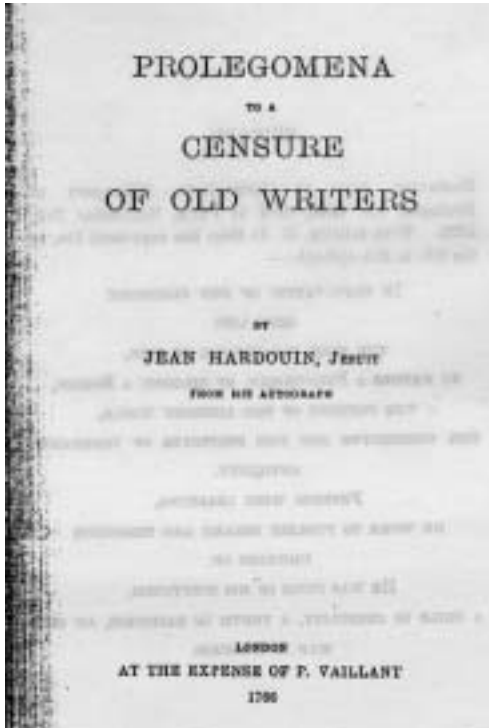
PROLEGOMENA

TO A

CENSURE

OF OLD WRITERS

BY

JEAN HARDOUIN, Jesuit

FROM HIS AUTOGRAPH

LONDON

AT THE EXPENSE OF P. VAILLANT

1766

Fig. 1.9. The title page from one of the books by J. Hardouin, 1776.

THE

PROLEGOMENA

OF

JEAN HARDOUIN

TRANSLATED BY

EDWIN JOHNSON, M.A.

SYDNEY

ANGUS AND ROBERTSON, LTD.

CASTLEREAGH STREET

1909

AUSTRALIAN BOOK COMPANY,

81, WARWICK LANE,

LONDON, E.C.

Fig. 1.10. The title page from J. Hardouin's book in Edwin Johnson's English translation, 1909.

HISTORIE UND KRITIK.

(einige kritische bemerkungen.)

IV. DAS ALTERTUM. [Römer und Griechen.]

C. METRIK UND PROSA.

ROBERT BALDAUF, BASEL.

MAI 1902.

FRIEDRICH REINHARDT, UNIVERSITÄTSBUCHDRUCKEREI, BASEL.

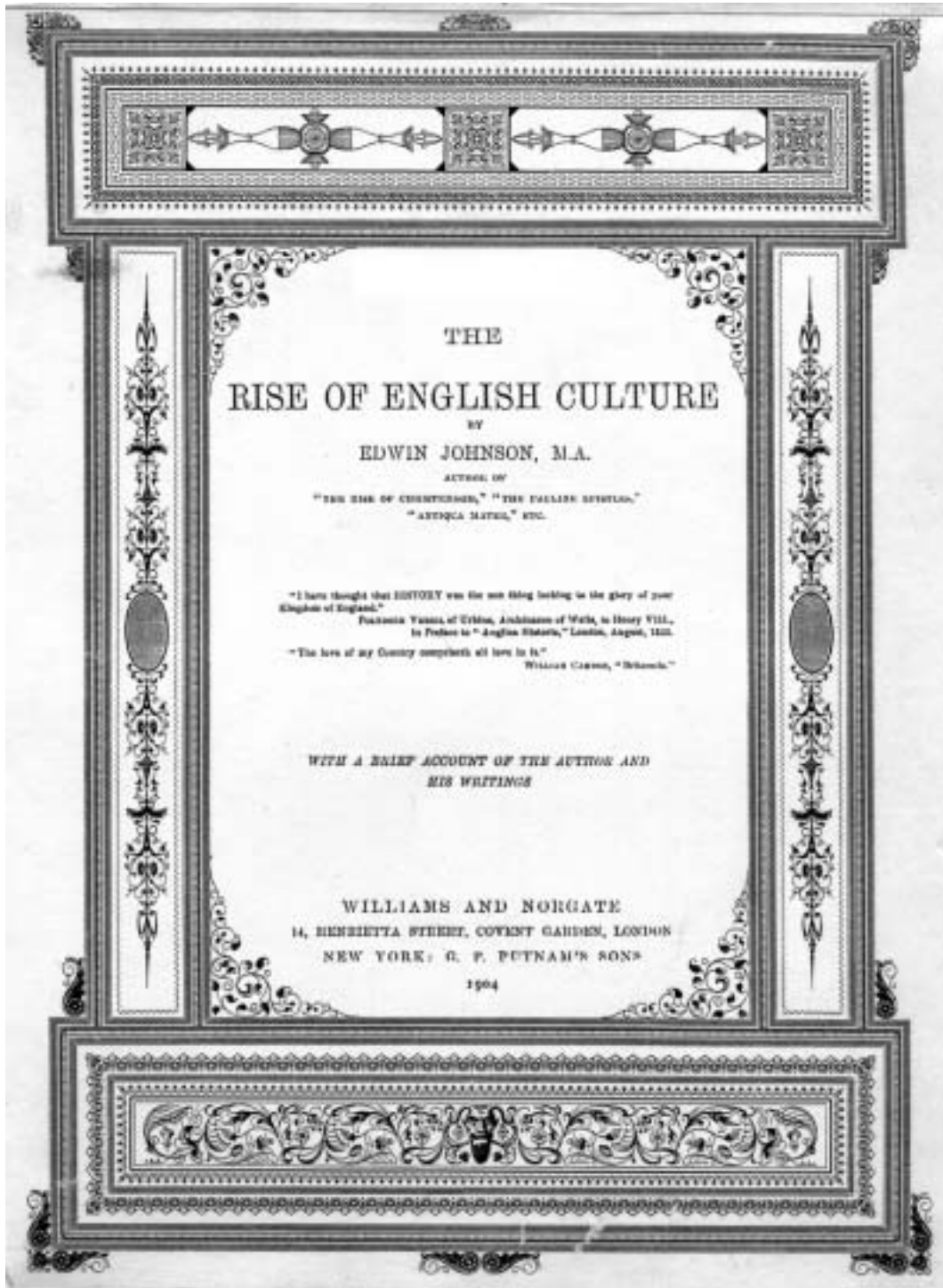Fig. 1.11. The title page from one of R. Baldauf's books, 1902.

Fig. 1.12. The title page from one of E. Johnson's books, 1904.

Fig. 1.13. A portrait of Sir Isaac Newton. Taken from [336], Volume 6, inset between pages 646-647.

The issue of veracity is hardly raised at all in the XX century, and the ancient chronology solidifies terminally in the very shape and form given to it by the writings of Eusebius, Hieronymus, Theophilus, Augustine, Hippolytus, St. Clement of Alexandria, Usher, Scaliger, and Petavius. To someone in our day and age, the very thought that historians have followed an erroneous chronology for about three centuries seems preposterous since it contradicts the existing tradition.

However, as chronology developed, specialists encountered considerable difficulties in trying to correlate the varied chronological data offered by ancient sources with the consensual Scaliger's version. It was discovered, for instance, that Hieronymus misdates *his own time* by a hundred years ([72], page 83).

The so-called "Sassanide tradition" separated Alexander the Great from the Sassanides by an interval of 226 years, which was extended to 557 by contemporary historians ([72], page 83). In this case, the gap exceeds 300 years.

"The Jews also allocate a mere 52 years for the Persian period of their history, despite the fact that Cyrus II is separated from Alexander the Great by 206 years (according to the Scaligerian chronology – A. F.)" ([72], page 83).

The basic Egyptian chronology has also reached us through the filter of Christian chronologists: "The list of kings compiled by Manethon only survived as quotations made by the Christian authors" ([72], page 77). Some readers might be unaware that "The Oriental Church avoided using the birth of Christ as a chronological point of reference since in Constantinople the debates about the date of his birth have continued well into the XIV century" ([72], page 69).

3.
THE VERACITY OF THE SCALIGER-PETAVIUS CHRONOLOGY WAS QUESTIONED AS EARLY AS THE XVI CENTURY

3.1. Who criticized Scaliger's chronology and where

3.1.1. De Arcilla, Robert Baldauf, Jean Hardouin, Edwin Johnson, Wilhelm Kammeyer

The doubts regarding the correctness of the consensual version aren't a recent phenomenon. They have quite a tradition behind them. N. A. Morozov wrote in particular that "the Salamanca University professor de Arcilla had published his works *Programma Historiae Universalis* and *Divinae Florae Historicae* where he had proved that the entire history of the Classical Age was mediaeval in its origin. This is exactly the same point of view that was shared by the Jesuit historian and archaeologist Jean Hardouin (1646-1724), who considered the Classical literature to have been written in monasteries during the preceding XVI century… The German Privatdozent Robert Baldauf wrote his *History and its Criticisms* in 1902-1903, proving that not only ancient history, but even that of the early Middle Ages, is a forgery of the Renaissance epoch and the subsequent centuries with the use of nothing but philological arguments" ([544], volume 7, pages VII-VIII, Introduction).

You can see the title page of one of Jean Hardouin's books on fig. 1.9, and that of its translation by Edwin

Johnson on fig. 1.10. Fig. 1.11 shows us the title page of one of Robert Baldauf's writings.

The eminent English scientist Edwin Johnson (1842-1901), the author of several remarkable critical studies of ancient and mediaeval history, gave some severe and serious criticisms of Scaligerian chronology, fig. 1.12. The main conclusion that Edwin Johnson had arrived to over his many years of chronological research, was formulated thusly: "We are a lot closer in time to the Greeks and the Romans than what the chronological tables tell us" ([1214], page XXX). Edwin Johnson called for the revision of the entire edifice of the ancient and mediaeval chronology! His principal works were published in the late XIX – early XX century ([1214] and [1215]).

See more details concerning the research of Jean Hardouin, Robert Baldauf, and Wilhelm Kammeyer in the work by E. Y. Gabovitsch (Karlsruhe, Germany) quoted in Chron7, Appendix 3.

3.1.2. Sir Isaac Newton

"Isaac Newton (1642-1727), an English mathematician, mechanician, astronomer, and physicist, the creator of classical mechanics, member of the Royal Society of London since 1672 and its president since 1703… had developed differential and integral calculus (independently from G. Leibnitz). He had discovered light dispersion and chromatic aberration, researched diffraction and interference, worked on the development of the corpuscular theory of light, made a hypothesis that combined the concepts of waves and particles, as well as building the reflecting telescope, formulating the principal laws of classical mechanics, discovering the Gravity Law, formulating the theory of movement of celestial bodies and the founding principles of celestial mechanics" (*The Soviet Encyclopaedic Dictionary*, Moscow, 1979, page 903). See fig. 1.13 for a portrait of Sir Isaac Newton.

Sir Isaac Newton occupies a special place among the critics of the Scaliger-Petavius version. He is the author of a number of profound works on chronology where he relates his conclusions regarding the inveracity of Scaliger's version in some of its principal parts. This research remains rather obscure for the contemporary reader despite having provoked major controversy in the past. The main chronological works of Newton's are the following ([1298]):
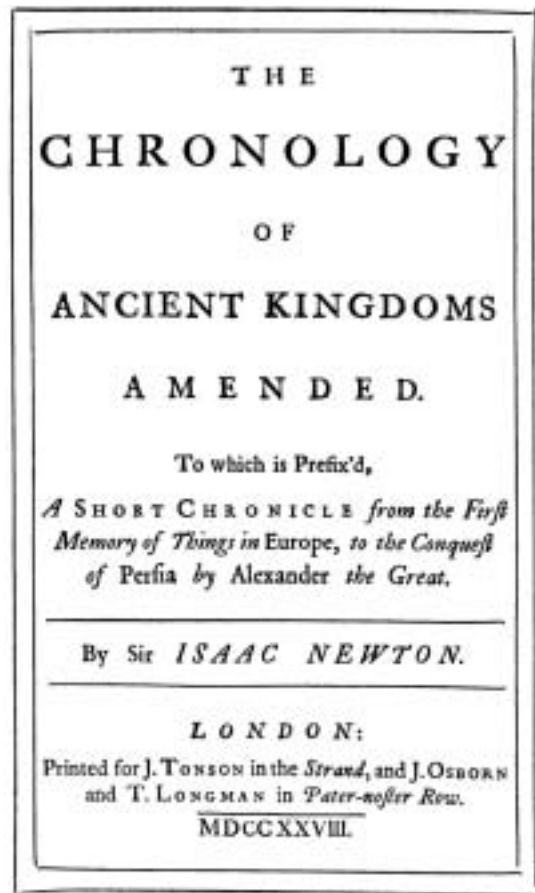

Fig. 1.14. The title page from the book by Sir Isaac Newton called *The Chronology of Ancient Kingdoms amended. To which is Prefix'd, A Short Chronicle from the First Memory of Things in Europe, to the Conquest of Persia by Alexander the Great* (London, J. Tonson, 1728). Taken from [1298].

1) *A short Chronicle from the First Memory of Kings in Europe to the Conquest of Persia by Alexander the Great*;

2) *The Chronology of Ancient Kingdoms Amended*, fig. 1.14.

Newton made a radical revision of the ancient chronology based on natural scientific ideas. Some – very few – events were *added extra age*. This is true of the legendary voyage of the Argonauts, which Newton determined to have occurred in the XIV century B.C. and not in X B.C., as was believed in his time period. However, the dating of this event is rather vague in later chronological studies of other chronologers as well.

The new chronology offered by Sir Isaac is a lot shorter than the consensual chronology of Scaliger. Newton moved most of the events dated as preceding the epoch of Alexander the Great, forward in time, *closer to us*. The revision isn't as radical as that contained in the writings of N. A. Morozov, who was of the opinion that the Scaligerian version of ancient chronology was only veracious starting in the IV century A.D. Let us mark that Newton did not go further in time than the B.C./A.D. mark in his research.

Contemporary historians have this to say about these works of Newton's: "They are the fruit of forty years of labour, diligent research and a tremendous erudition. Basically, Sir Isaac Newton had studied all of the major literary works on ancient history and all the primary sources beginning with ancient and oriental mythology" ([619], pages 104-105).

Modern commentators invariably come to the conclusion that Sir Isaac was wrong when they compare his conclusions to the consensual Scaligerian chronology. They say that:

"Naturally, without deciphered cuneiform and hieroglyphic writings, having no archaeological data due to the *non-existence of archaeology in that age,* bound by the presumption of veracity of the Biblical chronology and the belief in the reality of what was told in myths, Newton's errors weren't measured in mere tens of hundreds of years – he was thousands of years off the mark, and his chronology is far from being true even in what concerns the very reality of the events described. W. Winston wrote in his memoirs, 'Sir Isaac often saw the truth in mathematics intuitively, without even needing proof… But this very Sir Isaac Newton had compiled a chronology… However, this chronology isn't any more convincing than the most ingenious historical novel, as I have finally proved in my refutation thereof. O, how weak, how utterly weak even the greatest of the mortals can be in some regards'" ([619], pages 106-107).

What did Sir Isaac suggest exactly? Basically, he had analyzed *the B.C. chronology* of Ancient Egypt and Ancient Greece. He must have lacked the time for the analysis of more recent epochs, since this tractate only got published in the last year of his life.

For instance, the contemporary consensual version of chronology ascribes the first years of reign of the Egyptian Pharaoh Menes to approximately 3000

B.C. ([1298]). Newton suggested that this event could be given a date as recent as 946 B.C. ([1298]). Thus, the shift forward in time comprises about 2000 years.

Nowadays the myth of Theseus is dated to the XV century B.C. However, Sir Isaac claimed that these events took place around 936 B.C. ([1298]). Hence, the shift of dates forwarded that he suggests amounts to roughly 700 years.

The famous Trojan War is dated to roughly 1225 B.C. today ([72]), but Newton claims this event to have occurred in 904 B.C. ([1298]). The shift forward here is one of approximately 330 years. Et cetera.

Newton's main conclusions may be encapsulated as follows: He moves a part of the history of Ancient Greece about 300 years forward in time, closer to us. The history of Ancient Egypt, covering a span of several hundred years according to Scaliger, that is, 3000 B.C. and on, is moved forward in time by Newton and compressed into a time period as short as 330 years, namely, 946 B.C. – 617 B.C. Newton also moves some fundamental dates of the "ancient" Egyptian history about 1,800 years forward in time ([1298]).

Sir Isaac Newton only managed to revise the dates preceding 200 B.C. His observations were of a rather eclectic nature, and he could not find any system in these apparently chaotic re-datings.

We shall also briefly relate the publication history of Newton's work as told by the book [1141], which may lead one to certain conclusions. Newton seemed to have been wary of the plethora of complications that the publication of his tractate on chronology could lead him to. This work of his had commenced many years before 1727. The book had been re-written numerous times up until his death in 1727. It is noteworthy that the *Short Chronicle* wasn't intended for publication by its author; however, the rumours of Newton's chronological research had spread far enough, and the Princess of Wales expressed a wish to familiarize herself with it. Sir Isaac gave her the manuscript with the condition that no third party should learn of it. The same happened with Abbé Conti (Abbot Conti), who had started to lend the manuscript to interested scientists upon his return to Paris.

As a result, M. Freret had translated the manuscript into French and added his own historical overview to it. This translation had soon reached the

Paris bookseller G. Gavellier, who had written Newton a letter in May 1724 eager to publish his writing. Not having received an answer, he wrote another letter in March 1725, telling Newton that he would consider Sir Isaac's taciturnity as acquiescence for the book's publication, with Freret's comments. No reply was given to that, either. Then Gavelier had asked his friend in London to get a reply from Newton personally. Their meeting took place on 27 May 1725, and Sir Isaac answered in the negative. But it was too late. The book had already been published under the following title: *Abrégé de Chronologie de M. Le Chevalier Newton, fait par lui-même, et traduit sur le manuscript Angélois (With observation by M.Freret)*. Edited by the Abbé Conti, 1725.

Sir Isaac received a copy of the book on 11 November 1725. He had published a letter in the *Philosophical Transactions of the Royal Society* (v. 33, 1725, page 315), where he accused the Abbé of breach of promise and publication without the author's consent. When Father Souciet started his attacks in 1726, Sir Isaac had announced the preparation of a more voluminous and detailed work on ancient chronology for publication.

All of these events took place shortly before Newton's death. He had sadly lacked the time for publishing a more in-depth book, and none of its traces remain in existence. Sir Isaac died in 1727, leaving his research of ancient history unfinished.

Could all this complicated history of the *Short Chronicle*'s publication be explained by Newton's fear of groundless attacks? What was the reaction to the publication of his book?

The mid-XVIII century press had seen a multitude of responses. Most of them were made by historians and philologists, and had voiced such negative opinions as "the blunders of the honoured dilettante" in regard to Newton's work. Only very few articles appeared that expressed support of his opinion. After the initial wave of responses subsided, the book was de-facto hushed up and withdrawn from scientific circulation.

In the XIX century, François Arago, the author of the revue ([30:1]), presumed Newton's chronological research unworthy of more than the following rather flippant remark: "By and large, Newton failed to come up with correct judgments in everything ex-

cepting mathematics and its applications… Apart from his theological opuses, the chronology that he had written is there to confirm our statement – the one Freret refuted immediately upon publication." Most probably, Arago decided not to get involved in the issue, and had quoted Freret's opinion without thinking twice about it.

Cesare Lombroso tries to bring the issue to conclusion in his notorious *Genius and Insanity* in the following manner: "Newton, whose mind amazed the entire humanity, as his contemporaries rightly state, was yet another one to have gone senile in his old age, although the symptoms in his case weren't quite as grave as those of the geniuses listed above. That must have been the time when he had written his *Chronology, Apocalypse* and *Letter to Bentley*, obscure, involved writings, quite unlike anything that he had written in his youth" ([462:1], page 63).

Similar accusations would later be addressed at N. A. Morozov, another one to have dared to revise chronology. They sound most peculiar in a scientific discussion, and, as we think, mask the inability to reply substantially.

3.1.3. Nikolai Alexandrovich Morozov

S. I. Vavilov wrote the following about N. A. Morozov: "N. A. Morozov managed to combine his selfless revolutionary devotion to his people with a completely amazing dedication to scientific work. This scholarly enthusiasm and this completely unconditional passionate love for scientific research should remain an example to be followed by all scientists, young and old" (Sergei Ivanovich Vavilov, *Essays and memoirs*, Moscow, Nauka Publishing, 1981, page 284).

The first researcher of our time who had raised the issue of providing scientific basis for the consensual chronology in its fullness and quite radically was Nikolai Alexandrovich Morozov, figs. 1.15, 1.16., 1.17. On fig. 1.18 we can see a monument to N. A. Morozov, and on fig. 1.19 – his museum home in the town of Borok in the Yaroslavl region.

N. A. Morozov (1854-1946) was an eminent Russian scientist and encyclopedist whose fortune was far from easy.

Morozov's father, Peter Alexeyevich Shchepochkin, was a rich landowner and belonged to the old aristocratic Shchepochkin family, see fig. 1.20. N. A. Mo-

Fig. 1.15. A portrait of N. A. Morozov dated 1878. Taken from [687], Volume 1.

Fig. 1.16. A portrait of N. A. Morozov. Taken from [687], Volume 2.

Fig. 1.17. A portrait of N. A. Morozov. Taken from [583].

Fig. 1.18. Monument to N. A. Morozov on his grave in Borok, in the Yaroslavl Region. Taken from [583], p. 27.

Fig. 1.19. The museum home of N. A. Morozov in Borok. Taken from [583], page 223.

Fig. 1.20. Peter Alexeyevich Shchepochkin, father of N. A. Morozov. Taken from [141], page 6.

Fig. 1.21. Anna Vasilievna Morozova, mother of N. A. Morozov. Taken from [141], page 7.

Fig. 1.22. The title page of the *Memoirs* by N. A. Morozov.

rozov's great-grandfather was a relation of Peter the Great. N. A. Morozov's mother was a simple serf peasant, Anna Vasilievna Morozova, whom P. A. Schepochkin married, after signing her liberty certificate. The church didn't confirm the marriage, and so the children received their mother's surname.

At the age of twenty, N. A. Morozov joined the libertarian Narodnaya Volya movement. In 1881 he was sentenced for incarceration in Schliesselburg for life, where he had studied chemistry, physics, astronomy, mathematics and history, all on his own. In 1905 he was let free, having spent 25 years in gaol. After having received his freedom, he had immersed himself in a vast body of scientific and pedagogical work. His *Memoirs* are of the greatest interest, see fig. 1.22. Many authors wrote about N. A. Morozov – his literary biography, for example, was written by M. A. Popovsky ([675]).

After the October revolution, Morozov became Director of the Lesgaft Institute for Natural Scientific Studies, where he had done the major part of his famous research in ancient chronology with the use of natural scientific methods, supported by enthusiasts and the staff of the Institute.

After N. A. Morozov left his Director's office, the Institute was completely reformed, possibly with the objective of casting the important historical research conducted there by N. A. Morozov and his group into oblivion.

N. A. Morozov was made Honourable Member of the Russian Academy of Sciences (which became the USSR Academy of Sciences in 1925), decorated with the Order of Lenin and the Red Banner of Labour. More about the body of his prominent work in chemistry and several other natural sciences can be read in such publications as [146], [147], [582], [583] and [584]. The official reference book of the USSR Academy of Sciences published in 1945 ([811]) lists the Honourable Members the Academy had in 1945. There were just three – N. F. Gamaleya, N. A. Morozov, and J. V. Stalin ([811], pages 37-38). Nikolai Alexandrovich Morozov is described as follows: "Elected in 1932, known by his works on a variety of astronomical, meteorological, physical, and chemical problems. Merited Scientist of the Soviet Republic of Russia. Honorary member of the Muscovite Society for Natural Studies. Lifelong member of La Société Astronomique de France. Lifelong member of the British Astronomical Association" ([811], page 37).

In 1907, N. A. Morozov published a book titled *Revelations in Storm and Tempest* ([542]) where he analyzed the dating of the New Testament Apocalypse and came to conclusions that contradicted the Scaligerian chronology. In 1914, he published *The Prophets* ([543]), which contains a radical revision of the Scaligerian datings of the Biblical prophecies. In 1924-1932, N. A. Morozov published the fundamental work *Christ* in seven volumes ([544] see figs 1.23 and 1.24). The initial name of this opus had been *The History of Human Culture from the Natural Scientific Point of View.* It contains detailed criticisms of the Scaligerian chronology. The important fact discovered by Morozov was that the consensual Scaligerian chronology is based on an unverified concept.

Having analyzed a great body of material, N. A. Morozov put forth and partially proved the fundamental hypothesis that Scaliger's chronology had been expanded arbitrarily as compared to reality. This hypothesis was based on the "repetitions" that N. A. Morozov had found, namely, the texts that apparently described the same events, but are dated differently and

Fig. 1.23. The cover of the first volume of N. A. Morozov's œuvre titled *Christ*, 1927.

Fig. 1.24. The title page of the first volume of N. A. Morozov's *Christ*, 1927, the State Publishing House, Moscow-Leningrad.

considered unrelated in our time. The publication of this work caused vivid discussions in the press, and its repercussions can be found in contemporary literature. There had been a number of rational counter-arguments, but the critical part of *Christ* remained undisputable in its entirety.

Apparently, N. A. Morozov had been unaware of the similar works of Sir Isaac Newton and Edwin Johnson that were all but forgotten by his time. This makes the fact that many of Morozov's conclusions coincide with those of Newton and Johnson all the more amazing.

However, N. A. Morozov raised the issue as a much wider and more profound one, having encompassed the entire period up to the VI century in the frame of critical analysis, and found the need for a radical revision of datings. Despite the fact that N. A. Morozov had also failed to discover any sort of system in the chaos of altered datings that arose, his research was performed on a higher qualitative level than Newton's analysis. N. A. Morozow was the first scientist to have possessed the clear understanding of the ne-

cessity of revising the datings of mediaeval events as well as those belonging to "ancient history". Nevertheless, N. A. Morozov did not go further than the VI century A.D. in time, considering the consensual version of the chronology of the VI-XIII century to be basically correct. We shall yet see that this opinion of his turned out to have been gravely erroneous.

Thus, the issues raised in our works are hardly new. The fact that they recur century after century, and get voiced ever louder, shows that the problem in question does exist. And the fact that the independently suggested alterations of the ancient chronology – those of I. Newton, E. Johnson, and N. A. Morozov – are close to each other in principle is a clear witness that the solution to the problem we're studying lies somewhere in this direction.

It is worthwhile to give a brief account of the creation of Morozov's *Christ*. His ideas met vehement opposition as early as during the publication stage. N. A. Morozov had to address Lenin as the Head of State personally in 1921 and ask him for support. V. I. Lenin had delegated the study of this issue to

A. V. Lunacharsky. Let us quote Lunacharsky's reply dated 13 April 1921:

"From Lunacharsky to Lenin, C 13.IV.1921,

Dear Comrade Lenin,

I have received your request in re Morozov's book *Christ* signed by Comrade Gorbounov. It would please me greatly to delegate this matter to the editing board responsible for such matters. I, for one, am familiar with the work in question. It is a perfectly preposterous thing that uses a ridiculous demonstration to prove the date of the solar and lunar eclipses that the Gospel refers to as having accompanied the Crucifixion and occurred on Friday, that Christ had lived in the fifth century and not in the first, and uses this data to deny the existence of such historical characters as Julius Caesar, who turns out to have really been identified as Julian the Apostate, Augustus, etc., also suspecting the falsification of the writings of Cicero, Horace, etc., as really referring to the Middle Ages, etc., etc.

I like and respect Morozov a lot, but this book is so bizarre that its publication shall definitely bring harm to the name of the author and the State Publishing House.

If serious science treated Morozov's demonstration concerning the Apocalypse with great suspicion, the book *Christ*, in its turn, can be regarded as completely absurd and based on the same scientific one-sidedness.

If you consider this reply of mine not to be competent enough, I'll be glad to hand the book over to specialists for consideration.

The People's Commissar A. Lunacharsky." ([488], pages 271-272).

Shortly afterwards, having met N. A. Morozov personally and witnessed the detailed scientific report that the scientist had made during their meeting, A. V. Lunacharsky had radically changed his mind about the book and sent the following missive to Lenin as early as 12 August 1921, in complete contradiction of his previous letter:

"From Lunacharsky to Lenin,

12 August 1921.

To the State Publishing House, with a copy to be delivered to the Committee of People's Commissars.

Although I could not familiarize myself with the actual manuscript of Comrade Morozov's voluminous opus *Christ and His Time,* an oral report of its contents made by the author and a demonstration of several tables made me consider its publication as a matter of considerable importance, one that is to be addressed as soon as possible.

Since the work is rather large (three volumes, fifty sheets all in all), and seeing as how we still haven't emerged from the state of acute paper crisis, I would offer the Petersburg branch of the State Publishing House to cut the edition down to 4,000 copies at least, in order to get it published without delay.

People's Commissar of Education Lunacharsky." ([488], page 308).

The comment of the editors is also noteworthy ([488]):

"The contradiction between the two Lunacharsky's letters to Lenin dated 13 April and 12 August respectively can be explained by the fact that Lunacharsky had revised his initial reply. The complete collection of Lenin's works *erroneously* states that Lunacharsky expressed a negative opinion of Morozov's work later on calling it non-scientific in vol. 53, page 403, comment 145" ([488], page 310).

Nevertheless, the first volume of *Christ* took three more years to be published in 1924. Morozov had to request support from the government yet again. This time it took the participation of F. E. Dzerjinsky. Here is a fragment of F. E. Dzerjinsky's letter to Morozov dated 14 August 1924:

"Dear Nikolai Alexandrovich,

…I am prepared to provide any assistance you may need in order to get your writing published – just tell me what I have to do exactly, what obstacles need to be removed and what people I need to talk to.

I will be most glad if I manage to be of use to you in any way at all.

14/VIII. Kindest regards, F. Dzerjinsky"

All of the above notwithstanding, in 1932, after the publication of the seventh volume of *Christ*, Morozov's opponents had finally succeeded in stopping the publication of his further materials on the topic.

3.1.4. Recent publications of German scientists containing criticisms of Scaliger's chronology

In the period since the publication of our works on chronology, which started to appear in 1980, several German scientists have also published the rather interesting results of their research containing a critical

analysis of the Scaligerian chronology. The first of these publications appeared in 1996; the ones we consider the most noteworthy are those written by Uwe Topper ([1462] and [1463]), as well as Heribert Illig's *Was There Really a Charlemagne?* ([1208]) which claims that many documents which we ascribe to Charlemagne's epoch today are really more recent forgeries, and builds a hypothesis that one needs to withdraw about three centuries from the mediaeval history, including that of Charlemagne's age.

It has to be said that the chronological obtruncation suggested by Heribert Illig is of a local nature; Illig and his colleagues are of the opinion that the contradictions they noticed in the Scaligerian history can be resolved by minor corrections, such as subtracting 300 years from the history of mediaeval Europe. Our works demonstrate the deficiency of such local expurgations; what we claim is that the entire edifice of the Scaligerian chronology needs a cardinal revision in all that concerns the times preceding the XIII-XIV century A.D.

The veracity of the Scaligerian chronology of "ancient" Egypt is questioned in *When Did the Pharaohs Live?* by Gunnar Heinsohn and Heribert Illig. One has to mention that the authors fail to make so much as a passing reference to the scientific œuvres of N. A. Morozov which were published in the early XX century. Morozov's epic body of work entitled *Christ,* which was published in 1924-1932 and questioned the entire chronology of "ancient" Egypt, pointed out the numerous "collations" of Egyptian dynasties and reasoned the necessity of a substantial concision of the "ancient" Egyptian history. Alack and alas, there are no known translations of Morozov's works except for the *German* text of the *Revelations in Storm and Tempest.* Despite our numerous appeals, Herbert Illig and his colleagues still refuse to recognize the existence of Morozov's research; it was only recently that the alternative History Salon presided over by Professor E. Y. Gabovitsch finally managed to get the name of N. A. Morozov mentioned in German scientific debates.

We should also point out Gunnar Heinsohn's *Assyrian Rulers Equalling Those of Persia* ([1185]), where certain parallels are drawn between the comparative "ancient" histories of Assyria and Persia. However, Heinsohn fails to raise the possibility of transferring the events of that age into the mediae-val epoch, leaving them in the "antediluvian" historical period, which we see as a mistake.

The suggestively titled *C-14 Crash* by Christian Blöss and Hans-Ulrich Niemitz ([1038]) is also interesting and contains a voluminous body of evidence used by the authors to question the feasibility of using the radiocarbon analysis method (in its current state, at least), as well as the dendrochronological method, for the dating of historical artefacts with any degree of proficiency. Also see the bulletin [1491].

3.2. The questionnable veracity of the Roman chronology and history. The hypercritical school of the XIX century

Let us give a brief account of the situation with the Roman chronology, which has played a leading role in the chronology globally attributed to ancient times. Fundamental criticisms of the tradition commenced as early as the XVIII century, in the Academy of Scriptures and Fine Arts that was founded in Paris in 1701 and two decades later hosted extensive discussions about the veracity of the entire Roman tradition (Pouilly, Freret, etc). The accumulated materials provided the basis for the more in-depth criticisms of the XIX century.

One of the prominent representatives of this important scientific current, later dubbed *hypercriticism,* was the well-known German historian Theodor Mommsen, who pointed out discrepancies between accounts in such passages as:

"Despite the fact that Tarquin the Second had already been an adult by the time his father died, and that his reign had started thirty-nine years after that, he got inaugurated as a *young lad.*

Pythagoras, who had arrived in Italy almost an entire generation before the exile of the kings [which is supposed to have happened around 509 B.C. – A. F.] is nevertheless supposed to have been a friend of Numa Pompilius" ([538], page 876).

Historians are of the opinion that Numa had died around 673 B.C. The discrepancy here reaches a century at least. To carry on quoting from T. Mommsen:

"The state ambassadors who went to the city of Syracuse in the year 262 since the foundation of Rome, had conversed with Dionysius the Senior, whose reign started *eighty-six years later.*" ([538], page 876)
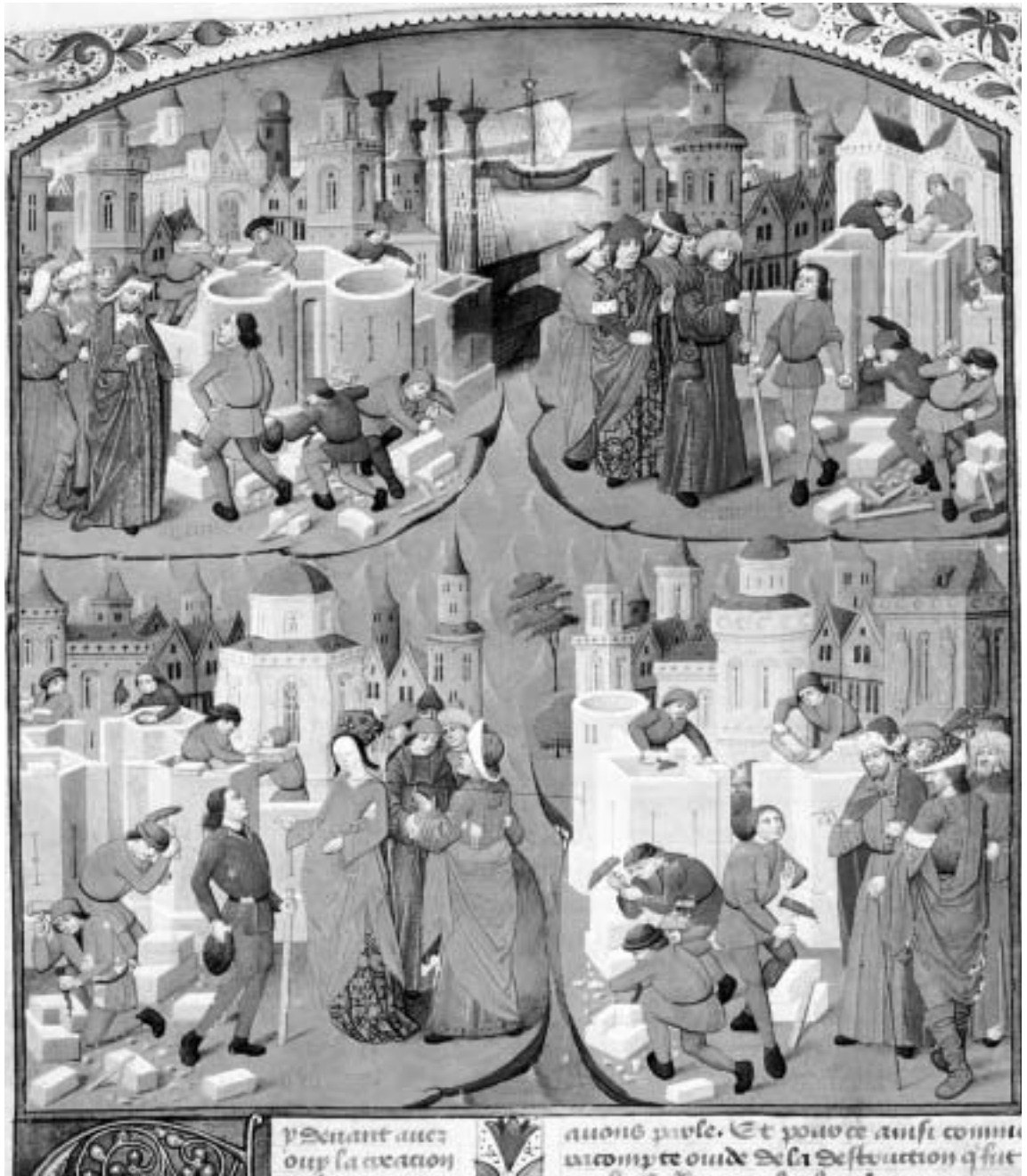
Fig. 1.25. Ancient miniature from Jean de Courcy's **Global Chronicle (Chronique de la Bouquechardière)**, titled *Trojans Founding Cities: Venice, Cycambre, Carthage, and Rome* ([1485], page 164). The Trojan War and the foundation of the Italian Rome are thus made practically simultaneous, although Scaliger's chronology separates these events by 500 years. Taken from [1485], ill. 201.

Fig. 1.26. Close-up of a fragment of the miniature. A curious detail is the warm fur hat with earflaps on the head of one of the Trojan kings. Taken from [1485], ill. 201.

Fig. 1.27. Close-up of a fragment of the miniature. A curious detail is the warm fur hat with earflaps on the head of one of the Trojan kings. Taken from [1485], ill. 201.

What we see is a deviation of about eight decades.

The Scaligerian chronology of Rome is constructed upon a most flimsy foundation indeed. The time interval between different datings of the foundation of Rome, which is a date of the greatest importance, is as large as 500 years ([538], page 876, or [579], pages 23-24).

According to Hellanicus and Damastus, who are supposed to have lived in the IV century B.C., and whose opinion on this matter was later supported by Aristotle, Rome was founded by Aeneas and Ulysses, and named after the Trojan woman Roma ([579], pages 23-24). Several mediaeval authors concurred with this as well; in Jean de Courcy's *Chronique de la Bouquechardière (Global Chronicle)*, we see a miniature notably named "Trojans Founding Cities: Venice, Cycambre, Carthage, and Rome" ([1485], pages 164, 165). The miniature can be seen in fig. 1.25. One has to remark that it represents a mediaeval scene, and that the two Trojan kings who have arrived to inspect the building site are wearing warm fur hats with earflaps, q.v. figs. 1.26 and 1.27.

Thus, the foundation of Rome occurs immediately after the Trojan War which both Aeneas and Ulysses took part in. But in the consensual chronology of Scaliger, the interval between the Trojan War, which allegedly took place in the XIII century B.C., and the foundation of Rome, which is said to have occurred in the VIII century B.C., is 500 years. This means that either:

- the foundation of Rome took place 500 years later than is generally thought;
- the Trojan War occurred 500 later; or
- the chronographers are deliberately lying about Aeneas and Ulysses founding Rome.

Also, what happens to Romulus in this scenario? Could Romulus have been another name for Ulysses? A lot of questions arise, as you can see, and they only increase in number once we start delving further in.

A propos, according to a different version the city was named by Romus, the son of Ulysses and Circe. Could this mean that Romus (or Remus, the brother of Romulus) was the son of Ulysses? This would be impossible within the paradigm of Scaliger's chronology, naturally.

The historian B. Niese has the following to say about it:

"Rome, as well as many other Italian cities, was con-

sidered to have been founded by the heroes of Greece and Troy that wound up in those parts – there is a variety of legends to prove it. The most ancient one, the one that was quoted by Hellanicus and Damastus as early as the IV century B.C., and later by Aristotle, claims that the City was founded by Aeneas and Ulysses, and received its name after the Trojan woman Roma… Another version suggests Romus, the son of Ulysses and Circe, to have been its founder." ([579], page 23)

Let us reiterate that there are about 500 years separating this date from the consensual one.

Such tremendous fluctuations in the determination of a date as important as that of the Foundation of the City (Rome) affect the datings of a great number of documents using it as a temporal reference point. The well-known *History* by Titus Livy is one of them. Actually, the identification of the City with the Italian Rome is one of the hypotheses of the Scaligerian chronology. The possibility that the City could have been the famous *Rome upon the Bosporus*, or Constantinople, also known as *Czar-Grad,* or the City of the Kings, cannot be excluded.

By and large, historians are of the opinion that "the traditional Roman history has reached us via the works of a mere handful of authors; the most fundamental one doubtlessly being the historical opus by Titus Livy" ([719], page 3). It is alleged that Titus Livy was born around 59 B.C., and described a 700-year period of Roman history. 35 books survived out of his original 144. The first publication of his writings took place in 1469, and was based *on a manuscript of unknown origin currently lost* ([719], page 3). The discovery of a manuscript with five more works occurred in Hessen some time later ([544]).

T. Mommsen wrote:

"In what concerns… the global chronicle, everything was a lot worse… The development of the historical science gave hope for traditional history to be verified by documents and other dependable sources, but the hope was buried in complete frustration. The more research was conducted and the deeper it went, the more obvious the difficulties in writing a critical history of Rome became."([539], page 512)

Furthermore, Mommsen tells us that:

"…*the numeric inveracities* have been systematic in his works [referring to Valerio Anciate – A. F.] until the contemporary historical period… He [Alexander Polyhistor – A. F.] gave an example of putting the missing five hundred years that had passed since Troy fell and until Rome had been founded into chronological perspective [we have to remind the reader that according to a chronological version that differs from the consensual one, Rome was founded immediately after the Fall of Troy ([579], pages 23-24) – A. F.]… having filled this period with a list of ghostly rulers, just like the ones that were used widely by the chronographers of Egypt and Greece; apparently, he was the one who brought the kings Aventinus and Tiberinus, as well as the Albanian clan of Sylvians, into existence. The descendants didn't miss their opportunity to invent first names and periods of reigning – they even painted portraits for better representation." ([539], pages 513-514)

These criticisms are also reviewed by Niese ([579], pages 4-6).

Theodor Mommsen was far from being the only scientist to suggest the revision of these most important dates from the "ancient times".

A detailed account of what the historians later labelled the "ultra-sceptical stance" – the version questioning the veracity of the chronology of the "Royal Rome," as well as our entire knowledge of the first five centuries of Roman history can be found in [92] and [498]. The problems inherent in making the Roman documents concur with the chronology of Scaliger are related in [1481].

According to the historian N. Radzig:

"The matter here is that the Roman manuscripts did not make it till our times, so all of our presumptions are based on whatever the Roman annalists have to tell us. But even here… we run into major difficulties, the principal one being that even the annalist material is represented very poorly." ([719], page 23)

The Great Annals of Rome had perished ([512], pages 6-7). It is assumed that the Roman *fasti* gave yearly chronological lists of all the civil servants of ancient Rome. These tables could theoretically provide for a trustworthy chronological skeleton of sorts.

However, the historian G. Martynov inquires:

"How do we make this all concur with the *constant controversy* that we encounter all over the texts of Livy, in the names of the consuls, their frequent omission, amongst other things, and a *complete laissez-faire attitude to the choice of names?…* How do we make it cor-

respond with the names of the military tribunes? *The fasti are literally mottled with errors and distortions that one cannot make heads or tails of.* Livy himself had already been aware of how *flimsy* this foundation of his chronology was." ([512], pages 6-7, 14)

G. Martynov sums up with the following:

"Neither Diororus nor Livy possess a correct chronology… we cannot trust the fasti, which tell us nothing about who was made consul in which year, or the cloth writings that led Licinius Marcus and Tubero to *contradictory conclusions.* The most trustworthy documentation is the kind that turns out to be *much more recent forgeries* after in-depth analysis." ([512], pages 20, 27-28)

It is thus somewhat disconcerting to hear the modern chronologer E. Bickerman assure us of the following: "Since we possess full lists of Roman consuls for 1050 years… the Julian dating for each one of them can be deduced easily, given that the ancient datings are veracious" ([72], page 76). The close-tongued implication is made that we possess a definite trustworthy Julian dating of the foundation of Rome, despite the fact that the 500-year fluctuations of this date affect the entire consul list, as well as the whole history of "ancient" Rome based on this list.

The actual monograph of E. Bickerman ([72]) also sadly fails to contain so much as a hint of a *justification* for the fundamental dates in the "ancient" chronology. Instead of relating the dating basics, the book just offers a number of individual examples that explicitly or implicitly refer to the *a priori known* scheme of the consensual Scaligerian chronology.

4.
THE PROBLEMS IN ESTABLISHING A CORRECT CHRONOLOGY OF "ANCIENT" EGYPT

The significant discrepancies between the chronological data offered by the ancient sources and the global chronology of the ancient times as devised in the XVII century arose in other areas as well. For instance, the establishment of the Egyptian chronology presented some substantial difficulties, since a great many documents contain chronological contradictions. Let us examine the correlation between the classical *History* by Herodotus, and the Scaligerian chronology.

For instance, during his consecutive and coherent account of Egyptian history, Herodotus calls Cheops *the successor* of Rhampsinitos ([163], 2:214, page 119). The modern commentator will immediately "correct" in the following manner: "Herodotus creates confusion in chronology of Egypt – Rhampsinitos (Ramses II) was a king of the XIX dynasty (1345-1200 b.c.), whilst Cheops belonged to the IV (2600-2480 b.c.)" ([163], page 513, comment 136).

The discrepancy here equals 1200 years, no less. Just think of what the figure implies and of its sheer value: *twelve hundred years.* Let us carry on. According to Herodotus, Asychis was succeeded by Anysis ([163], 2:136-137, page 123). Modern commentary is also rash to tell us that "Herodotus *leaps* from the end of the IV dynasty (about 2480 b.c.) to the beginning of the Ethiopian reign in Egypt (about 715 b.c.)" ([163], page 514, comment 150).

The leap is one of 1800 years. *Eighteen hundred years!*

In general, it turns out that "The chronology of kings given by Herodotus does not concur with that found in the fragments of Manetho's list of kings" ([163], page 512, comment 108). As a rule, the chronology of Herodotus *is much shorter* than Scaliger's version. The temporal distances between kings according to Herodotus are often thousands of years shorter than corresponding periods as given by Manethon.

The *History* of Herodotus contains a great number of "minor errors", those of 30-40 years; however, they only come to existence as a result of attempts at fitting his *History* into the Scaligerian chronology. We quote some of the numerous examples of such occurrences. The modern commentator tells us that "Herodotus confuses king Sesostris with the king Psammetix I" ([163], page 512). Also: "Pittacus could not have met Croesus in 560 b.c. [by the way, Herodotus does not give the date in such terms – A. F.], since he had died in 570 b.c." ([163], page 502). Another event related by Herodotus is commented upon thusly: "It is an error made by Herodotus… Solon could not have met Croesus" ([163], page 502).

But how can this be true? Herodotus devotes an entire page to relating the interactions between Croesus and Solon ([163], 1:29-31, page 19). The Scaligerian chronology, on the other hand, tells us no such interactions ever took place.

The commentators also accuse Herodotus of dating solar eclipses incorrectly ([163], pages 504, 534); and so on, and so forth.

We should note that the choice of one chronological version among several contradicting ones is far from simple. There had been a conflict between the so-called *short* and *long* chronologies of Egypt that were developed in the XIX century. The short chronology is the one currently used, but even it contains a great many deep contradictions which still remain unresolved.

The most prominent German Egyptologist, H. Brugsch, wrote:

"When the reader inquires about whether any epochs and historical moments concerning the Pharaohs can be considered to possess a finite chronological assessment, and when his curiosity makes him turn to the tables compiled by a great variety of scientists, he will be surprised to find himself confronted with a large number of opinions on the chronological calculations of the Pharaoh era belonging to the representatives of the newest school. For instance, the German scientists date the reign of Menes, the first Egyptian Pharaoh, as having commenced in the following years:

Boeckh dates this event to 5702 B.C.,
Unger – to 5613 B.C.,
Brugsch – to 4455 B.C.,
Lauth – to 4157 B.C.,
Lepsius – to 5702 B.C.,
Bunsen – to 3623 B.C.

The difference between the two extreme datings is *mind-boggling,* since it amounts to 2079 years… The most fundamental research conducted by competent scientists for the verification of the chronological sequence of the Pharaohs' reigns and the order of dynastical succession, had also proved the necessity of allowing for *simultaneous* and *parallel* reigns that would greatly reduce the summary reigning time of the thirty Manetho's dynasties. Despite all the scientific discoveries made in this area of Egyptology, the numeric data condition remains in an extremely unsatisfactory condition to this day [late XIX century – A. F.]" ([99], pages 95-97).

The situation hasn't improved to the present day. Modern tables date the beginning of the reign of Menes differently, to "approximately 3100 B.C.," "roughly 3000

B.C.," etc. The fluctuation span for this date amounts to 2700 years. If we consider other opinions – those of the French Egyptologists, for instance ([544], vol. 6), the situation becomes even more complex:

Champollion gives the dating as 5867 B.C.,
Lesueur – as 5770 B.C.,
Mariette – as 5004 B.C.,
Chabas – as 4000 B.C.,
Meyer – as 3180 B.C.,
Andrzejewski – as 2850 B.C.,
Wilkinson – as 2320 B.C.,
Palmer – as 2224 B.C., etc.

The difference between the datings of Champollion and Palmer equals *three thousand six hundred forty three years.* No commentary is needed, really.

We discover that, generally, "Egyptology, which had poured some light over the perpetual darkness that covered the ancient age of Egypt, only came into existence 80 years ago," as Chantepie de la Saussaye wrote at the end of the XIX century ([965], page 950). He also said that "it *has been the private domain of a very few researches… alack and alas, the results of their research have been popularized in too much haste…* Thus, many *erroneous views* entered the circulation, which resulted in the inevitable sobering when Egyptology became a lot less in vogue and the *excessive trust* in the results of the research *was lost…* To this day, the construction of the Egyptian chronology remains impossible" ([966], pages 97-98; [965], page 95).

The situation with the list of kings compiled by the Sumerian priests is even more complex. "It was a historical skeleton of sorts, one that resembled our chronological tables… But, sadly, this list was of little utility… By and large, the chronology of the king list makes no sense," according to the prominent archaeologist L. Wooley ([154], page 15). Furthermore, apparently, the "*dynastical sequences have been set arbitrarily*" ([154], page 107).

We see that the great antiquity ascribed to these lists today contradicts modern archaeological information. Let us give just one example that we consider representative enough.

Telling us about the excavations of what we consider to be the most ancient royal Sumerian sepulchres, dated roughly to the *third millennium before Christ,* Wooley mentions a series of findings of golden toilettery, which "was of Arabic origin and belonged

to the early XIII century A.D., according to one of the best experts in the field." Wooley patronizingly calls the expert's mistake "a forgivable one, since no one had thought such advanced art could have existed in the third millennium before Christ" ([154], page 61).

Unfortunately, the development of the entire critical concept and the propagation of the hypercritical current of the late XIX – early XX century froze, due to the sheer lack of objective statistic methods at the time, ones that could provide for the independent and objective verification of the previous chronological identifications.

5.
THE PROBLEM IN DATING THE "ANCIENT" SOURCES
Tacitus and Poggio. Cicero and Barzizza. Vitruvius and Alberti

The framework of the global Scaligerian chronology was constructed as a result of the analysis of the chronological indications given by the ancient sources. It is natural that the issue of their origin should be of interest in this respect. Modern historiography manifests the paucity of evidence in what concerns the genesis of such "ancient" manuscripts. The general observation is made that the overwhelming majority of these documents surfaced during the Renaissance epoch that allegedly superseded the "dark ages." The discovery of manuscripts often happened under circumstances that forbade the analysis which could allow the critical dating of such findings.

In the XIX century two prominent historians, Hochart and Ross, had published the results of their research proving that the famous "ancient" Roman *History* by Cornelius Tacitus was really written by the well-known Italian humanist Poggio Bracciolini ([21], [1195], and [1379]). The publications occurred in the years 1882-1885 and 1878; the interested readers may turn their attention to [21], which covers this problem exhaustively. We should just note that we deem the *History* by Tacitus to be an edited original – that is, a partial forgery and not a complete one. However, the events related in the *History* have been misdated and transposed far back in time.

The history of the discovery of Tacitus' books really provokes a great many questions ([21]). It was

Poggio who had discovered and published the opuses of Quintillian, Valerius Flaccus, Asconius Pedianus, Nonius Marcellus, Probus, some tractates by Cicero, Lucretius, Petronius, Plautus, Tertullian, Marcellinus, Calpurn Seculus, etc. ([21]). The circumstances of these discoveries and their datings have never been related in detail. See more about the history of Tacitus' books in CHRON1, chapter 7.

In the XV century famous humanists such as Manuel Chrysolorus, Gemisto Pleton, Bessarion of Nicaea and some others, came to Italy. They were the first ones to familiarize Europe with the achievements of "ancient Greek thought." Byzantium gave the West almost all of the known "ancient" Greek manuscripts. Otto Neugebauer wrote that "the major part of the manuscripts that our knowledge of the Greek science is based upon consists of Byzantine copies made 500-1500 years after the death of their authors" ([571], page 69).

According to the Scaligerian history ([120]), the entire "Classical ancient" literature only surfaced during the Renaissance. In most cases, a detailed analysis shows us that the obscurity of the literature's origins and the lack of documentation concerning its passage through the so-called "Dark Ages" leads one to suspect that none of these texts really existed before the dawn of the Renaissance ([544]).

For instance, the oldest copies of the so-called incomplete collection of Cicero's texts are said to be the copies allegedly made in the IX-X century A.D. However, one instantly finds out that the archetype of the incomplete collection "had perished a long time ago" ([949]). The XIV-XV century witness a surge of interest in Cicero, so:

"Finally, about 1420 the Milanese professor Gasparino Barzizza… decided to undertake a rather precarious endeavour of filling the gaps in the incomplete collection with his own writings for the sake of consequentiality [! – A. F.]. However, before he could finish this volume of work, a miracle occurred: a forlorn manuscript with the complete text of all the rhetorical works of Cicero's becomes unearthed in a parochial Italian town by the name of Lodi… Barzizza and his students eagerly embrace the new discovery, arduously decipher its ancient [presumably XIII century – A.F.] script, and finally produce a readable copy. Subsequent copies constitute the actual "complete col-

Fig. 1.28. Ancient miniature allegedly dated XV century, depicting the "ancient" Cicero as a mediaeval writer. Modern commentary: "Cato, with Scipio and Lelius standing in front of him. Cicero can be seen on the left, working on his tractate *On the Old Age*" ([1485], page 163). The entire setting is typically mediaeval. Taken from [1485], page 195.

lection."… Meanwhile, the irrecoverable happens: the archetype of the collection, the manuscript of Lodi, becomes abandoned since no one wants to confront the textual difficulties it presents, and finally gets sent back to Lodi, *where it disappears without a trace:* nothing is known of what happened to the manuscript since 1428. The European philologists still lament the loss." ([949], pages 387-388)

A propos, the reverse or so-called Arabic reading of the name Barzizza gives TsTsRB without vocalizations, which is close to the consonant root of the name Cicero, TsTsR.

Figs. 1.28 and 1.29 show two ancient miniatures from a book by Cicero that was allegedly published in the late XV century ([1485], page 162). In fig. 1.28 Cicero is portrayed from the left, writing the tractate *On the Old Age*. In fig. 1.29 Cicero is depicted from the right side, penning out the tractate *On Friendship*. We see a typically mediaeval setting. Cicero and his interlocutors are wearing mediaeval clothes, which means that the author of the miniatures (in the XV century or later) apparently didn't doubt Cicero to have been his historical contemporary.

De vita XII Caesarum by Caius Suetonius is also only available as relatively recent copies. All of them hail back to the only "ancient manuscript" ([760]), that is presumed to have been in Einhard's possession in the alleged year 818 A.D. His *Vita Caroli Magni* is supposed to represent a diligent copy of the biographical schemes of Suetonius today ([760], pp. 280-281). The original document, known as the *Fulda Manuscript*, did not reach our time, and neither did the first copies

Fig. 1.29. Ancient miniature allegedly dated XV century depicting the "ancient" Cicero and other "ancient" characters in a typically mediaeval setting. The modern commentary reads: "Lelius (on the left), Ennius, and Scaevola (centre); Cicero is seen composing his tractate *On Friendship*" ([1485], page 163).

([760], p. 281). The oldest of Suetonius' copies is hypothetically the IX century text that was only brought to light in the XVI century. Other copies are dated as post-XI century in the Scaligerian chronology.

The fragments from *De viris illustribus* by Suetonius also appeared very late. The alleged dating of the latest fragment is the IX century A.D.:

"This manuscript was discovered by Poggio Bracciolini in Germany in 1425… The Hersfeld Manuscript did not survive (nothing but several pages from the Tacitus part remained), but about 20 of its copies did – those were made in Italy in the XV century." ([760], page 337)

The dating of the "ancient" sources was performed in the XVI-XVII century out of considerations that are perfectly nebulous to us nowadays.

De Architectura by Vitruvius was discovered as late as 1497 – according to N. A. Morozov ([544], vol. 4, page 624), the astronomical part of the book quotes the periods of heliocentric planetary circulations with the utmost precision! Vitruvius, an architect who is supposed to have lived in the I-II century A.D., knew these periods better than Copernicus the astronomer! Furthermore, his error in what concerns the circulation of Saturn differs from the modern value of the period by a ratio of 0.00007. The error ratio for Mars is 0.006, and a mere 0.003 for Jupiter, q.v. in the analysis ([544], vol. 4, pages 625-626).

We should mark the magniloquent parallels between the books of the "ancient" Vitruvius and those of Alberti, the prominent humanist of the XV century ([18]), see fig. 1.30. One cannot fail to notice a

Fig. 1.30. Leon Battista Alberti. Self-portrait. Bronze medallion from around 1430. Washington, National Gallery. Taken from [18], page 160.

certain semblance of the names Alb(v)erti and Vitruvius, bearing in mind the frequent inflexion of the sounds "b" and "v." Alberti (1414-1472) is known as a prominent architect, the author of the fundamental theory of architecture that is very similar to the theory of the "ancient" Vitruvius ([18], pages 3-4). As well as the "ancient" Vitruvius, the mediaeval Alberti was the author of a voluminous tractate that included mathematical, optical, and mechanical knowledge, as well as from his theory of architecture.

The title of the mediaeval opus of Alberti's, **The Ten Books on Architecture** coincides with its "ancient analogue" by Vitruvius. Nowadays it is supposed that the "ancient" Vitruvius had been "his ultimate ideal that he emulated in the creation of his tractate" ([18], page 152). Alberti's volume is written "in an archaic manner," accordingly. The specialists have long ago compiled tables comparing fragments of the works by Alberti and Vitruvius which sometimes coincide word

for word. Historians explain this fact in the following manner: "all of these numerous parallels… unveil the Hellenistic-Roman atmosphere that his thoughts evolved in" ([18], page 89).

So, the book of the "ancient" Vitruvius fits into the mediaeval atmosphere and ideology of the XV century A.D. absolutely organically. Furthermore, the majority of Alberti's mediaeval constructions are "an emulation of the ancient style" ([18], pages 165, 167, 173). He creates a palace "made to resemble a Roman amphitheatre in its entirety" ([18], page 179).

So, the leading mediaeval architect fills Italian towns with "ancient" edifices that are nowadays considered an emulation of the Classical age – but this by no means implies they were considered as such in the XV century. The books are also written in the manner that will be made archaic much later. *It is only after all of this,* in 1497 A.D., that the book of the "ancient architect Vitruvius" appears, occasionally coinciding with a similar book of the mediaeval Alberti word for word. One feels that the architects of the XIV-XV century did not consider their endeavours to be an "emulation" of the Classical Age – they *were* the Classical Age. The emulation theory was not to evolve till much later, in the works of the Scaligerite historians, who were forced to explain the numerous parallels between the Classical Age and the Middle Ages.

One observes a similar situation with the scientific literature. It would be expedient to remind the reader of how the acquaintance of the European scientists with the works of *Euclid, Archimedes*, and *Apollonius* occurred, since, as we can see, the Middle Ages were the time when the "revival" of the "achievements of ancient science" took place.

M. Y. Vygotsky, an expert in the history of science, writes that "*not a single solitary copy of Euclid's Elements had reached our times… the oldest manuscript we know of is a copy made in 888… there is a large number of manuscripts that belong to the X-XIII century*" ([321], page 224). Fig 1.31 shows a page from a deluxe edition of Euclid's *Geometry* dated 1457 ([1374], page 103). It contains a picture of a "panoramic view of Rome." It is most remarkable that the book by the "ancient" Euclid contains a picture of the *mediaeval* Rome and not the "ancient" one. One can clearly see a *Christian Gothic cathedral* right in front. The commentators say that "such Christian monuments as Ara Coeli are de-

Fig. 1.31. A panoramic view of Rome from the "ancient" *Geometry* by Euclides, from an edition allegedly dated 1457. We see mediaeval Rome, a Gothic Christian cathedral, etc. Taken from [1374], page 103.

picted here" ([1374], page 103). One gets a clear implication that Euclid was really a mediaeval author.

I. G. Bashmakova, an expert in the history of mathematics informs us that even before the publication of the Latin translation of the *Arithmetica* by the "ancient" Diophantus, the European scientists "have been using the algebraic methods of Diophantus, remaining unaware of his works" ([250], page 25). I. G. Bashmakova assesses the situation as "somewhat paradoxical." The first edition of the *Arithmetica* is dated 1575 a.d. If Ptolemy's *Almagest* was instantaneously continued by Copernicus – let us remind the reader that the surge of interest in the *Almagest*'s publication immediately preceded the era of Copernicus, q.v. in detail in CHRON3 – Diophantus' opus must have been continued by Fermat (1601-1665).

The history of both manuscripts and printed editions of the "ancient" Archimedes follows the pattern already known to us. According to I. N. Veselovsky,

all of the modern editions of Archimedes have been based on the *lost* manuscript of the XV century, and on the Constantinople palimpsest that was found as late as 1907. It is assumed that the first manuscripts of Archimedes reached Europe quite late, in 1204. The first translation is supposed to have been made in 1269, and the complete text found in 1884 – *not until the XIX century.* The first printed edition allegedly appeared in 1503, and the first Greek edition – only in 1544. The "works of Archimedes entered scientific circulation after that" ([40], pages 54-56).

On fig. 1.32 you can see an ancient portrait of Archimedes from his book *Opera* dating to the alleged XV century. We see a typical mediaeval scientist in his study. The commentators couldn't fail to have marked this: "The study is represented in the Renaissance fashion" ([1229], page 87).

Conical Sections by the "ancient" Apollonius was not published until 1537. Furthermore,

Fig. 1.32. Ancient miniature depicting the "ancient" Archimedes as a mediaeval scientist. Vatican, Biblioteca Apostolica Vaticana, Urb. Lat. 261, fol. 1r. Taken from [1229], page 87.

"Kepler, who was the first to discover the significance of conical sections (ellipses) in astronomy, didn't live to see the publication of the complete works of Apollonius. The next three books... were first published in a Latin translation [a translation yet again! – A. F.] in 1631." ([740], page 54)

So, the body of work of the "ancient" Apollonius only got to be published in its entirety after the discovery of the objects that this "ancient" tractate deals with, in Kepler's epoch.

By the way, could the works of "the ancient Apollonius" just be an edited version of the *Pole* Copernicus? The name Apollonius is almost identical to *Polonius* – a *Pole*, a *native of Poland, or Polonia.* The astronomer Copernicus (1473-1543) was the immediate precursor of the astronomer Kepler (1571-1630).

6.
TIMEKEEPING IN THE MIDDLE AGES
Historians discuss the "chaos reigning in the mediaeval datings." Peculiar mediaeval anachronisms

The Scaligerian chronological version was far from being the only one. It competed with versions that were significantly different. Bickerman mentions the "chaos reigning in the mediaeval datings" ([72], page 73). Furthermore, the analysis of ancient documents shows us that old concepts of time were substantially different from modern ones.

"Before the XIII-XIV century the devices for time measurement were a rarity and a luxury. Even the scientists didn't always possess them. The Englishman Valcherius… was lamenting the lack of a clock that afflicted the precision of his observations of a lunar eclipse in 1091." ([1461], page 68)

"The clocks common for mediaeval Europe were sundials, hourglasses, and water clocks, or *clepsydrae.* However, sundials only were of use when the weather was good, and the clepsydrae remained a scarcity" ([217], page 94). In the end of the IX century A.D., candles were widely used for timekeeping. The English King Alfred took them with him on his journeys and ordered them to be burned one after the other ([217], page 94). The same manner of timekeeping was used in the XIII-XIV century, in the reign of Charles V, for instance.

"The monks kept count of time by the amount of holy book pages or psalms they could read in between two observations of the sky… For the majority, the main timekeeping medium was the tolling of the church bells" ([217], page 94). One is to bear in mind that astronomical observations require a chronometer that possesses a second hand, while we learn that "even after the discovery and the propagation of mechanical chronometers in Europe, they *had been lacking the minute hand for a long time*" ([217], page 95).

It has to be said that the ultra-sophisticated chronological Cabbala developed in the Middle Ages contradicts this imprecision of temporal observation. For instance:

"The very periods used for measuring time on Earth… acquire an entirely different duration… when used for measuring the Biblical events… Augustine

equalled every Genesis day to a millennium [! – A. F.], thus attempting to define the duration of the history of humankind." ([217], pages 109-110)

Such an "inherent trait of the mediaeval historiography as its anachronistic propensity" is of importance to us.

"*The past is described in the same categories as the contemporary epoch… the Biblical and the ancient characters wear mediaeval attire…* a mediaeval moralist ascribes "courteousness" to the *ancient Romans,* which was a purely *knightly* virtue… The epochs of the Old and the New Testament *are not put in a direct temporal sequence…* The fact that the portals of mediaeval cathedrals portray Old Testament kings and patriarchs together with the ancient sages and evangelical characters unravels the anachronistic attitude to history like nothing else… *In the end of the XI century the crusaders were certain they came to punish the actual executioners of the Saviour, and not their offspring.*" ([217], pages 117-118)

This fact is significant enough, and we shall come back to it later on.

Modern historians base their observations on the Scaligerian chronology, believing that the mediaeval authors had "*attained a state of great confusion in what concerned both concepts and epochs*" due to their alleged ignorance, and that they had confused the ancient Biblical epoch with the Mediaeval one. Mediaeval painters, for instance, kept portraying the Biblical and the "ancient" characters in typically mediaeval costumes. However, another point of view is also viable, one that differs from the traditional "love for anachronisms" explanation. Namely, that all of the statements made by the mediaeval chronographers and artists may have reflected reality, and we consider them to be anachronistic because we follow the erroneous Scaligerian chronology.

The Scaligerian chronological version only managed to immortalize one mediaeval chronological concept out of many. Other versions previously coexisted with the consensual chronology.

For instance, it was assumed that the Holy Roman Empire of the German nation in the X-XIII century A.D. *was the immediate descendant* of the "ancient" Roman Empire that is alleged to have fallen in the VI century A.D., according to the Scaligerian version ([270], vol. 1, page 16). Mark the repercussions of

the discussion that appears very odd in our time: "Petrarch… made the statement that he was supposed to have based on a number of philological and psychological observations, that the privileges granted by Nero Caesar to the *House of Austrian Dukes* [in the XIII century A.D.! – A. F.] – were fake. It needed proof in those days" ([270], vol. 1, page 32).

For the modern historian [270], the thought that the "ancient" Caesar and Nero were the contemporaries of a mediaeval Austrian house of dukes that had only commenced its reign in 1273 A.D., that is, about 1200 years after Caesar and Nero – is naturally a preposterous one. However, as we see, the mediaeval opponents of Petrarch were of a different opinion, since it "needed proof" q.v. above.

E. Priester makes the following observation in re the same notorious documents: "All the interested parties were perfectly aware that the documents were blatant and shameless forgeries [such is the modern interpretation of the fact – A. F.], and nevertheless politely shut their eyes on this circumstance" ([691], page 26). An abnormally large number of "anachronisms" that transpose ancient events into the epoch of the XI-XIV century is contained in the mediaeval German chronicles and texts. Detailed reference may be obtained from [469].

The reader must be accustomed to believing the famous gladiator fights only occurred "in the distant ancient age". This is not the case, however. V. Klassovsky in [389], having told us of the gladiator fights in the "ancient" Rome, proceeds to add that *these fights took place in the mediaeval Europe of the XIV century as well!* For instance, he mentions the gladiator fights in Naples around 1344 A.D., which were attended by Johanna of Naples and Andrew of Hungary ([389], page 212). These mediaeval fights *ended with the death of one of the fighters,* exactly the way they did in the "ancient" times ([389]).

7.
THE CHRONOLOGY AND THE DATING OF BIBLICAL TEXTS

The datings of religious sources are virtually woven out of obscurity and confusion. The Biblical chronology and datings are of a very vague nature, being based on the authority of late Mediaeval theologians.

The historians write the following:

"The true history of the origins of the books from the New Testament also fails to concur with the one backed by the church… The order of the New Testament books [some of them – A. F.] that is used nowadays is the direct opposite of the one set by the ecclesial tradition… The real names of the authors of mediaeval books… remain unknown." ([444], page 264)

As we shall learn, the consensual point of view about the Old Testament books *preceding* those of the New Testament also causes many doubts, and contradicts the results obtained by modern empirico-statistical dating methods. One should also consider the issue of the age of the Biblical manuscripts that have reached our time. They turn out to be of mediaeval origin.

"The oldest more or less complete copies of the [Greek] Bible are the manuscripts of Alexandria, Vatican, and Mt. Sinai… All three manuscripts are dated [palaeographically; that is, with such an ephemeral concept as handwriting style used as a basis – A. F.] as the second half of the IV century A.D. The codex language is Greek… The least is known about the Vatican codex – nobody knows how the artefact manifested in Vatican around 1475… The Alexandrian codex is known to have been given to the English king Charles I by the Patriarch Cyril Lucaris in 1628…" ([444], pages 267-268)

The codex of Mt. Sinai had only been discovered in the XIX century by K. Tischendorf ([444], pages 268-270).

So, the three oldest codices of the Bible only surface after the XV century A.D. The reputation of their antiquity had been created by the authority of K. Tischendorf, who based his research on the style of handwriting. However, the very idea of palaeographical dating apparently *implies the existence of a known global chronology* of other documents and thus cannot be an independent dating method in any way. What we know for certain is that the history of these documents can be traced as far back as 1475 A.D.; in other words, no other more or less complete "ancient" Greek Bibles exist [444].

Among separate Biblical books, the oldest ones are considered to be those of Zechariah and Malachi, dated to the alleged VI century A.D., also palaeo-

Fig. 1.33. The Trident Council (1545-1563). A painting by Titian. Kept in the Louvre, Paris. Taken from [328], page 238.

graphically ([444]). "The most ancient Biblical manuscripts are in Greek" ([444], page 270).

There are no Hebraic manuscripts of the Bible predating the IX century A.D. (!) in existence, although those of a more recent time, primarily the middle of the alleged XIII century A.D., are kept in many national libraries. The oldest Hebraic manuscript is a fragment of the Books of Prophets, and it is dated to 859 A.D. One of the two second oldest manuscripts "is dated to 916 A.D. and contains the Books of the Prophets; the other is dated to 1008 A.D. and contains the text of the Old Testament." ([444], page 270)

However, the first manuscript was dated to 1228 by the scribe. The so-called Babylonian punctuation of letters given here allows this text to be dated by the Seleucid Era, which gives us 916 A.D. However, there are

no serious foundations for such a statement, and it is hence possible that the dating was given in years since Christ ([543], pp. 263-264), in which case the manuscript would belong to the XIII century and not the X.

The oldest Hebraic document containing the complete Old Testament can be ascribed to the alleged year 1008 A.D. ([444], page 270).

It is supposed that the Biblical canon was agreed upon by the Laodician Council in 363 A.D., but no edicts of this council remain in existence, and the same concerns the previous councils [765], page 148. The canon had really been made official by the new Trident Council that was called in 1545, during the Reformation, and continued until 1563. On fig. 1.33 we can see a painting of one of the council's sessions by Titian.

A great many books were destroyed by the edict of the Trident council – the ones considered apocryphal, namely, the *Chronicles of the Judaic and Israeli Kings* ([765]). *We shall never be able to read these books,* but there is one thing that we can be perfectly certain of. They were destroyed since they described history differently from the books approved of by the winning faction of Scaligerite historians. We should emphasize that "there were a lot more apocryphal opuses, than those… certified canonical" ([471], page 76), and that most biblical datings are wholly dependent on palaeography, which means that they are based upon the a priori chronological knowledge of the Scaligerian school and would change automatically if a chronological paradigm shift occurred.

Let us give an important example: "In 1902 the Englishman Nash had purchased a fragment of an Egyptian papyrus manuscript whose dating cannot be agreed upon by the scientists to this day" ([444], page 273). The final agreement was made that the text corresponds to the beginning of our era. Later on, "after the discovery of the Qumran Manuscripts, the comparison of the handwriting styles in both Nash's papyrus and the Manuscripts allowed for the determination of a greater antiquity of the latter" ([444], pages 272-273). Thus, one papyrus fragment whose dating "cannot be agreed upon" pulls a whole lot of other documents after it. Nevertheless, the "dating of the [Qumran – A. F.] scrolls provoked major dispute amongst scientists (the dating range was given from the II century and until the epoch of the Crusades)" ([471], page 47).

The "early A.D." dating is considered proven after 1962, when a radiocarbon research on the Qumran manuscripts was conducted. However, as we shall mention again later on, the radiocarbon method is really unsuitable for the dating of specimens whose age falls into the span of 2-3 millennia, since the ensuing datings cover too wide a temporal range (this may reach as wide a span as 1-2 thousand years, for specimens whose age reaches 1-2 thousand years).

Although [444] dated the Qumran Manuscripts to 68 A.D., the American historian S. Zeitlin categorically insists on "the *mediaeval* origin of these texts" ([444], page 27).

We shall give a more detailed account of matters concerning the Biblical manuscripts in CHRON6.

8.
DIFFICULTIES AND CONTRADICTIONS ARISING FROM THE READING OF OLD TEXTS

8.1. How does one read a text written in consonants exclusively? The vocalization problem

The datings of other Biblical fragments that we possess today also need attentive additional analysis.

Attempts to read most of the old manuscripts, such as the Biblical and the Ancient Egyptian ones, often confront historians with severe difficulties.

"The first steps of our research into the primordial language of the Old Testament bring us to the fact of a paramount importance, which is that written Hebrew neither had signs for vowels originally, nor the ones to replace them… The books of the Old Testament were written in nothing but consonants." ([765], page 155)

The situation is a typical one. Ancient Slavonic texts, for instance, also come shaped as chains of consonants, often even lacking the vocalization symbols and separation of individual words from one another – just an endless stream of consonants.

Ancient Egyptian texts also contained nothing but consonants.

"The names of the [Egyptian – A. F.] kings… are rendered [in modern literature – A. F.] *in a perfectly arbitrary manner*, à la primary school textbook content… There is a plethora of significant variations that defy all attempts of classification, being a result of *arbitrary interpretation* [! – A. F.] that became tradition."([72], page 176)

It is possible that the scarcity and the high cost of writing materials made the ancient scribes extremely frugal, and the vowels were eliminated as a result.

"It is true that if we take a Hebraic Bible or a manuscript nowadays, we shall find a skeleton of consonants filled with dots and other signs that are supposed to refer to the missing vowels. Such signs were not included in the ancient Hebraic Bible… The books were written in consonants exclusively, being filled with vowels by the readers to the best of their ability and in accordance with the apparent demands made by sense and oral tradition."([765], page 155)

Imagine how precise the kind of writing that con-

sisted of nothing but consonants would be today, when the combination BLD, for instance, could mean blood, bled, bold, build, boiled, bald, etc.; RVR could stand for river, rover, or raver, etc. The vocalization aleatory quotient in ancient Hebraic and other old languages is exceptionally high. Many consonant combinations may be vocalized in dozens of ways ([765]). Gesenius wrote that "it was easily understood how imperfect and unclear such writing method had been" (quoted in [765]).

T. F. Curtis also noted that "even for the priests the meaning of the scriptures remained extremely doubtful and could only be understood with the aid of the tradition and its authority" (quoted in[765], p. 155). Robertson Smith adds that "the scholars had no other guide but the actual text, that was often ambiguous, and oral tradition. They had no grammatical rules to follow; the Hebraic that they wrote in often allowed for verbal constructions that were impossible in the ancient language" (quoted in [765], page 156). Scaligerian history considers such a status quo to have prevailed for many centuries ([765]).

It is furthermore assumed that "this great paucity of the Hebraic Bible had only been remedied in the VII or VIII century of our era," when the Massorets had processed the Bible and "added... symbols that stood for vowels, but they had no other guides but their own intuition and very fragmentary oral tradition, and this fact is common knowledge for every expert in the Hebraic language" ([765], pages 156-157).

Driver points out that:

"Since... the Massorets and their efforts in the VII and VIII centuries, the Jews started to protect their holy books with the utmost zeal and vigour when it had already been too late to mitigate... the damage done to them in any way. The result of this overzealous protection had been the immanetization of the distortions that had been made equal to the original text in authority." (Text given by [765], page 157.)

"The common opinion used to be that the vowels were introduced to the Hebraic text by Esdra in the V century B.C.... When Levita and Capellus proved this wrong in XVI and XVII century France, having demonstrated that the vowels had only been introduced by the Massorets, the discovery had made a great sensation in the entire Protestant Europe. Many were of the opinion that this new theory might lead to the complete dethronement of religion. If the vowels weren't received in an Epiphany of divine inspiration, being merely a human creation, and a relatively recent one, at that, how could one rely on the text of the Holy Writ?... The debate that followed had been amongst the most heated in the history of the new Biblical criticism, and had lasted for over a century. It had finally ended when the veracity of the new opinion had been acknowledged by everyone." ([765], pages 157-158)

If such fierce dispute flared up around the Biblical vocalizations in the XVI-XVII century, mightn't this mean these very vocalizations were *introduced very recently*? Could this have happened in the XV-XVI century? And since this vocalization version was far from the commonly accepted version, it had to encounter opposition, which may have been quite vehement. And only after that was this Massoret deciphering of the Bible shifted (by Levita and Capellus?) into the VII-VIII century A.D. in order to give the Biblical text the authority of antiquity.

The situation with the Koran must have been similar. We are informed that:

"Arabic writing... becomes developed further in the middle of the VII century, when the first transcription of the Koran had occurred (651 A.D.). The additional diacritical marks on, above, or beneath the letter were introduced in the 2nd half of the VII century for differentiating between similarly written letters, for... vowels and doubled vowels." ([485], page 41)

Other sources tell us that the vocalizations were only introduced in the 2nd half of the VIII century by Al-Khalil Ibn Ahmed ([485], page 39). Could all of this activity have taken place in the XV-XVI century?

8.2. The sounds "R" and "L" were often confused in the Middle Ages

We shall give some direct evidence of the fact that the sounds "R" and "L" were often subject to flexion. Amsterdam, among others, is a city whose name was affected by such instability and was called AmsteRdam, AmsteLdam, Amstelodami, etc. ([35], page XLI). We should mention another interesting fact here. Fig. 1.34 shows the title page of a book on navigation published in Amsterdam in 1625. The name of the city is already given as Amsterdam, the way it

Fig. 1.34. The title page from a book published in Amsterdam and dated 1625. The city is called AmsteRdam, spelt with an "R". However, on an ancient engraving that we see on the same page, we see the name AmsteLRedam, with both sounds that were often mistaken for each other included ("R" and "L"). Taken from [1160], page 287.

Fig. 1.35. Close-up of a fragment of an old engraving, with Amsterdam spelt in a rather curious manner, "AmsteLRedam." Taken from [1160], page 287.

is written today – however, an old etching that one sees on the same page gives the *old* name in a rather peculiar spelling – *AmsteLRedam,* q.v. in fig. 1.35. Both consonants are present here, and a bizarre combination of sounds is achieved as a result. This reminds us that the names of many European towns and cities have been unstable until fairly recently, when they became immanetized in the printing press epoch. Numerous other examples of this phenomenon are given below.

9.
PROBLEMS IN THE SCALIGERIAN GEOGRAPHY OF BIBLICAL EVENTS

9.1. Archaeology and the Old Testament

The vocalizations of quotidian lexemes may not be all that key to our purposes, but the consonant sequences used for names of cities, countries, and rulers definitely are. Hundreds of different vocalizations were spawned, some of which were arbitrarily localized in the Middle East due to the hypothesis that binds Biblical events to that area exclusively.

The archaeologist Millar Burroughs expresses his unswerving trust in the correctness of the Scaligerian geography, writing that "in general… archaeological work doubtlessly gives one a very strong confidence in the dependability of the Biblical indications" (quoted in [444], page 16). One of the modern archaeological authorities, the American William Albright, wrote, albeit hazily, that "one should not doubt that archaeology [in reference to the excavations in modern Palestine – A. F.] confirms just how substantially historical the Old Testament tradition is" (quoted in [444], page 16; also see [1003], [1443]). However, Albright concedes that the situation with Biblical archaeology had been so chaotic in the beginning of the 1919-1949 period that the varying views on chronological issues could not have reached any sort of convergence at all, and that "under those circumstances one really could not have used the archaeological data concerning Palestine for illustrating the Old Testament" (quoted in [444], page 16).

The one-time Director of the British Museum, Sir Frederic Kenyon, categorically insists that archaeology has refuted "the destructive criticism of the second half

of the XIX century". W. Keller even published a book titled, suggestively enough, *And Yet the Bible is Right* ([1219]), which tries to convince the reader of the veracity of the Scaligerian interpretation of Biblical data.

However, here is some information from the eminent archaeologist L. Wright, also an avid supporter of the theory that the Scaligerian localizations and datings of the Biblical events were correct:

"The overwhelming majority of findings neither prove nor disprove anything; they fill the background and provide a setting for history… Unfortunately, many of the works that can be understood by the average reader have been written with excessive zeal and desire to prove the Bible correct. *The evidence is misused for making erroneous and semi-correct conclusions*" (quoted in [444], page 17).

The pioneers of archaeology in Mesopotamia were C. J. Rich, A. H. Layard, and P. E. Botta in the XIX century – however, in order to get their research subsidized, they had to advertise their findings in a sensational manner, identifying their findings with Biblical towns in a rather arbitrary manner.

But the accumulation of material evidence resulted in a significant quandary. Actual facts show that none of the Old Testament books have concrete archaeological proof of their Scaligerian dating and localization. In the XX century L. Wooley, the prominent archaeologist, performed excavations of a town that he tried to identify with "the Biblical Ur." However, it turned out that "unfortunately, one cannot give satisfactory chronological datings of the episodes [concerning the Biblical Abraham – A. F.] within the span of the second millennium of Middle Eastern history ([1484], [444], page 71).

The Scaligerian history insists that all the events concerning the Biblical patriarchs occurred precisely and exclusively on the territory of the modern Mesopotamia and Syria. Nevertheless, it is immediately acknowledged that "as to what concerns the identity of the patriarchs Abraham, Isaac, and Jacob, one can just reiterate that the information obtained as a result of the most fruitful excavations in Syria and Mesopotamia was extremely meagre, *or simply nonexistent*" ([1484], [444], page 77).

One might wonder just how justifiable it is to search for traces of the Biblical patriarchs in modern Mesopotamia.

Furthermore, the Scaligerian history is of the opinion that all of the events involving the Biblical Abraham and Moses occurred on the territory of modern Egypt. It is evasively stated that:

"The historical intensity of this tradition *is not confirmed archaeologically,* but its historical plausibility is, together with an account of the circumstances that may have been the setting of the patriarchs' biography." ([444], page 80)

We are also warned that:

"One is to be cautious when using cultural and social indications for dating purposes: *since we have the principal concepts in what regards the era of the patriarchs, one needs to possess a certain flexibility in the fixation of chronology.*" (quoted in [444], page 82)

As we shall soon see, this flexibility may stretch as far as hundreds and even thousands of years.

W. Keller proceeds to tell us that "Egypt remains indebted to the researchers. *In addition to the fact they found nothing about Joseph, neither documents nor any other traces of his time have been discovered*" [1219]. Egypt remains "in debt" in what concerns Moses as well ([444], page 91). In this case one may wonder yet again about the possibility of Biblical events having taken place in a different country – not necessarily bound to the territory of modern Egypt.

The archaeologist Albright, an avid supporter of the Scaligerian interpretation of the Bible, has nevertheless got to agree with the fact that "the previous concept of the Exodus to Haran from the Chaldaean Ur found *no archaeological evidence* except for the actual city" (quoted in [444], page 84).

Furthermore,

"It turned out that the very location of Mount Sinai is impossible. Another complication is that the Bible often states Mount Khorev to have been the place where the Revelation was given. If we are to take the Biblical description of the natural phenomena accompanying said procedure seriously, one has to presume the mountain to have been a volcano… The problem is that the mountain called Sinai nowadays *had never been a volcano.*" ([444], page 133)

Some archaeologists place Sinai in North Arabia, claiming that it was located in Midian, near Kadesh ([444], page 133). But *none of these mountains were volcanoes, either*.

The Bible says that "…the Lord rained upon Sodom and upon Gomorrah brimstone and fire from the Lord out of heaven" (Genesis 19:24). The Scaligerian history locates this event somewhere in modern Mesopotamia. "The first thing that one could use in this respect is *the assumption of a volcanic eruption. But there are no volcanoes in this area*" ([444], page 86). It seems to be natural to search for these cities in an area that *does* have volcanoes. However, the search is still conducted in Mesopotamia at a great effort and with no results whatsoever. And finally a "solution" is reached: the southern part of the Dead Sea appears to conceal some debris resembling tree trunks under a 400 metre layer of very salty water of poor transparency ([444], page 86). This sufficed for the American archaeologist D. Finnegan, as well as W. Keller after him, to claim that "the valley of Siddim," together with the charred remains of both cities, had submerged ([444], page 86).

The Bible scholar and historian Martin Noth states explicitly that there is no reason to ascribe the destruction of the cities found by the archaeologists in Palestine, to the Israeli invasion in search of the so-called "Promised Land" ([1312]). As it was noted above, from the archaeological point of view the entire Scaligerian interpretation of the conquest of Canaan by Joshua, the son of Nun, becomes suspended in thin air ([1312], [1486]). Are we conducting our search for the Biblical Promised Land in the correct place? Could the troops of Joshua have been predominantly active elsewhere?

It is further written that:

"N*o archaeological proof of any Biblical report of the 'Epoch of the Judges' exists to this day.* All the Judges' names that are contained in the Old Testament aren't known from any other source *and weren't found on any archaeological artefacts from either Palestine or any other country.* This concerns the names of the first kings Saul, David, and Solomon." ([444], page 158)

The Scaligerian history convinces us that Noah's Ark had moored to Mount Ararat in the Caucasus. Werner Keller ([1219]) assures us that the Armenian village of Bayzit still holds the tradition of a shepherd who saw a large wooden vessel on the Mount. The Turkish expedition of 1833 mentions "some ship made of wood that was seen over the southern glacier." Keller proceeds to tell us that in 1892 a certain Dr. Nuri was leading an expedition in search of the

sources of the Euphrates, and saw a fragment of a ship on the way back which was "filled with snow and dark red on the outside." The Russian aviator officer Roskovitsky claimed to have seen the Ark's remnants from his aeroplane during the First World War. Czar Nikolai the Second is supposed to have commanded an entire expedition there, that had not only seen, but also photographed, the remains of the Ark. The American historian and missionary Aaron Smith from Greenborough, an expert on the problem of the Great Deluge, wrote a history of Noah's Ark mentioning 80 thousand publications on the topic. Finally, a scientific expedition was arranged for. In 1951 Smith spent 12 days on top of Mount Ararat with 40 of his colleagues. They found nothing. Nevertheless, he made the following claim: "Even though we *failed to find so much as a trace of Noah,* my trust in the Biblical tale of the Deluge had only become firmer; we shall yet return" (quoted in [444]). In 1952 the expedition of Jean de Riquer obtained similar results. This somewhat anecdotal account here merely scratches the surface of the problem of geographical locations that is so acute for the Scaligerian chronology, as it were.

Herbert Haag in his foreword to Cyrus Gordon's **Historical Foundations of the Old Testament** credits the author with the following:

"His aim isn't apologetic, which makes him quite unlike other authors that drown the book market with paperbacks attempting to "prove the Bible" by jumbling together all sorts of sensationalist "proof" received from ancient Oriental sources."([444], page 18)

Various museums, institutes, and universities send expeditions to the Middle East for "Biblical excavations." Great sums of money are invested in such excavations, and a great many special societies and funds have been founded with the sole purpose of conducting archaeological research in the Scaligerian "Biblical Countries." The first one of these institutions was the Research Fund of Palestine founded in 1865; currently there are about 20 similar organizations in existence ([444]). Among them are the American Institute for Oriental Studies, the Jerusalem Affiliate of the Vatican Institute of Bible Studies, and the Israeli Research Society. No other region of the planet has been studied by archaeologists with such intensity as the Scaligerian "Biblical" territories. A great variety of literature is published on this subject as well

– special magazines, monographs, atlases and albums for the popularization of Biblical archaeology.

The Biblical topic is often given priority at the expense of other archaeological issues. The prominent Soviet historian who studied antiquity, Academician V. V. Struve, has got the following to say about it:

"The excavations in Egypt and Babylonia were only of interest to the bourgeois science since they could be linked to Palestine. In order to find the funding needed for the excavations, the historians had to prove that an ancient copy of the Bible could be unearthed as a result of their research, or the sandals of Moses, mayhap, and then the monies were provided instantly." ([444], page 44)

The following example is a rather representative one. In the early XX century a tablet archive was found in the city of Umma, in Mesopotamia. But since Umma isn't mentioned in the Bible, and no enthusiastic entrepreneur could identify it with some Biblical town, the excavations in Umma were stopped, and the archives scattered without even being studied. The tablets were sold to Paris collectors for one franc per piece ([444]).

"Archaeology as well as the historical science in general can find no proof to the Biblical legend about the Egyptian slavery of the Jews" ([444], page 102). The Egyptologist Wilhelm Spielberg tells us that "what the Bible tells us about the plight of Israel in Egypt isn't any more of a historical fact than the accounts of Egyptian history related by Herodotus" (quoted in [444], page 103). V. Stade wrote that "anyway, it is clear that the research concerning the Pharaoh under whose rule Israel moved into Egypt and left it represents nothing but the juggling of names and dates void of all meaning" (quoted in [444], page 103). Let us repeat our question: could an altogether different country be described by the name of Egypt?

The Bible lists a great many geographical locations that the People of Israel visited during their 40 years of wandering after the Exodus from "Egypt." The archaeologists still fail to find these locations where the Scaligerian history places their Biblical descriptions. Wright says that "few sites on the way to Mount Sinai can be identified with any degree of certainty" (quoted in [444], page 128). V. Stade wrote that: "checking the itinerary of Israel has as much sense as, say, tracking the way of the Burgundians' return from

King Etzel as described in the *Nibelungenlied*." The Egyptologist W. Spielberg quotes this statement, saying that "we can still sign under every word of Stade's" and that "the depiction of events following the Exodus, the listing of the sites where stops were made, the crossing of the desert – *all of this is fiction*" (quoted in [444], page 132). Many sites that were considered to have been on the itinerary of the Israelis have been excavated thoroughly and intensively for a long time now. No traces have ever been found!

The Biblical account of the destruction of Jericho is well known. One of the Arabic settlements in the Middle East had been arbitrarily identified with the Biblican Jericho whose walls were destroyed by the sounds of the horn. The settlement has been subject to thorough excavations since the endeavours of Sellin, Watzinger, and Garstang in late XIX century. There were no results obtained. In 1952 an Anglo-American archaeological expedition led by Kathleen Kenyon ventured to continue Garstang's research. No justifications for identifying the excavated town with Jericho have ever been found. Wright wrote that "the information received on Jericho was called disappointing, and it is true: not only is it hard to interpret the Biblical tale of Jericho, one cannot so much as trace the outline of the tradition's history… The Jericho issue is more problematic today than ever" (quoted in [444]).

The Bible says that after Jericho the Israelis destroyed the city of Ai. The spot where this city was supposed to have been located according to the "calculations" made by the historians has also been subject to fundamental research. Yet again, the results have failed to satisfy. The German archaeologist and Bible historian Anton Jirku ([1213]) expresses his grief over the futility of the "Jericho" excavations, and proceeds to describe those of "Ai" as afflicted by "an even greater discrepancy between the report of the conquest of Ai that ensued and the results of the excavations" (quoted in [444], pages 145-151).

According to the Bible, the capital of Judaea in the reign of king Saul was the city of Gibeah. The historians have given birth to a hypothesis identifying it with the ruins excavated in the Tell el-Ful Hill six kilometres to the north of modern Jerusalem. However, it is conceded that "not a single inscription had been found in the town, and no clear evidence that the ruins belong to Saul's palace or a tower that

he built" ([444], page 158). But had Saul's palace really been built there?

A CONCLUSION: Archaeological research shows that the books of the Old Testament have no archaeological proof of their localization and dating as suggested by the Scaligerian tradition. Thus, the entire "Mesopotamian" Biblical theory becomes questionable.

9.2. Archaeology and the New Testament

The traditional localization of the events described in the New Testament isn't in any better condition. The lack of archaeological proof of the Scaligerian localization of the New Testament is explained by the fact that "Jerusalem had been destroyed in the years 66-73, and that the Jews had been forbidden… to come anywhere near the city" ([444], page 196). The Scaligerian history is of the opinion that Jerusalem can be located at the settlement that the locals call El Kuds, whose site used to be perfectly barren before, also known as Elia Capitolina. It was after the passage of some time that "the ancient Jerusalem" was reborn here. The "historical remnants of Biblical times" shown to tourists today, such as the Wailing Wall, etc., do not hold up to even minimal scientific criticism, in full absence of historical and archaeological proof.

Fig. 1.36 shows an ancient miniature, allegedly dating to 1470, that depicts the pillaging of Jerusalem by the Syrian king Antiochus Epiphane ([1485], pages 164, 165). As we can see, the mediaeval author of the miniature didn't hesitate to represent Jerusalem as a typically mediaeval town with Gothic buildings and towers, and all the warriors wearing mediaeval plate armour.

One must emphasise that other versions exist apart from the Scaligerian. The Catholic Church, for instance, has been claiming the "very house" that Virgin Mary had lived in and where "Archangel Gabriel appeared before her" to have been located in the Italian town of Loreto since the XIII century, which means that the Catholic version transfers a part of evangelical events to Italy. The earliest document concerning the "Loreto house" is the bull issued by Pope Urban VI dated to 1387. In 1891 Pope Leo XIII issued an encyclical "in celebration of the 600 years of Loreto's Miracle." Thus, the "miracle" is dated at XIII century A.D. Historians mark that "Loreto remains a holy pilgrimage place for the Catholics to this day" ([970], p. 37).

Fig. 1.36. Ancient miniature allegedly dated 1470 from Jean de Courcy's *Global Chronicle (Chronique de la Bouquechardière)*. We see Jerusalem pillaged by the Syrian king Antiochus Epiphane. Jerusalem is pictured as a mediaeval Gothic town. We see an Ottoman crescent on the spire of one of the towers. Taken from [1485], ill. 200.

A. Y. Lentzman tells us:

"In 1940, the excavations sanctioned by Pope Pius XII were commenced under the Vatican crypts, and their peak fell on the post-war years… In the late 1940's a solemn statement was made by the press, especially the Catholic press [since the excavations must have been expensive – A. F.], that *not only the burial spot of the Apostle Peter was found, but his remains as well*… An objective analysis of the results of Vatican excavations demonstrated all of these claims to have been false. Pope Pius even had to make a radio announcement on the 24 December 1950 where he had acknowledged "the impossibility of making any veracious claims about the unearthed human bones belonging to the Apostle." ([471], pages 45-49)

The location of the town of Emmanus near which

Jesus is said to have appeared before his disciples after the Resurrection defies all attempts of being determined. The place of the Transfiguration of Jesus, Mount Tabor, also remains impossible to locate. Even the location of Golgotha is doubted by historians." ([444], page 201).

Seeck in his *Geschichte des Untergangs der antiken Welt* (History of the Ancient World's Decline, III, 1900) wrote that "we have no intention… of picturing his [Christ's – A. F.] earthly destiny… all the issues of the origins of Christianity are so complex that we are glad to have the opportunity and the right to leave them well alone" (quoted in [259], page 46). A convenient stance, and one that has got absolutely nothing to do with science.

The archaeologist Schwegler sums up in the following way:

"This is where the tragedy begins for the believer whose primary need is to know the place on Earth where his Saviour had lived and suffered. But it is the location of the place of his (Christ's) death, that remains covered in impenetrable darkness, if we're to think in archaeological categories." (quoted in [444], page 202)

Apparently, there is no possibility of determining the location of the cities of Nazareth and Capernaum, as well as that of Golgotha etc., on the territory of modern Palestine. ([444], pages 204-205)

We shall quote the following noteworthy observation to sum up:

"Reading the literature related to Evangelical archaeology leaves a strange impression. Tens and hundreds of pages are devoted to the descriptions of how the excavations were organized, what the location of the site and the objects relevant to the research looked like, the historical and Biblical background for this research, etc.; and the final part, the one that is supposed to cover the result of the research, just contains a number of insubstantial and obviously embarrassed phrases about how the problem was not solved, but there's still hope, etc. It can be said categorically and with all certainty that *not a single event described in the New Testament has any valid archaeological basis for it* [in the Scaligerian chronology and localization – A. F.]… This is perfectly true in what concerns the identity and the biography of Jesus Christ. There is no proof for the location of any of the places where the evangelical events are traditionally supposed to have occurred." ([444], pages 200-201)

We ask yet again: is it correct to search for the traces of the events described by the New Testament in the Middle Eastern Palestine? Could they have taken place somewhere else?

10.
ANCIENT HISTORICAL EVENTS: GEOGRAPHIC LOCALIZATION ISSUES

10.1. The locations of Troy and Babylon

The correct geographic localization of a large number of ancient historical events is truly a formidable task. Naples, for instance (whose name merely stands for "New Town") is reflected in the ancient chronicles as the following cities:

1) Naples in Italy, existing to this day.

2) Carthage, also translating as "New Town" ([938], page 13, B, 162-165).

3) Naples in Palestine ([268], page 130).

4) The Scythian Naples (see the collection of the State History Museum of Moscow).

5) New Rome a. k. a. Constantinople or Czar-Grad, which could also be referred to as "New Town".

Thus, if a chronicle is referring to an event that occurred in Naples, one has to devote all of one's attention to making sure one understands which town is meant.

Troy may be seen as yet another example. One of the consensual localizations for Homer's Troy is near the Hellespont straits. Schliemann used this hypothesis for solemnly baptizing as "Troy" the 100×100 metre excavation site of a minuscule ancient settlement that he had discovered near the Hellespont ([443], page 107). Actually, the very localization of Hellespont itself is highly controversial. See CHRON2 for more details.

The Scaligerian chronology and history tell us that Homer's Troy had met its final fate of destruction and utter desolation in the XII-XIII century B.C. ([72]). However, we know that the Italian town of Troy played an important role in mediaeval history, particularly in the well-known war of the XIII century. This town still exists ([196]).

Many Byzantine historians of the Middle Ages refer to Troy as an *existing mediaeval town,* among them

Fig. 1.37. Ancient miniature allegedly dated to 1470 from Jean de Courcy's *Global Chronicle (Chronique de la Bouquechardière)*. We see the "extremely ancient" King Nimrod in the "ancient" Babylon, which is depicted as a Gothic mediaeval town with elements of Muslim architecture. Taken from [1485], ill. 199.

Nicetas Aconiatus ([934], Volume 5, page 360), and Nicephorus Gregoras ([200], Volume 6, page 126).

According to Titus Livy, Troy and the entire Trojan region were located in Italy ([482], Volume 1, pages 3-4). He tells us that the surviving Trojans landed in Italy soon after the fall of Troy, and that the place of their first landing was called Troy. "Aeneas… wound up in Sicily; his fleet sailed thenceforth, and came to the Laurentian region. *This place is called Troy as well*" ([482], Volume 1, pages 3-4, Book 1, No. 1).

Several mediaeval historians *identify Troy with Jerusalem,* for instance ([10], pages 88, 235, 162, 207). This fact embarrasses modern historians greatly, leading them to write such comments as: "Homer's actual book somewhat suddenly turns into an account of the devastation of Jerusalem" [in a mediaeval text de-

scribing Alexander's arrival in Troy – A. F.] ([10], page 162).

Anna Comnena, a mediaeval author, somewhat unexpectedly locates Jerusalem in Ithaca, the island where Ulysses was born ([419], Volume 2, pages 274-285). This is most peculiar indeed, since it is known perfectly well that modern Jerusalem isn't located on an island.

Another name for Troy is Ilion, while Jerusalem is also known as Aelia Capitolina ([544], Volume 7). Aelia and Ilion are rather close phonetically. It is possible that *the same city* was called Troy and Ilion by some, and Jerusalem and Aelia by others. Eusebius Pamphilus writes somebody "referred to the small Frigian towns, Petusa and Timion as 'Jerusalem'" (quoted in [544], page 893).

The facts quoted above demonstrate the fact that the name of Troy had multiplied in the Middle Ages, and had been used for referring to different cities. Could an archetypal mediaeval original have existed? The Scaligerian chronology contains information that allows the construction of the hypothesis that Homer's Troy was really Constantinople, or Czar-Grad.

Apparently, the Roman emperor Constantine the Great took into account the wish of his fellow townsmen and "had initially chosen the *place where the ancient Ilion, the fatherland of the first founders of Rome, had been located*". This is what the prominent Turkish historian Jalal Assad tells us in his *Constantinople* ([240], page 25). Historians proceed to tell us that Constantine had "changed his mind" afterwards, and founded New Rome nearby, in the town of Byzantium. But it is a known fact in Scaligerian history that Ilion is another name for Troy.

What we encounter here may well be a remainder of the fact that the same town located on the Bosporus had been referred to by different names: Troy, New Rome, Czar-Grad, Jerusalem. It might also be true that since Naples means New Town, it was the name that had been used for New Rome as well.

Let us mention the fact that southern Italy used to be called the Great Greece in the Middle Ages (Eusebius Pamphilus) ([267], pages 282-283).

Nowadays it is assumed that the city of Babylon was located in modern Mesopotamia. Some of the mediaeval texts hold a cardinally different opinion. The well-known book *Serbian Alexandria,* for instance, locates Babylon in Egypt. Moreover, it tells us

that Alexander the Great died in Egypt as well – according to the Scaligerian version, this event took place in Mesopotamia ([10], page 255).

Furthermore, we see that "Babylon is the Greek name of the settlement that had been located opposite the pyramids [the Tower of Babel – A. F.]… *In the Middle Ages it had been a frequently used name for Cairo,* whose suburb this settlement eventually became" ([464], page 45). The name Babylon can be translated, as well as the names of many other cities, and thus may have been used for referring to other locations.

Eusebius tell us that Rome used to be called Babylon ([267], page 85). Furthermore, "the Byzantine historians [in the Middle Ages – A. F.] often called Baghdad Babylon" ([702], page 266, comment 14). Michael Psellus, the author of the alleged XI century refers to Babylon as one would to an existing town – not a destroyed one ([702], page 9).

In fig. 1.37 we can see an ancient miniature dated 1470 depicting "ancient" Babylon as a typically mediaeval Gothic town ([1485], pages 164, 165). The Tower of Babel is being constructed on the right. The "ancient" king Nimrod is also portrayed as a mediaeval knight in plate armour. Modern commentators deem this to be a fantasy bearing little semblance to reality: "on the left we see Babylon presented as a *fantasy Gothic town with elements of Muslim architecture.* The giant in the centre is Nimrod. The construction of the tower of Babel is pictured on the right" ([1485], page 164). It is most probable, however, that this is not a fantasy. The artist had been perfectly aware of what he was painting, and the picture reflects mediaeval reality.

10.2. The geography of Herodotus is at odds with the Scaligerian version

Let us quote some examples from Herodotus, who plays a key role in the Scaligerian chronology. He claims the African river Nile to be parallel to Ister, that is nowadays identified as the Danube (and, oddly enough, not Dniester) ([163], page 492). This is where we find out that "the opinion that Danube and Nile were parallel reigned in the *mediaeval Europe* until as late as the end of the XIII century" ([163], page 493). Thus, the mistake of Herodotus proves to be mediaeval in its origins.

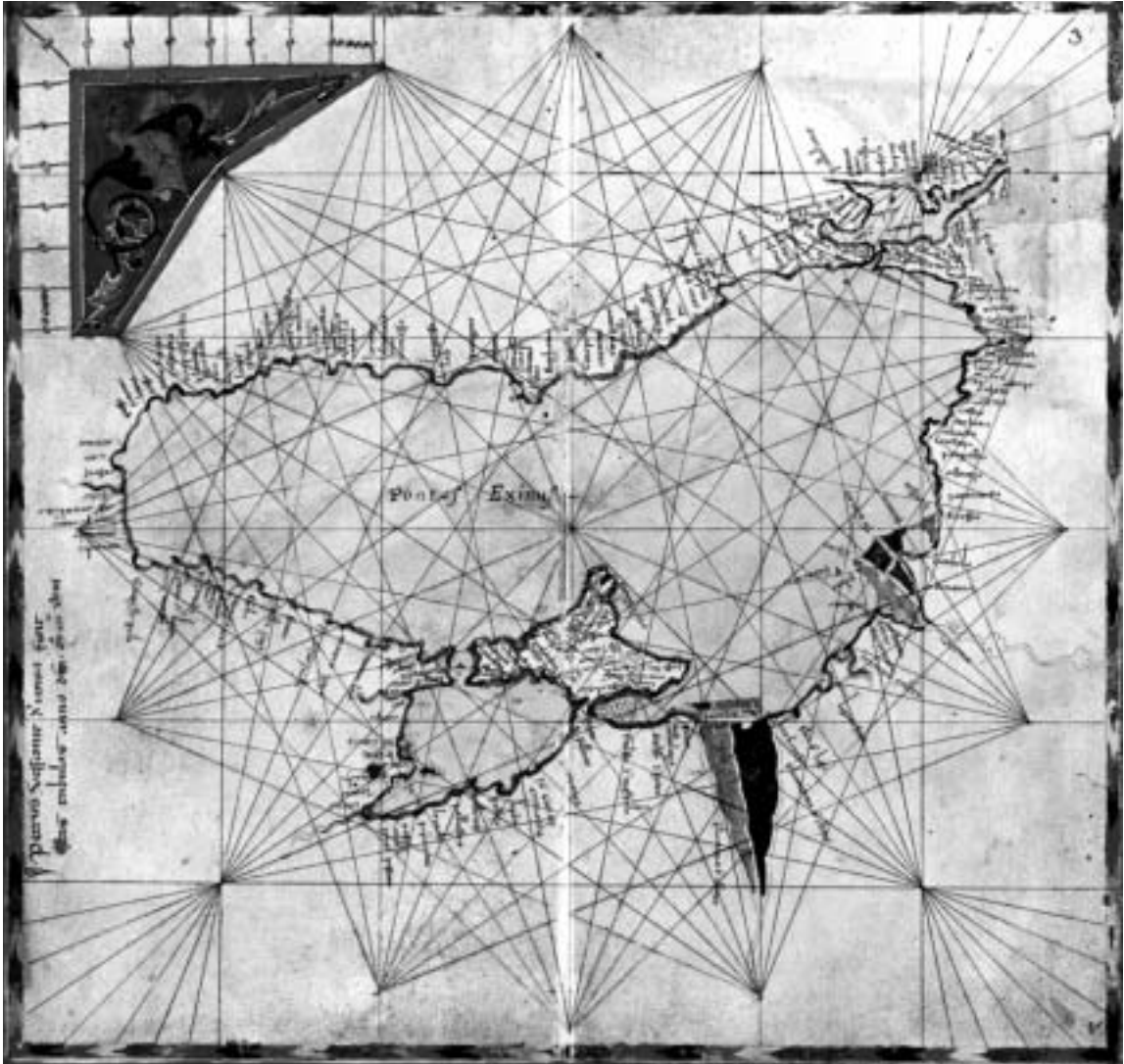Herodotus proceeds to tell us that "the Persians in-

Fig. 1.38. An old inverted map of the Black Sea. This is a so-called "portolano" by the Genoese Pietro Vesconte, allegedly dated 1318 ([1468], page 3). Several points on the coast of the Black Sea are marked. The centre of the map says Pontus Euxinus. The North is at the bottom, the East on the left. The East used to be referred to as *Levant*, see [1468], page 37, which means "situated on the left". There are traces of the name remaining in the German language, among others, where the Middle East is still called *Levant*. See [573], page 333. The Crimean peninsula, it will be observed, is "upside down" in comparison to its location on modern maps. Taken from [1468], map 3.

habit all of Asia to the very Southern Sea that is also called the Red Sea" ([163], 4:37, page 196). According to consensual geography, the Southern Sea is the Persian Gulf. Giving a description of the peninsula that contemporary historians identify with the Arabian peninsula, Herodotus writes that "it begins near

the Persian land and stretches to the Red Sea" ([163], 4:39, page 196). Everything appears to be correct here. However, this contradicts the opinion of those historians who identify the Red Sea mentioned by Herodotus with the Persian Gulf ([163]). This is why modern commentators hasten to "correct" Herodotus:

Fig. 1.39. An old inverted map of a part of the Mediterranean. A portolano by the Genoese Pietro Vesconte, allegedly dating from the XIV century [1418]. The North is at the bottom, the East on the left. This is probably the reason why the East used to be referred to as *Levant*, or "located on the left." Taken from [1468], map 4.

"Red Sea stands for Persian Gulf here" ([163], Appendices, Part 4, comment 34).

Let us continue. The Red Sea in its modern interpretation may indeed "reach further up than the Persians" according to Herodotus ([163], Volume 4:40), but only meeting one condition, namely, that the map used by Herodotus was *inverted* in relation to the ones used nowadays. Many mediaeval maps are like that, with North and South swapped (q.v.

below). This makes the modern historians identify the Red Sea with the Persian Gulf ([163], Appendix, Part 4, comment 36), although the Persian gulf is "below" the Persians in this case, or to the East of them, but doesn't reach "further up" at any rate.

Historians identify the same sea as mentioned by Herodotus in 2:102 with the Indian Ocean ([163], Appendix, Part 2, comment 110). What we observe here is the inversion of the East and the West. Could

Fig. 1.40. An old inverted map of Spain and a part of Africa. Africa is on top, and Spain at the bottom. Thus, the North is at the bottom, and the East is on the left. Another portolano by Pietro Vesconte, allegedly dating from the XIV century ([1468]). These maps most probably date from the XV-XVI century. Taken from [1468], map 8.

the map that Herodotus had used have been an inverted one, then?

In book 4:37 Herodotus identifies the Red Sea with the South Sea, q.v. above. This proves to be the final straw of confusion for the modern commentators who try to fit Herodotus into the Procrustean geography of the Scaligerian school, and the maps used nowadays. They are forced to identify the Red (Southern) Sea with the Black Sea! See book 4:13, [163], Appendix,

Part 4, comment 12. We see yet another inversion of the East and the West in relation to the Persians.

Thus, identifying the geographic data as offered by Herodotus with the Scaligerian map runs us into many difficulties. The numerous corrections that the modern historians are forced to make show us that the map that Herodotus had used may have been inverted in relation to the modern ones, which is a typical trait of *mediaeval* maps ([1468]).

Fig. 1.41. An old inverted map of England and France. France is on top, and England at the bottom. The East is on the left. A portolano of the Genoese Pietro Vesconte, allegedly dating from the XIV century. Taken from [1468], map 10.

As we can see, the commentators have to make a conclusion that Herodotus uses different names to refer to the same seas in his *History*. If we're to believe the modern historians, we have to think that Herodotus makes the following identifications: Red Sea = South Sea = Black Sea = North Sea = the Mediterranean = the Persian Gulf = Our Sea = Indian Ocean ([163], Appendix, comments 34, 36, 110, etc.).

The mentions of the Crestonians, the town of Creston, and the region of Crossaea sound most pe-

culiar coming from an allegedly ancient author ([163], 1:57, page 27; 5:3, page 239; 5:5, page 240; 7:123, page 344; 7:124, pages 344-345; 7:127, page 345; 8:116, page 408; page 571). One constantly gets the feeling that he is referring to the mediaeval *crusaders*. "Cross" and "Crest" are the roots one most often associates with the Middle Ages. Just how veracious are the datings of the events related by Herodotus?

The unbiased analysis of Biblical geography yields many oddities as well ([544]).

10.3. The inverted maps of the Middle Ages

Modern maps place the East on the right, and the West on the left. However, we find that the opposite is true for many mediaeval maps – all of the sea charts of the alleged XIV century had the *East* on the *left*, and the *West* on the *right*, q.v. the atlas [1468]. Some of these old inverted charts from Genoa can be seen in figs. 1.38, 1.39, 1.40 and 1.41. These charts may have been used by either traders or the military fleet.

The word *levant,* for instance, still means "oriental" in French. The Middle East is also often referred to as *Levant* in German ([573], page 733). This may be a reflection of the fact that the Orient was on the left of the maps (*leviy* means "left" in Russian, and the adverb for "on the left" is *sleva).* It is possible that the Russian word *leviy* was adopted by some of the Western European languages in order to refer to the Orient. See our Parallelism Glossary in CHRON7.

Why did the old maps, and sea charts in particular, have the East on their left, and the West on their right? The reason may have been that the first seafarers of Europe would sail forth from the seaports located on the European coast of the Mediterranean, as well as the Black and Azov seas, and so they had to move *from the North to the South.* The South was therefore in front, and the Northern coast behind them. A ship captain sailing into the Mediterranean from the Bosporus would look at the approaching African coast. Thus, the *East* was *on the left,* and the *West* was on the right.

This is why the first sea charts of both the traders and the military put the East on the left. It made sense to put that which lay in front on the top of the map. Thus, the way one looks at the map corresponds with the direction of one's movement.

11.
A MODERN ANALYSIS OF BIBLICAL GEOGRAPHY

The fact that many Biblical texts clearly refer to volcanic activity has been well known to historians for a long time. The word Zion is widely known; theologians interpret it as "pillar" ([544], Volume 2). Identifying Zion with Sinai and Horeb is common in both theology and Bible studies. Hieronymus in par-

ticular noted that: "it appears that the same mountain is called by two different names, Sinai and Horeb" ([268], page 129). I. Pomyalovsky wrote that: "the Old Testament often identifies it [Mt. Horeb – A. F.] with Sinai" ([268], page 326). "Mount Zion" can be translated as "The Pillar Mountain" ([544], Volume 2). The Bible explicitly describes Mount Sinai/Zion/Horeb as a volcano, q.v. below. In this case "The Pillar Mountain" makes sense in the way of referring to *a pillar of smoke* above the volcano. We shall be referring to God as the Thunderer below, following the interpretation suggested in [544], Volume 2.

According to the Bible,

"the Lord said unto Moses, Lo, I come unto thee in a thick cloud… upon mount Sinai… when the trumpet soundeth long, they shall come up to the mount… there were thunders and lightnings, and a thick cloud upon the mount, and the voice of the trumpet exceeding loud… And mount Sinai was altogether in smoke, because the Lord descended upon it in fire: and the smoke thereof ascended as the smoke of a furnace, and the whole mount quaked greatly. And when the voice of the trumpet sounded long, and waxed louder and louder, Moses spake, and God answered him by a voice." (Exodus 19:9, 19:11, 19:13, 19:16, 19:18-19)

Also: "And all the people saw the thunderings, and the lightnings, and the noise of the trumpet, and the mountain smoking" (Exodus 20:18). In fig. 1.42 we can see an ancient engraving from a 1558 Bible (**Biblia Sacra**) ([544], Volume 2, page 210, illustration 94). The mediaeval painter portrays Moses ascending a fiery mountain.

Furthermore:

"The day that thou stoodest… in Horeb… and the mountain burned with fire unto the midst of heaven, with darkness, clouds, and thick darkness. And the Lord spake unto you out of the midst of the fire; ye heard the voice of the words, but saw no similitude; only ye heard a voice." (Deuteronomy, 4:10-12)

The destruction of the Biblical cities of Sodom and Gomorrah has long been considered a result of a volcanic eruption. The Bible says that "the Lord rained upon Sodom and upon Gomorrah brimstone and fire from the Lord out of heaven… and, lo, the smoke of the country went up as the smoke of a furnace" (Genesis 19:24, 19:28).

Fig. 1.42. Moses ascending a fiery mountain. An ancient illustration from a Bible allegedly dated 1558 *(Biblia Sacra)*. Taken from [544], Volume 2, page 210, ill. 94.

On Albrecht Dürer's engraving "Lot Fleeing with his Daughters from Sodom" we can see a volcanic eruption destroying the Biblical cities of the plain in a fountain of fire and stones (fig. 1.43).

Let us turn to the Lamentations of Jeremiah that contain a description of the destruction of Jerusalem. It is assumed to be an account of the destruction of the city by a hostile army; however, the text contains many fragments such as "How hath the Lord covered the daughter of Zion with a cloud in his anger… and remembered not his footstool in the day of his anger! The Lord hath swallowed up all the habitations… he burned… like a flaming fire, which devoureth round about" (The Lamentations of Jeremiah, 2:1-3).

Then we encounter the following in the chapters 3 and 4 of the Lamentations:

"I am the man that hath seen affliction by the rod of his [God's – A. F.] wrath; he hath led me, and brought me into darkness, but not into light… he hath broken my bones… *he hath inclosed my ways with hewn stone*, he hath made my paths crooked…

he hath also broken my teeth with gravel stones, he hath covered me with ashes… thou hast covered with anger, and persecuted us: thou hast slain, thou hast not pitied. Thou hast *covered thyself with a cloud*… the stones of the sanctuary are pored out… the punishment… is greater than the punishment of the sin of Sodom… their [the survivors' – A. F.] visage is blacker than a coal… The Lord hath accomplished his fury; he hath poured out his fierce anger, and hath kindled a fire in Zion, and it hath devoured the foundations thereof." (The Lamentations of Jeremiah, 3:1-2, 3:4, 3:9, 3:16, 3:43-44, 4:1, 4:6, 4:8, 4:11)

Theologians insist all of this is metaphorical; however, a literal reading of the text divulges an account of the destruction of a large city by a volcanic eruption. The Bible refers to volcanic activity quite often; here's a list of all such references, compiled by V. P. Fomenko and T. G. Fomenko:

Genesis 19:18, 24, Exodus 13:21, 22, Exodus 14:18, Exodus 20:15, Exodus 24:15, 16, 17, Numbers 14:14, Numbers 21:28, Numbers 26:10, Deuteronomy 4:11,

36, Deuteronomy 5:19, 20, 21, Deuteronomy 9:15,21, Deuteronomy 10:4, Deuteronomy 32:22, The Second Book of Samuel 22: 8-10,13, The First Book of the Kings 18:38, 39, The First Book of the Kings 19:11, 12, The Second Book of the Kings 1:10-12,14, Nehemiah 9:12,19, The Book of Psalms (Psalm 11, verse 6, Psalm 106, verse 17), (Psalm 106, verse 18), Ezekiel 38:22, Jeremiah 48:45, The Lamentations of Jeremiah 2:3, The Lamentations of Jeremiah 4:11, Isaiah 4:5, Isaiah 5:25, Isaiah 9:17,18, Isaiah 10:17, Isaiah 30:30, Joel 2:3,5,10.

Seeing these descriptions as referring to Jerusalem in Palestine and the traditional Mount Sinai is very odd indeed, since *Mt. Sinai located on the modern Sinai Peninsula had never been a volcano.* Where did the events really take place, then?

It suffices to study the geographic map of the Mediterranean region ([440], pages 380-381, 461) to see that there are no volcanoes on the Sinai Peninsula, and there aren't any in either Syria or Palestine. There are zones of Tertiary and Quaternary volcanic activity, but one encounters those in the vicinity of Paris as well. There has been no volcanic activity recorded in documented history (the post-A.D. period).

The only relevant geographic zone that possesses powerful volcanoes active to this day is the area including Italy and Sicily, since there are no volcanoes in Egypt or anywhere in the north of Africa ([440]). We are looking for:

1) A powerful volcano that was active in the historical epoch;

2) A destroyed capital near the volcano (see the Lamentations of Jeremiah);

3) Two more destroyed cities near the volcano, Sodom and Gomorrah.

There is just one volcano in the entire Mediterranean area that fits these criteria – *Vesuvius.* It is one of the most powerful volcanoes active in the historical period. The famous Pompeii – a capital? – and two destroyed cities: Stabia (Sodom, perhaps?) and Herculanum (Gomorrah?). The names do possess a slight similarity.

N. A. Morozov was of the opinion that the origin for the name Sinai given to Vesuvius is the latin word *sinus* (or *sino* in Old Latin) – "mountain with bowels," and Horeb has its origins in the Latin word *horribilis,* "horrible." In [544] we can see the results of an interesting research that Morozov conducted concerning the Biblical text as read without vocalizations, and considering the localization of Mount Sinai/Horeb/Zion in Italy.

Let us quote several examples. The Bible says, "the Lord our God spake to us in Horeb, saying, Ye have dwelt long enough in this mount: turn you, and take your journey… to the land of the Canaanites (CNUN)" (Deuteronomy, 1:6-7). Theologians vocalize CNUN as Canaan, and localize it in a desert near the Dead Sea coast, but another vocalization is possible: CNUN – Cenoa, as a variant of Genoa (the area of Genoa in Italy). Apart from that, the word Canaan sounds like (the land of the) Khans.

The Bible gives the direction as "to the land of CNUN (the Canaanites), and unto LBNUN" (Deuteronomy 1:7), that is commonly vocalized as "Lebanon" – however, LBNUN is also often used for "white," and may have been used to refer to Mont Blanc – the White Mountain, literally. The land of the Canaanites may mean the same as the Khan's land, or the Land of the Khan.

Furthermore, we see "unto the great river, the river PRT" in Deuteronomy 1:7. PRT is localized as Euph-

Fig. 1.43. Albrecht Dürer's engraving titled "The Destruction of Sodom and Gomorrah." What we see here is a powerful volcanic explosion, as one might expect, destroying the Biblical cities of the plain. Taken from [1234], engraving 40.

rates; however, what lies beyond Mont Blanc is the river Danube with its large tributary *Prut*.

The Bible says, "when we departed from Horeb, we went through all that great and terrible wilderness" (Deuteronomy 1:19). The famous Flegrean Fields that are located near Vesuvius (Horeb) fit this description perfectly – large areas of scorched land full of small volcanoes, fumaroles, and layers of lava.

According to the Bible, the Israelites "came to KDSH V-RNAE" (Deuteronomy 1:19). KDSH V-RNAE is vocalized as "Kadesh-barnea" – however, the town in question may well be Cadiz upon the Rhone ([544], Volume 2, page 166). Cadiz on the Rhone might be another name of the modern Geneva – or indeed the Bulgarian city of Varna.

Further in the Bible we see, "and we compassed mount Seir many days" (Deuteronomy 2:1). Theologians left the word "Seir" without translation; if we translate it, we shall get "The Devil's Mountains" ([544], Volume 2, page 166). A mountain by this name exists near Lake Geneva – Mount Diableret, "The Devil's Mountain."

The *sons of Lot* encountered on the way may well be the Latin population (LT without vocalizations) ([544], Volume 2, page 167).

The River Arnon (ARNN) is mentioned in Deuteronomy 2:24. This may well be the Italian river Arno!

The Israelites "Went up the way to Bashan" according to Deuteronomy 3:1. The town of Bashan is often mentioned by the Bible. Amazingly enough, a town by the name of Bassano still exists in Italy.

The Bible proceeds to mention that "the king of Bashan came out against us… to battle at Edrei" (Deuteronomy 3:1). This is clearly a reference to Adria (near the Po estuary). As for Po itself – ancient Latin authors (see Procopius, for instance) often refer to it as "Jordan" (Eridanus) ([544], Vol. 2). The name concurs with the Biblical JRDN perfectly well ([544], Vol. 2, page 167).

According to the Bible, "there was not a city which we took not from them, threescore cities" (Deuteronomy 3:4). Indeed, many large towns were located in this area in the Middle Ages – Verona, Padua, Ferrara, Bologna, etc.

The Bible mentions the land "from the river of Arnon (Arno, ARN) unto mount HRMN (Hermon)", q.v. in Deuteronomy 3:8. However, the HRMN mountains can also be vocalized as the German mountains.

"For only Og king of Bashan remained… his bedstead [coffin here – A. F.] was a bedstead of iron; is it not in Rabbath of the children of Ammon?" (Deuteronomy 3:11). Rabbath is Ravenna, and the coffin of Og [Goth?] is the sepulchre of Theodoric the Goth located in Ravenna! Theodoric is supposed to have lived in 493-526 A.D., so this Biblical text could not have appeared before the VI century A.D., even in Scaliger's chronology.

The Israelites are supposed to have stopped at TBRAE, or "the place Taberah" (Numbers 11:3). Bearing the previous identifications in mind, we can recognize the Italian river Tiber in this name. Furthermore, CN is Siena (to the south-east from Livorno), the Biblical Hebron (HB-RUN, Genesis 23:2) is possibly Gorgo du Rhone ([544], Volume 2, pages 229-237). The slopes of Monte Viso are called Jebus (VUZ) in Judges 19:10. The city of Rome is called Ramah (RAMA) in Judges 19:13. All the quotes are from the authorized version of the Bible, and there are many more examples.

It is thus possible that a part of the events described in the Bible, namely, the journey of the Israelites led by Moses, and their subsequent conquest of the "Promised Land" with Joshua, took place in Europe, and particularly in Italy (as opposed to Palestine).

The localization of the "ancient" states mentioned in the Bible also raises a vast number of questions. The Bible often mentions the Phoenician towns of Tyre and Sidon; since we now allow for possibilities of mediaeval interpretations of many Biblical names, one cannot fail to notice the similarities between the names of Venetia and Phoenicia – they may well be the same name if we consider the usual rules of flexion. One comes up with the hypothesis of *localizing the Biblical Phoenicia as the mediaeval Venice.*

Indeed, the Bible describes the "ancient" Phoenicia as a powerful nation of seafarers that reigned over the entire Mediterranean, with colonies in Sicily, Spain, and Africa. "Ancient" Phoenicians traded extensively with faraway lands, as can be seen in the book of Ezekiel, chapter 27. All of these Biblical criteria are met by the mediaeval Venetian republic, a well-known and powerful state.

The Scaligerian history claims the principal Phoenician towns to have been the modern Tyre and Sidon (Saida). Do these towns fit their Biblical descriptions

of lavishness and splendour? A XIX century volume of sailing directions for seamen ([494]) tells us the following about Saida:

"The town had 1600 inhabitants in 1818… There is a small bay to the south… A small pier that is barely visible in our day used to belong to a small harbour that is now completely covered by the sands… Plague often rages fiercely here… One finds no traces of former splendour in Saida nowadays… There's a reef on the south end, and it's very shallow in the north… The depth between the town and the island is uneven… The passage is narrow, and the bottom is full of stones. A large ship's boat cannot come close to the shore, which makes it impossible to replenish water supply here" ([494], quoted in [544], Volume 2, page 637).

The town is located in the estuary of a river that isn't navigable by ships. Its main means of survival in the XIX century had been the local gardens. Strategically speaking, Saida's location is perfectly hopeless. It used to belong to virtually everyone during the crusades epoch; there are no records mentioning it as a large independent trade centre ([544], Volume 2).

All of this contradicts the Biblical descriptions of the greatness of Sidon and Phoenicia. The situation with Tyre is similar ([494], [544], Volume 2). Evidently, the Bible is referring to other locations.

12.
THE MYSTERIOUS RENAISSANCE EPOCH AS A PRODUCT OF THE SCALIGERIAN CHRONOLOGY

The Scaligerian chronology is very fond of the renaissance motif, appealing to the archetypal recurrence of the Classical Age.

The ancient Plato is supposed to have been the founding father of Platonism. His teaching allegedly falls into oblivion for centuries to come, and is revived by the famous Neoplatonist Plotin, allegedly in 205-270 A.D. The similarity of his name to that of his teacher is purely accidental, of course. Then Neoplatonism perishes as well, in order to be revived again in the XV century A.D. by another famous Platonist – Gemisto Pleton, whose name is also identical to that of his teacher as a result of sheer coincidence. The mediaeval Pleton is supposed to have revived the "ancient" Platonism, having been an avid advocate of "the ancient sage Plato." Furthermore, it is only in the XV century

that Plato's manuscript was unearthed ([247], pages 143-147). This is precisely the epoch of Gemisto Pleton.

Pleton founds "Pleton's Academy" in Florence in the image of the "ancient" Plato's Academy ([247]). A. A. Vasiliev writes that "His [Pleton's – A. F.] sojourn in Florence… had been one of the most important periods for Italy when it was importing the ancient Greek science, and Plato's philosophy in particular" ([675], Volume 3, Pt. 2; [120]).

Both Plato and Pleton write Utopian works. Gemisto Pleton is reported to have been the author of the famous *Tractate on the Laws,* which sadly failed to reach us in its entirety. However, the full text of Plato's tractate by the same title did. Pleton, who lived in the XV century, also suggests the construction of an ideal state, with his programme being extremely close to Plato's. Plotin, who had allegedly lived in 205-270 A.D., is yet another one to have hoped the Emperor would aid the foundation of the city of Platonopolis in Campagna (Italy again), where he had planned to introduce communal aristocratic institutions à la Plato ([122], Volume 4, pages 394-397).

Many prominent ecclesial leaders have historical doppelgangers in Scaliger's chronology. Eusebius in his *Historia Ecclesiastica (*[267]) makes many references to a certain Bishop Victor who played a key role in the so-called Easter Dispute, or the introduction of the Paschalian rules ([267], page 306). There is indeed an Easter dispute known to history and associated with the name of Victor, as reflected in the term "The Paschalian Cycle of Victor" ([76], table 17). However, this dispute and Victor's lifetime are ascribed to 463 A.D., whereas Eusebius who reports this is supposed to have lived in the III-IV century A.D. The Scaligerian chronology would appear to be inverted.

Furthermore, in [267] Eusebius tells us of a famed Dionysius who formulated the rules for celebrating Easter, having linked it to the Spring Equinox and the "suffering of the Saviour." According to Eusebius, Dionysius is supposed to have died in the 12th year of Gallienus, which is 265 A.D. in the Scaligerian chronology. It is most remarkable that another well-known scientist by the name of Dionysius existed in the VI century A.D. – namely, Dionysius Exiguus (Dionysius the Little). He is supposed to have conducted an in-depth study of the Paschalian problem, and deduced the date of Christ's birth for the first time.

Fig. 1.44. Charlemagne's portrait (he allegedly reigned in 742-814). Albrecht Dürer, 1514. The portrait is kept in the German Museum, Nuremberg. Taken from [328], page 25, ill. 3.

Apart from this, he calculated the advent of Easter for many years ahead, affixing it to the Spring Equinox ([76], table 18). We have two eminent scientists by the name of Dionysius who studied the Paschalian problem and the relation of Easter to the vernal equinox, both following Victor who already possesses a duplicate of his own. However, they are separated by a period of three centuries according to the Scaligerian chronology. This is evidently a mistake; there was

only one Dionysius whose double existed on paper exclusively. Actually, we are to acquaint ourselves with yet another Dionysius the Little, who must have been the prototype of both. We are referring to Dionysius Petavius who had lived in the XVII century.

We see strange duplicates in the Scaligerian history of the famous *Res Romana* as well ([5]). F. Schupfert writes that:

"The series of prominent Roman lawyers ends with Erennius Modestine who had died in 244 A.D. After that, the entire discipline of law enters a lethargic phase to be revived in nine hundred years by Erennius [who was the double of Erennius in activity as well as the name – A. F.]… It suddenly resurrected in the entirety of its primordial grace… in Bologna." ([879], page 187)

The mediaeval Irnerius ("ancient" Erennius?), the founder of the school, started lecturing in Roman Law around 1088 A.D., "reviving" it after an alleged nine-century period of oblivion. He is also supposed to have "collected" the ancient codices of Justinian.

There are two famous Homers in the Scaligerian history: the ancient poet and the mediaeval Angilbert Homer who is supposed to have belonged to Charlemagne's court in the IX century A.D. "He must have received his academic name Homer for his poetical works," suggests G. Weber. "Very few poetic works of Angilbert have reached us" ([122], Volume 5, page 391). This *mediaeval Homer* had been "an important member of the circle of scientists that existed in the Aachen court of Charlemagne" ([122], Volume 5, page 391).

It has to be noted that Charlemagne is in no way a personal name as we tend to think today; most probably, it used to mean "The Great King." The question of who exactly was referred to in that manner deserves a special study, and we shall return to it below. In fig. 1.44 we can see a portrait of Charlemagne painted by Albrecht Dürer in the XVI century.

Nowadays the "ancient Roman" count of time by ides and calends is assumed to have gone out of use in the VI-VII century A.D. Nevertheless, the mediaeval chronographers of XIV century A.D. appear to have been unaware of this fact, using the "long-forgotten" ides and calends wherever they saw fit ([229], p. 415).

There's a large number of such odd doubles in the Scaligerian history. We are not claiming they prove our statements; one may indeed find a large number of

Fig. 1.45. An old miniature from the book titled *Les Grandes Chroniques de France,* Paris, allegedly dating from the early XV century. The siege of Troy is on top, and the foundation of Paris at the bottom. The miniature illustrates the Trojan origins of the French, with the "ancient" Greeks and Trojans portrayed as mediaeval knights wearing heavy plate armour identical to that of the knights founding Paris at the bottom of the miniature, also mediaeval. Taken from [1485], ill. 115.

isolated coincidences. What we emphasize is the global nature of these duplicates and parallels, fitting the general scheme of chronological shifts which cover sequences of *hundreds of years* "side by side" and "following each other" for hundreds of years to come.

One of the principal indications of the mediaeval origins of many ancient documents is the very existence of a Renaissance Epoch when all of the ancient scientific disciplines, philosophy, arts, and culture in general are assumed to have been revived. The "re-

splendent Classical Latin" has degraded into a rough and clumsy lingo that only manages to regain its former splendour in the Renaissance epoch. This "revival" of Latin and Classical Greek begins in the VIII-IX century A.D. the latest ([335], page 23).

The famed mediaeval troubadours begin to use the plots that the historians call "a masquerade of classical recollections" in the alleged X-XI century. The "history of Ulysses" (Odyssey) appears in the XI century as a "mediaeval remake" of the "well-known

Classical story" complete with knights, belles dames, jousting tournaments, etc.; in fact, all the elements that shall later be considered integral to a "Classical" plot, ([335], pages 83-84).

"The troubadours have been proudly claiming the story [of the Trojan War – A. F.] to have been an original one, *it had neither been told nor written by anyone before…* The troubadours' primary concern had been the Trojan War, it had almost been a native story for them" ([335], pages 85-86). The Francs considered themselves descendants of the Trojans, while the alleged VII century author Fredegarius Scholasticus refers to King Priam as a representative of the previous generation ([335], pages 85-86).

Furthermore, "The voyage of the Argonauts became confused with the Trojan War… when the crusader conquerors [apparently, the mediaeval prototypes of the "ancient" Argonauts – A. F.] had set forth in the direction of faraway Asian lands" ([335], pages 85-86). In mediaeval texts the ancient Alexander the Great "compliments the French" ([335], pages 85-86).

Certain Slavonic texts of the middle ages use the name Parizh (the Russian name for the city of Paris) in order to refer to Paris, the abductor of Helen when they speak of the "ancient" Trojan War. Could it have referred to somebody from Paris? The following is said, for instance: "Parizh called himself Alexander and deceived Helen" ([10], page 234, comment 76). The same mediaeval texts often demonstrate the flexion of P and F spelling Parizh as Farizh.

On fig. 1.45 we see an ancient miniature from the *Great French Chronicle* dated as the alleged XV century that depicts the Trojan origins of the Francs. Modern commentary is as follows:

"The miniature illustrates the idea that the French can trace their ancestry back to Francion, the son of Hector and grandson of the Trojan king Priam. This is why we see the foundation of Paris directly under the picture of the fall of Troy." ([1485], page 104)

So, Troy barely has the time to fall when Paris is founded! The "ancient" Troy is also represented as a mediaeval city here.

The Scaligerian chronology reckons that the so-called apocalyptic nations of Gog and Magog mentioned in the Bible had disappeared from the historical arena in the early Middle Ages. However, reading modern commentary to the mediaeval *Alexandria*

([10]) we find out that "The names Gotti and Magotti must be a repercussion of the apocalyptic nations of Gog and Magog identified with the memories *of the Goths and the Mongols* (the Book of Revelation, XX, 7), who were well-known in the Middle Ages" ([10], page 248, comment 165).

The pressure of the Scaligerian chronology and all of these oddities brings historians to the conclusion that:

"The Middle Ages were the time when all idea of chronological consequentiality had been lost: monks with crosses and thuribles at the funeral of Alexander the Great, Catilina attending mass… Orpheus becomes a contemporary of Aeneas, Sardanapal a Greek king, and Julian the Apostate – a Papal chaplain. Everything acquires a *hue of fantasy* in this world [this perplexes the modern historian greatly – A. F.]. The most blatant anachronisms and *the strangest fancies* coexist peacefully." ([879], pages 237-238)

All these facts, and thousands of others, are rejected by the historians, since they contradict the consensual chronology of Scaliger and Petavius.

Christian saints and "ancient pagan characters" can be seen side by side on mediaeval Gothic cathedrals, q.v. in fig. 1.46 which shows the sculptures of Aristotle and Pythagoras together with the Christian saints from the western façade of the Chartres Cathedral. The historians try to explain this chronological heresy in a rather vague manner: "Aristotle and Pythagoras… the two pagan philosophers on a Christian cathedral symbolize the importance of scientific knowledge" ([930], page 169).

The oldest biography of "the ancient" Aristotle is dated to 1300 A.D. The manuscript's condition "rapidly deteriorates; certain places which could be read perfectly well in the XIX century are a great effort to make out nowadays" ([300], page 29). All of this despite the fact that, according to the Scaligerian chronology, certain manuscripts whose age exceeds a thousand years are still perfectly legible, and their parchment remains in a great condition, q.v. in CHRON6, ch. 2. The historians are most probably right in their estimation of manuscript destruction rate – many old texts may be well-preserved precisely because they really are not quite as old as we think them to be.

Presumably, "the best Greek codices of Aristotle's works belong to the X-XII century" ([300], p. 206).

Fig. 1.46. The sculptures of the *ancient Pagans* Aristotle and Pythagoras from the Chartres Cathedral, near the *Christian saints*. The western façade, allegedly dating from 1145-1170. "Aristotle and Pythagoras actually represent music and dialectic" ([930], page 169). Similar proximity of "ancient" and mediaeval characters is common in the bas-reliefs and murals of Christian temples in Europe and Russia. Taken from [930], page 169.

The "ancient" argument between the philosophies of Plato and Aristotle is revived in the XV century when Pleton and Scholarius, a devotee of Aristotle, engage in a similar dispute. This is yet another odd mediaeval duplicate of ancient events.

The history of Europe's first acquaintance with the works of Aristotle wasn't studied until the XIX century ([300]). It is written that "Aristotle's philosophy had remained in a state of stagnation and taciturnity… only… 1230 years since the birth of Christ…

the Latin population learnt of the philosophy of Aristotle" (quoted in [330], page 230). We would also like to quote the opinion of contemporary historians on this issue, namely, that "the mediaeval authors had a penchant of referring to texts that they often were altogether unacquainted with" ([333], page 117).

In the Middle Ages "the somewhat barbaric shape… of the dispute between the realists and the nominalists… really represents the *renaissance* of the two immortal schools of idealism and empiricism…

Nominalism and realism… signified a *rebirth* of the teachings of Plato and Aristotle in the XII century" ([335], pages 167-168). It is also assumed that the originals of Plato's and Aristotle's works were unknown in Europe in that epoch ([335]). Weren't yet written, perhaps?

Yet another chronological duplicate: "antiquity" = Middle Ages. "Three of the four principal philosophical systems of the Classical age were represented in the mediaeval science" in XII-XIII century Paris ([335], page 175). "The collision of realism… and nominalism… had given birth to scepticism at last… Another system that had been the latest to have appeared in Greece had also seemed imminent… namely, that of mysticism" ([335], page 175). Indeed, mysticism soon becomes "revived" by Bonaventura ([335]).

Thus, the evolution of mediaeval philosophy faithfully mirrors even the minute details of the development of its predecessor. Let us present this information as a table:

The Middle Ages	The Classical Age
1. Realism	1. Idealism
2. Nominalism	2. Empiricism
3. Pleton – the initiator of the revival of Platonism	3. Plato – the founder of Platonism
4. Scholarius – the initiator of the revival of Aristotelism	4. Aristotle – the founder of Aristotelism
5. Confrontation between the two schools	5. Confrontation between the two schools
6. Confrontation between Pleton and Scholarius	6. Confrontation between the Platonists and the Aristotelists
7. The naissance of scepticism	7. The naissance of scepticism
8. Mysticism evolves after the three schools	8. Mysticism evolves after the three schools
9. A total of four principal mediaeval schools of thought	9. A total of four principal Classical schools of thought.

A long time before the "discovery" of the "ancient" manuscript of *The Golden Ass,* the entire "ass topic" had been well-developed by the mediaeval troubadours ([335]). The "Classical ass story" that surfaced as late as the Renaissance is a *logical conclusion* of the entire *mediaeval* cycle. One has to note that long before the discoveries of the "Classical" originals all of the main plots they contain had been developed by the troubadours, with the "ancient" originals really being subsequent chronologically as well as structurally ([335], pages 142-143).

Long before the discovery of the "ancient" fables of Aesop, similar tales had been told in the Middle Ages, in the alleged XI-XIII century ([335]).

An important fact to note is that ancient people didn't have fixed names in the modern sense; what they used instead were *aliases* which had explicit meanings in the original language. The aliases characterized a person in some manner; the more remarkable qualities a person had, the more aliases he or she would be likely to possess. B. L. Smirnov says that "one seldom finds a name that would mean nothing" ([519], Volume 6, page 526, comments 126, 31. Also see J. Frazer's works [917], [918], [919], [920]). For instance, the chroniclers could refer to an emperor by the alias that used in their own region, and so different chronicles referred to the same rulers by different names.

The Egyptian Pharaohs used to have different names before and after their coronation. As multiple coronations would take place in different regions, the list of names kept growing. These aliases are usually translated as "The Mighty," "The Fair," etc.

The father of a Roman consul who lived in the alleged year 169 B.C. had 13 names; his son had 38 ([872], page 101). The Torah scholars quote 94 names for the Biblical god ([544], Volume 6, page 978).

The same phenomenon was typical in Russian history. "Czar Ivan III was also known as Timothy; Czar Basil III was known as Gabriel… Prince Dmitri (who had been killed in Uglich) was called Uar; one name had been secular, and the other ecclesial" ([586], page 22). The name Uar most probably simply meant "Czar."

Nowadays we tend to assume that the mediaeval names differed significantly from the "ancient" ones. However, the analysis of a number of texts shows us that the ancient names were in use throughout the Middle Ages. Nilus of Sinai, who is supposed to have died in 450 A.D., writes to his contemporaries possessing typically "ancient" names – Apollodorus,

Amphiction, Atticus, Anaxagoras, Demosthenes, Asklepiodes, Aristocles, Aristarchus, Alciviades, Apollos, etc. ([836]). Many names that are considered to be "exclusively ancient" nowadays, were still in use in Byzantium in the XII-XIV century. Georgius Phrantz uses the following names in his *History* (1258-1476): Antioch, Argo, Amorius, Hermetian, Demetrios, Dionysius, Dioscorus, Epidaurus, Calliope, Cleope, Kritopulos, Laconicus, Macrobius, Minos, etc. - typical ancient names belonging to people of the XIII-XV century.

Handwritten books remained in existence for a long time after the invention of the printing press. They had been made in large quantities in the XV-XVIII century all across Europe ([740], pages 13, 25). In the Balkans, "handwritten books managed to compete with the printed ones" as recently as the XIX century ([740], page 26). Apart from a few exceptions, the entire Irish literature of the VII-XVII century "only exists in the handwritten form" (quoted by [740], page 28). Up until 1500 A.D., 77 percent of all printed books are supposed to have been in Latin, possibly due to the fact that the Latin fonts were easy to make. Other fonts made their way into the printing practice extremely slowly. The diacritic signs were difficult to make, as well as the ones used for stresses, vocalizations, etc. This is why "the scribes had remained without competition in what concerned copying the Greek, Arabic and Hebraic manuscripts" for centuries after the invention of the printing press ([740], page 57).

This may be the reason why many Greek, Arabic and Hebraic manuscripts considered "very ancient" belong to the epoch of printing. Among them are many classical texts, Tischendorf's Biblical codices, etc.; see Chron6, Chapter 2.

It appears that the region richest in handwritten books during the printing epoch was Greece – the country that is considered to have a very long ancient history, one that gave the world a large number of "ancient manuscripts." Historians tell us that "due to the lack of publishing houses in Greece, *books were copied manually*" ([740], page 106). One wonders how many handwritten books of the XV-XIX century were to be declared ancient later on.

The following information clearly demonstrates the lack of a solid scientific foundation under the very concept of palaeographical dating - that is, dating by the "handwriting style." It turns out that "the creation of the deluxe Greek codices with the texts of ancient authors had been ordered by humanists and philanthropist collectors" ([740], page 109). Let us repeat the question: how many of these mediaeval codices were later declared extremely ancient?

One might suggest a method that allows the differentiation between real manuscripts and handwritten copies of printed books, namely, comparing the misprints in the printed versions with the handwritten errors, since during the manual copying of printed literature most misprints would get copied as well.

The foundations of the Scaligerian chronology had been laid by the analysis of *written sources*. A secondary analysis of these datings free from a priori hypotheses about the antiquity of the documents, may lead to the discovery of serious contradictions, as we have demonstrated.

13.
THE FOUNDATIONS OF ARCHAEOLOGICAL METHODS HAVE BEEN BASED ON THE SCALIGERIAN CHRONOLOGY FROM THE VERY BEGINNING

"HAD THERE BEEN NO BATTLE?"

The results of excavations conducted by the Swiss anthropologist Georg Glovacki in Italy proved sensational. The scientist discovered that there had been no military action conducted in the area where the troops of Hannibal had allegedly won over the Roman legions in the battle of Cannes. A study of the barrows showed that the remains belong to the victims of the XIII century plague epidemic, and not to Roman soldiers, as everyone was accustomed to thinking.

Sovetskaya Rossiya, 28 November 1984.

13.1. The ambiguity of archaeological datings and their dependence on the existing chronology

The reader may inquire about the state of affairs concerning other methods of dating historical sources and artefacts used nowadays. Modern archaeologists speak of the "ignorant diggers" of the previous centuries in pained tones, since many artefacts had been

defaced in the search for valuables. The archaeologist Count A. S. Ouvarov excavated 7729 mounds in the Vladimir-Suzdal area. A. S. Spitsyn has the following to say about it: "when the items [found in the excavations of 1851-1854 – A. F.] came to the disposal of the Rumyantsev museum, they had been a chaotic pile of materials with no markings whatsoever, and no one could tell which mound this or the other object had belonged to. The grandiose excavations of 1851-1854… shall be mourned by the scientists for years to come" ([19], pages 12-13). Nowadays the excavation methods are a lot more advanced – however, applying them to "ancient" excavations is an impossibility since these have already been conducted by the "diggers" of the past ([389]).

The basics of archaeological dating methods are as follows: "the best way of deducing the age of a given European culture is finding out which Egyptian dynasty this European tribe traded with" ([390], page 55). The findings of Mycenae-made Greek vessels in the Egyptian mounds of the 18th-19th dynasties allow the archaeologists to consider the dynasty and the culture as contemporaries. Similar vessels are found later on in Mycenae together with a particular kind of pin that is later on also found in Germany near some urns. A similar urn is found near Fanger, together with a different kind of pin, which resembles the one found in Sweden, in the so-called Barrow of King Bjorn, which can thus be dated as a contemporary of the 18th-19th Egyptian dynasties ([390]). However, it turns out that King Bjorn's Barrow "could not have belonged to Bjorn, king of the Vikings [a well-known mediaeval character – A. F.] since it predates his time by about two millennia" ([390], pages 55-56).

Firstly, one fails to understand what criteria of similarity have been used here. Secondly, and a lot more importantly, all of these methods are heavily dependent on the a priori datings of the "ancient" Egyptian Pharaoh dynasties. This method, which is also known as "the dominoes method," and all similar ones are based on pure unadulterated subjectivism, and, principally, on the Scaligerian chronology. Newly-found artefacts such as vessels are compared to similar findings dated in accordance with the consensual chronology. The alteration of the chronological scale automatically alters the chronology of the new archaeological findings. An erroneous chronology completely invalidates all such methods.

It is little wonder that the archaeologists investing their trust in such methods are constantly confronted with bizarre facts. It appears that "in certain remote parts of Europe one encounters the coexistence of things whose prototypes in the East are *separated from each other by centuries*" ([390], pages 55-56).

Furthermore, L. S. Klein ([390]) firmly denies all connexions between King Bjorn's Barrow and the mediaeval Bjorn, king of the Vikings. This method tells us only that Bjorn's Barrow is contemporary to the 18th-19th Egyptian dynasties; it tells us nothing about the possible datings of these actual reigns, which may well be mediaeval, along with Bjorn the Viking.

"The first schemes of Egyptian chronology had been based on the work of Manethon… who had compiled the list of the Pharaohs [allegedly in the III century B.C. – A. F.] and grouped them into 30 dynasties, having added up all the years of reigns [and assuming that their reigns have all been consecutive – A. F.]. *The figures he got proved formidable.* Flinders Petrie, L. Borhardt, and other Egyptologists had estimated the duration of the history of Ancient Egypt to equal 5-6 thousand years. This is how the "long" chronology of Egypt was born, the one that had been prevalent for a long time. E. Meyer and his followers had developed the so-called "short" chronology as an alternative. The problem is that *the Pharaohs, and their entire dynasties, often reigned simultaneously* (as co-rulers) in different parts of the country. Manethon was making the assumption that the state had been a monolithic one under a single ruler, and so *he had lined all of the Pharaohs into a sequence and thus considerably extended the entire history of the state*" ([390], pages 54-55).

We should add that the "short" chronology of Egypt is still way too long, and should really have been called "a slightly shorter chronology."

As we have already mentioned in reference to the data provided by the Egyptologist Heinrich Brugsch, the so-called "short" chronology is also based on ethereal foundations. We learn that its creator, E. Meyer, "had based his deductions on the annual records and entries referring to memorable events that had been made by the Pharaohs themselves. However… this chain of knowledge had reached us

as *separate links, with many gaps and distortions*" ([390], pages 54-58). This is why attaching the archaeological material to the "Egyptian scale" does not solve the problem of absolute (or indeed even relative) dating.

13.2. The excavations of Pompeii. The dating of this town's destruction

The excavations of the "ancient" town of Pompeii are a perfect illustration of the problems that arise in the dating of archaeological materials. First and foremost, it isn't clear *which year's eruption* destroyed it. Apparently, the XV century author Jacopo Sannazaro wrote: "We were approaching the town (Pompeii), and could already see its towers, houses, theatres and temples, *untouched by the centuries* [?! – A. F.]" (quoted in [389], page 31). It is assumed, however, that the town of Pompeii had been destroyed and completely buried after the eruption of 79 A.D. This is why the archaeologists have to interpret Sannazaro in the following manner: "in the XV century some of the buildings of Pompeii were already emerging from the debris" ([389], page 31). It is thus assumed that Pompeii had been covered by a thick layer of earth, since the ruins of the town had only been found in 1748, and the discovery had been purely accidental. Herculaneum had been discovered in 1711 ([389], pages 31-32). Nowadays the history of the discovery of Pompeii is related after the documented recollections of that epoch as follows: "during the construction of a canal on the river Sarno (1594-1600), the ruins of an ancient town had been found. *Nobody had the merest notion* it might be Pompeii… Methodical scientific excavations were started as late as 1860 by Giuseppe Fiorelli. However, his method of work was far from the usual scientific standards" ([433], page 49).

The excavations had indeed been conducted in a barbaric manner. "Nowadays it is hard to estimate the damage done by the sheer vandalism of that time… if somebody thought a picture or a figurine wasn't artful enough or visually pleasing, it would become destroyed and thrown away as trash. Sculpture fragments had been sold as souvenirs, often as statuettes of saints" ([434], pages 224-225). Some of these "Christian forgeries" may have been mediaeval originals that did not fit the Scaligerian chronol-

Fig. 1.47. "Ancient" mural from the Boscoreale villa near Pompeii. "We can distinctively see a terrestrial globe shown in an approximate perspective. The object was also related to the sundial" ([1177], ill. 4, inset between pages 106-107). Taken from [1177], plate 4.

ogy, and hence wound up sold as souvenirs instead of becoming part of a museum's collection.

If one's cogitation is to be confined within the paradigm of the Scaligerian chronology, the artistic level of the artefacts found in Pompeii is very high indeed – be it frescoes, inlays, or statues. The state of science is also deemed advanced enough to *correspond to that of the Renaissance epoch*. One of the findings was a sundial with uniform hourly divisions, which had been considered a high level of precision even towards the end of the Middle Ages. This finding was analyzed by N. A. Morozov. An "ancient" picture of a part of such a device that had been found on a villa near the town of Pompeii can be seen in fig. 1.47.
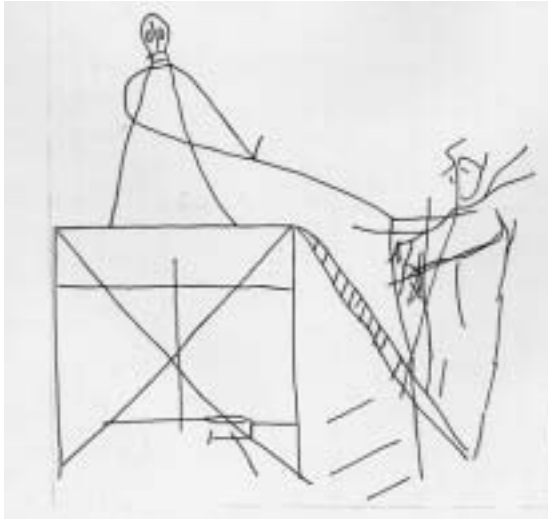
Fig. 1.48. A picture found on a Pompeian wall. We see a hooded mediaeval henchman, dragging a caped figure by a rope onto a wooden scaffold. Taken from [389], page 161.

Fig. 1.49. A picture of a mediaeval knight wearing a helmet with a visor, found in "ancient" Pompeii. Taken from [389], page 161.

V. Klassovsky wrote that "a set of surgical instruments had been discovered that is all the more noteworthy since some of the items have been previously supposed to belong to the modern times, *discovered and introduced by the scientific avant-garde of the operative medicine*" ([389], page 126).

Some of the graffiti art found on the walls of Pompeii is *clearly mediaeval in its origin.* For instance, the picture of a *hooded henchman* ([389], page 161, q.v. in fig. 1.48). We see a mediaeval henchman that drags his victim (a man in a cape) onto a scaffold with a rope. V. Klassovsky tells us this is a "copy from a drawing made on plaster with some sharp object." Another drawing that is definitely worthy of our attention is that of a mediaeval warrior wearing a helmet *with a visor* ([389], page 161, see fig. 1.49). These two drawings are but a small part of the Pompeian graffiti that is explicitly mediaeval in its content (q.v. the illustrations to [873]). One should mark the illustration that one sees on page 44 of [873] (fig. 1.50). Nowadays we are being told that it portrays "ancient" gladiators ([873], page 44). However, what we see is clearly *a mediaeval knight with a visor on his helmet.* This is well-known military equipment of the Middle Ages.

V. Klassovsky sums up his general impression of the excavations of Pompeii as follows: "I have often been amazed… to find that *ancient Pompeian artefacts often prove to be spitting images of the objects of a much later epoch*" ([389], page 133).

We also find out that, according to Klassovsky, many of the famous Pompeian inlays bear *an amazing resemblance* to the *mediaeval* frescoes of Rafael and Giulio Romano in composition, colouring and style ([389], page 171, comment A). To put this simply, they look like *mediaeval frescoes.* An example of such an inlay can be seen in fig 1.51, ([389], page 172, table XII). This is assumed to be an ancient battle of Alexander the Great and the Persian king Darius (on the right). The inlay had been discovered in 1831 and is now in the domain of the National Museum in Naples ([304], Volume 1, pages 232-233).

V. Klassovsky's comment runs as follows:

"On the floor of the triclinium one sees the famous mosaic from coloured stone, which now crowns the collection of the museum in Naples. The colouring and the technique are unparalleled, the composition may well be compared to the best works of Raphael

Fig. 1.50. Pictures of the Nero epoch painted on the wall of an "ancient" Pompeian residence. The "ancient" gladiators are depicted as mediaeval knights here; one can clearly see helmets with visors, which were invented in the Middle Ages. Taken from [389], page 44.

Fig. 1.51. An "ancient" Pompeian inlay showing the battle of Alexander and Darius at Issa. Modern drawn copy. Taken from [389].

and Giulio Romano… It is most remarkable indeed that there should be a semblance between the work of the anonymous ancient artist and Raphael's 'Battle between Constantine and Maxentius' in style and the way the main group is composed. Certain decorations of the Roman thermae of Titus bear amazing

Fig. 1.52. "Ancient" gladiators wearing mediaeval helmets with visors. Pompeian artwork, close-up of a fragment. Taken from [389].

resemblance to some of Raphael's frescoes as well [sic!]." ([389], page 171)

The Scaligerian history as followed by Klassovsky tries to convince us that all of these works of "ancient" art had been created in the I century A.D. at the latest, and had remained buried until very recently, when the excavations of Pompeii finally began. Raphael, Giulio Romano and other artists of the Renaissance are supposed to have created paintings strongly resembling these "ancient originals" without even having seen them. All of this is highly suspicious. The hypothesis that we put forward is as follows: *Pompeii is a mediaeval town of the Renaissance epoch.* It had been destroyed by one of the relatively recent eruptions of the Vesuvius. The "ancient" Pompeian artists had been contemporaries of Raphael and Giulio Romano, hence the stylistic semblances. Pompeii might have been destroyed and buried by ashes during the well-known eruption of the Vesuvius that occurred in 1500 ([389], page 28), or even by the eruption of 1631. See more in CHRON2, Chapter 2.

Most of the Pompeian graffiti cannot be used for dating purposes, being quotidian announcements, slang, etc. However, some of the inscriptions explicitly contradict the Scaligerian chronology. One of them can be found in [389], and is translated by N. A. Morozov as follows: "The hunt and the decorations of *Valentis Nero* Augustus the Holy, son of the Holy D. Luc-

Fig. 1.53. A rare picture of a Christian tabernacle unearthed in the "ancient" Herculaneum (Italy).

retius Valentis the Immanent, the 28th of March." We run into a contradiction between the Scaligerian history and actual inscriptions discovered as a result of excavations. An emperor with the double name of Valentis-Nero is mentioned here, whilst in the Scaligerian chronology these names belong to two different emperors separated by about 300 years.

A longer version of the same "ancient" announcement referring to the pageants of 6-12th April can be seen in [873], No. 73 (see fig. 1.52). The translation offered by V. Fyodorova in [873], page 74, *separates* Nero from Valentis, as we had expected. We had no opportunity of checking the authority of both translations.

Artefacts of *the Christian epoch* had been found in the "ancient" town of Herculaneum. In fig. 1.53, for instance, one can see a Christian chapel discovered during the excavations of Herculaneum with a large cross on the wall.

13.3. The alleged acceleration of the destruction of the "ancient" monuments

The archaeologists of the XX century have noticed a rather odd tendency. The overwhelming majority of the ancient monuments report deterioration in their condition that had allegedly started two or three hundred years ago (from the moment their study began, in other words), and had been more intense than during the preceding centuries and even millennia. The examples are widely known: the Theatre of Epidaurus, Parthenon, the Coliseum, the palaces of Venice, etc. ([228], [144], [207], [456]). Here's another example in the form of an article from the *Izvestiya* newspaper, dated 31 October 1981:

A SPHINX IN PERIL. The famous figure of the El Giza sphinx in Egypt had stood steadfast for five millennia. However, pollution had afflicted it terribly. A large piece of the sculpture (a paw) fell off. The reasons for this are as follows: high humidity, salty ground, and, primarily, the accumulation of sewage around the sphinx that isn't filtered in any way at all."

It is nevertheless supposed to have stood for five thousand years without any problems whatsoever.

This condition of deterioration is usually explained by the "negative effect of modern industry" ([144], [456]). However, as far as we know, there has been no quantitative research conducted to this day, as to whether or not modern industry afflicts ancient constructions made of stone. One logically assumes all of these buildings to be a lot more recent than what the Scaligerian chronology tells us. They are subject to erosion, and have a constant natural destruction rate, which is a high one.

13.4. When did the construction of the Cologne Cathedral really begin?

Nowadays we are being told that the construction of the famous Cologne Cathedral had carried on for *several centuries*. It is assumed that the construction began in the IV century ([1015], page 3). After that, the cathedral had allegedly been rebuilt many times, and nothing remained from the "original cathedrals" whatsoever. The construction of the Gothic cathedral is supposed to have begun in 1248 – some sources even mention the exact date as 15 August 1248 ([1015], page 6). It is further assumed that the construction had been "finished for the most part" in the XVI century, circa 1560 ([1015], page 8). After that, this gigantic mediaeval cathedral had allegedly undergone minor renovations, but, by and large, its shape remained as it was (see fig. 1.54).

Fig. 1.54. The Cologne Cathedral as it is today. Cologne, Germany. Taken from [1017], photograph 3.

The most important masonry layers of the Cologne Cathedral

Legend	Dates
1	1248-1560
2	1829-1875
3	1842-1863
4	1845-1880
5	1904-1939
6	1845-1875
7	1826-1972
8	1952

A schematic representation of the southern side of the cathedral with the most important kinds of masonry. The term "Sandstone from Schlaitdorf" also refers to the assorted sandstone from Flonheim, Trier, Udelfangen, and especially Heilbronn.

Fig. 1.55. The chronology of the Cologne Cathedral masonry. Taken from the technical brochure titled *The Danger to the Cologne Cathedral. An Illustrated Documentary of the Erosion. Excerpt from the Illustrated Textbook on the Cologne Cathedral (Gefahr für den Kölner Dom. Bild-Dokumentation zur Verwitterung. Auszug aus dem Kölner-Dom-Lese- und Bilderbuch)* by Professor Dr. Arnold Wolff. We obtained the brochure in the Cologne Cathedral.

How valid is this point of view? When had the cathedral that we can see today really been constructed? Is the construction that we see truly mediaeval, constructed in the XIII-XVI century for the most part?

In fig. 1.55 we can see a schematic drawing from a technical brochure that demonstrates which parts of the cathedral are mediaeval, and which ones were built over the last two centuries. The full name of the brochure is *Gefahr für den Kölner Dom. Bild-Dokumentation zur Verwitterung. Auszug aus dem Kölner-Dom-Lese- und Bilderbuch. Professor Dr. Arnold Wolff. (The Dome of Cologne in danger. Graphic documents on weathering.)* It was originally addressed to professionals specializing in the preservation and restoration of stone constructions. It was printed in Cologne, and can be obtained inside the cathedral.

According to the scheme, the oldest part of the masonry, that which belongs to the years 1248-1560, is represented by horizontal shading. The rest – shown by seven other kinds of shading, such as diagonal, dotted. etc. – was constructed a lot later, *after* 1826!

Amazingly enough, the oldest part of the masonry (horizontal shading) *amounts to a small part of the modern edifice.* Really, it only covers half of the cathedral's foundation, and even this small mediaeval fragment is not whole, since it consists of two parts that are pretty distant from each other (q.v. fig. 1.55). The rest of the masonry – that is, *the major part of the entire modern edifice* – only appeared in the early XIX century. The absence of masonry dating to 1560-1825 is particularly suspicious. Does it mean that there were no works at all conducted in 250 years, or that they did not affect the structure of the cathedral in any way worthy of mentioning?

What the German historians and architects are telling us in this manner is that *the cathedral that we see today had essentially been built in the XIX century!* By what criteria does the Scaligerian history call it a mediaeval cathedral, in that case? Someone might say that despite the fact that the cathedral was built in the XIX century, it should still faithfully represent the mediaeval original that had been standing there ever since the XIII century.

We would like to ask about the groundwork for this hypothesis. Are there any *genuine* mediaeval graphical representations of the Cologne Cathedral before the XVII century? Apparently, there are *none.* The same brochure by Arnold Wolff contains an engraving dated 1834/1836 that depicts the cathedral very much the way it is nowadays. The album [1017] contains what appears to be the oldest picture of the cathedral on page 21 – dated 1809. We consider all of this to mean that the construction of the cathedral *in its present form* had only commenced in the XIX century, which is proved by the masonry scheme as shown above. The cathedral had been built between 1825 and 1835 for the most part, and the engraving dated 1834/1836 reflected the final stages of the cathedral's construction. There were renovations done in the XIX-XX century, but there were no major changes.

There were some traces of an ancient building on the site of the modern cathedral, since some mysterious masonry dated 1248-1560 is present on the scheme. However, this very scheme explicitly tells us that this mediaeval masonry had been used as building material for the XIX century construction. Let us study fig. 1.55 yet again. The lower part of the left tower is made of stones dating to the XIX century laced with layers dated from the XIII-XVI century. The upper part of this tower is a construction of the XIX century, and the same is true for the other tower. The old mediaeval building that stood on the place of the modern cathedral had been deconstructed in the XIX century, and its masonry was used as construction material when the new edifice was erected.

We would like to pose the following questions to the historians and the archaeologists:

1) Are there any genuine mediaeval pictures of either the Cologne cathedral or its predecessor that had existed before the XVII century?

2) Does the modern Cologne cathedral bear any resemblance to the mediaeval cathedral that stood on its place before the XVIII-XIX century? Our hypothesis is that if there had indeed been a cathedral here, it was significantly different from the modern one – a great deal smaller, for one thing.

3) Why are there no traces of masonry dating to the period between 1560 and 1825 in the walls of the modern Cologne cathedral? Doesn't this mean that the construction really commenced in the XIX century on the spot that had been previously occupied by a building of smaller proportions belonging to the epoch of the XIII-XVI century? One should also question the veracity of dating the old masonry to the XIII-XVI century; these stones may well belong to the XVII-XVIII century. Another enquiry that we find worthy of making concerns the methods used by modern archaeologists for dating *masonry fragments.* How can they be certain that a given stone was used for the construction of a cathedral wall in the year that they consider to be the correct dating, and not some other?

We conclude with a general observation concerning the unnaturally prolonged construction of many historical buildings of mediaeval Europe. According to the Scaligerian history, they had been built *very slowly indeed,* for centuries on end. The Strasbourg cathedral is a perfect example. It used to be the tallest building in Europe. We are now being told that its construction began in 1015, and ended as late as 1275 ([415], Volume 1, page 333). That makes 260 years. The Erwin von Steinbach tower allegedly took 162 years to build. The historian Kohlrausch makes the logical conclusion that "the entire edifice [of the cathedral – A. F.] *took 424 years to build"* ([415], Volume 1, page 333) – almost half a millennium!

Kohlrausch also couldn't have missed the unnaturally procrastinated construction of the Cologne cathedral. Apparently realizing the necessity of an explanation for such a great duration, he offers the following as a theory: "The Cologne cathedral, whose construction began… in 1248… lasted 250 years. Such tardiness can be explained by the fact that its stones bear a great amount of artwork" ([415], Volume 1, page 333). As we are beginning to understand, artwork has got absolutely nothing to do with the matter at hand – it is the erroneous Scaligerian chronology that has arbitrarily extended the construction period into several centuries.

Fig. 1.56. "The Bronze Idols from Luristan," allegedly extremely ancient ([245], page 19). Kept in the Louvre in Paris. These artefacts most probably date from a much more recent period. Taken from [245], page 19.

Fig. 1.57. A bronze figurine, presumably "very old," dated to the V century B.C. This sconce most probably belongs to a much more recent age, namely, the XVI-XVIII century. Taken from [1237].

13.5. Archaeological methods are most often based on Scaliger's datings

The modern methods of archaeological dating rely on the Scaligerian chronology to a great extent, and may often lead to great mistakes, which are blatantly obvious in some cases. Let us give a few examples.

The excavation of a barrow that had been "dated with absolute certainty" as belonging to the epoch of Kiev Russia (the alleged IX-XII century), according to the "archaeological method," occurred relatively recently. However, *nineteenth century coins* were found in the same barrow, among the bones. This is mentioned in the article by the Byelorussian historian Zaikovsky published in 1997 in the 12th issue of the

Almanach of History and Archaeology on page 83. It is clear that the coins could not have made their way into the barrow by chance. Is there an explanation? As a matter of fact, there is, and a simple one at that. The "ancient" barrow belongs to the XIX century. And there is nothing surprising about it, since the pagan church also known as "Romish" had existed in Russia and Byelorussia until the XX century, complete with specific burial rites. The centre of the Romish church had been in the Byelorussian village of Romy. In the XIX century it had possessed an archbishop, more that a hundred parishes, and a special language used by priests in sacraments. There is a XIX-century volume containing a detailed description of this old Russian pagan church.

Another example. A different barrow is being excavated, and the archaeologists make another "perfectly certain dating" that ascribes it to the Bronze Age. The ground under the barrow had been virgin until the hole that preceded the barrow had been dug. Some *XVIII century* ceramics had been found in this hole; it could only have got there during the burial. This is yet another case of archaeologists using "scientific methods" for the dating of a XVIII century mount to the Bronze Age, or the time when the rather inexperienced humanity could not have fathomed the intricacies of iron metallurgy. Pity, this. But the XVIII century was a period when both iron and steel had already been well known. And, presumably, simply because of the absence of iron and steel items in this barrow, it became dated to the *Bronze Age.*

In the cases described, the burrows contained objects that contradicted their initial datings. If there are no such objects, the archaeologists date the barrows "scientifically" as belonging to times immemorial. The very method of "archaeological dating" appears an extremely flawed one, wholly dependent on the a priori known *Scaligerian chronology*.

13.6. One of the numerous problems of the Scaligerian history – the problem of bronze manufacture before the discovery of tin

Many chemists and metallurgists have been reporting the following peculiar circumstance for quite a while, namely, that no bronze could possibly have been manufactured in the Scaligerian "ancient" Bronze Age. Professor Michele Giua, "a prominent and versatile specialist in organic synthesis, as well as the chemistry of explosives and plastics" ([245], from the cover annotation), the author of an in-depth work titled *The History of Chemistry,* writes the following (basing his logical construction on Scaliger's chronology, naturally):

"Copper… had been known from the prehistoric times not just in its free state… but also as bronze, an alloy of copper and tin. During the prehistoric epoch known as *Bronze Age,* bronze had been used for the manufacture of various utensils, jewellery, weapons etc. However, the issue of ancient tin metallurgy remains extremely nebulous. Metallic tin was not known in the Bronze Age; *nevertheless, it had to have been used for the manufacture of bronze.* All we can do is *assume that a metal of a higher fusibility had been manufactured* as a result of fusing copper with some minerals rich in tin content. Copper had thus been known before tin, whose metallurgy is a lot more complex. However, the fact that *bronze had been known earlier than tin* does not clarify a number of other problems of ancient history." ([245], pages 17-18)

The picture is perfectly clear. As we can see, the fact that tin metallurgy is more complex than that of copper is common knowledge. Hence bronze, being a fusion of copper and tin, *must have* appeared after the discovery of the latter. The Scaligerian history has it the other way round – bronze is supposed to have been discovered before tin, in the Bronze age. This contradiction in the Scaligerian chronology can be explained by the fact that the chronologers of that school had neither been chemists nor metallurgists. How were they to know that the compilation of a history textbook requires that the description of the discovery of tin should precede that of the invention of bronze? However, the historians of the XVII-XVIII century were driven by altogether different considerations, neither caring much for tin, nor indeed for science itself. None of them would consider consulting with a chemist. As a result, "ancient" Greek heroes happily hack at each other with bronze swords that need tin for their manufacture, which has not yet been discovered. Modern chemists are naturally confused by such historical tableaux, and are earnestly questioning the reasons for the existence of such oddities in the Scaligerian history of chemistry and metallurgy.

Our explanation is a very simple one. The Bronze Age falls within the epoch of the XIV-XVI century, when tin had already been discovered (after copper, of course). Consider the allegedly ancient bronze idols from Luristan currently in the Louvre's possession, q.v. in fig. 1.56. Michele Giua cites them as examples of "ancient" bronze art. However, these artful Bronze Age figurines most probably were made in the XV-XVII century.

The same applies to the "ancient" bronze girandole that has received the dating of V century B.C., also from the Louvre's collection, that can be seen in fig. 1.57. It may well be an item made in the XVI-XVIII century.

14.
THE PROBLEMS AND DEFICIENCIES OF DENDROCHRONOLOGY AND SEVERAL OTHER DATING METHODS

14.1. The consequent scale of dendrochronological datings does not extend further back in time than the X century A.D.

The *dendrochronological* method is one of the modern dating methods claiming to be capable of dating historical artefacts independently. It is based on the assumption that the yearly growth of tree rings is uneven. Annual ring thickness rates are supposed to be roughly similar for the trees of the same kind that grow in similar conditions.

In order to make this method fit for actual dating, one has to construct a reference scale of annual ring thickness for trees of a particular kind for a historical period of sufficient length. Let us call this graph a dendrochronological scale. If such a scale is constructed, it might aid one in the attempt at dating archaeological findings containing wooden pieces. One has to determine the timber type, saw off a sample, measure the thickness of rings, build a diagram and try to find out whether it concurs with any part of the reference scale. One should also consider the question of what deviations of compared diagrams can be ignored safely.

However, the European dendrochronological scales only reaches several centuries back in time, which does not allow for the dating of "ancient" constructions.

"Many European scientists have started to experiment with the dendrochronological method… however, obtaining results appeared a formidable task. *The oldest trees in the European forests are only 300-400 years old…* Deciduous trees have *vaguely defined* rings which are hard to study and most reluctant to tell the researcher anything about the past… Quality archaeological material proved extremely scarce, against all expectations." ([616], page 103)

American dendrochronology exists in better conditions, since it is based on Douglas fir, mountain pine and yellow pine ([616], page 103). However, this region is far away from the zone of "ancient history." Furthermore, there is always a large number of ignored factors, such as the weather conditions for the period in question, soil quality, the humidity level fluctuation for the area in question, its geography, etc. All of them affect the growth rate of the rings significantly ([616], pages 100-101). It is most important that the creation of dendrochronological scales had been based on *the existing Scaligerian chronology* ([616], page 103). Thus, any alteration of the chronology of documents should *automatically* alter these scales, whose independence is thus greatly compromised.

It appears that the dendrochronological scales for Europe and Asia only reach several centuries back from our age. We shall give a more detailed account of the contemporary state of such scales for Italy, the Balkans, Greece, and Turkey.

Let us refer to a diagram of *dendrochronological dating scales* for those countries that reflects the state of affairs in this area as of the spring of 1994 (fig. 1.58). This diagram was kindly provided by Professor Y. M. Kabanov (Moscow). He took part in a conference in 1994 where the American Professor Peter Ian Kuniholm had made a report on the modern state of dendrochronology, presenting this rather noteworthy diagram that had been compiled in the Malcolm and Carolyn Wiener Laboratory for Aegean and Near Eastern Dendrochronology, Cornell University, Ithaca, New York, USA.

In fig. 1.58 we can see fragments of dendrochronological scales for different kinds of timber: oak, box, cedar, pine, juniper, and conifers in general.

All of these scales have a very obvious gap around 1000 A.D. Thus, none of them can be continued without intervals further back in time than the X century A.D.

All of the earlier fragments of dendrochronological scales as shown on the diagram cannot be used for independent datings, since their attachment to the temporal axis is wholly dependent on the Scaligerian chronology, which had served as a basis for the dating of several individual "ancient" pieces of wood.

A piece of wood found in a Pharaoh's tomb thus gets the dating of some distant millennium before Christ due to "historical considerations" which are naturally based on the Scaligerian chronology. After that, other "ancient" pieces of wood are linked to the one that has already been dated. These attempts occasionally succeed, which results in the construction
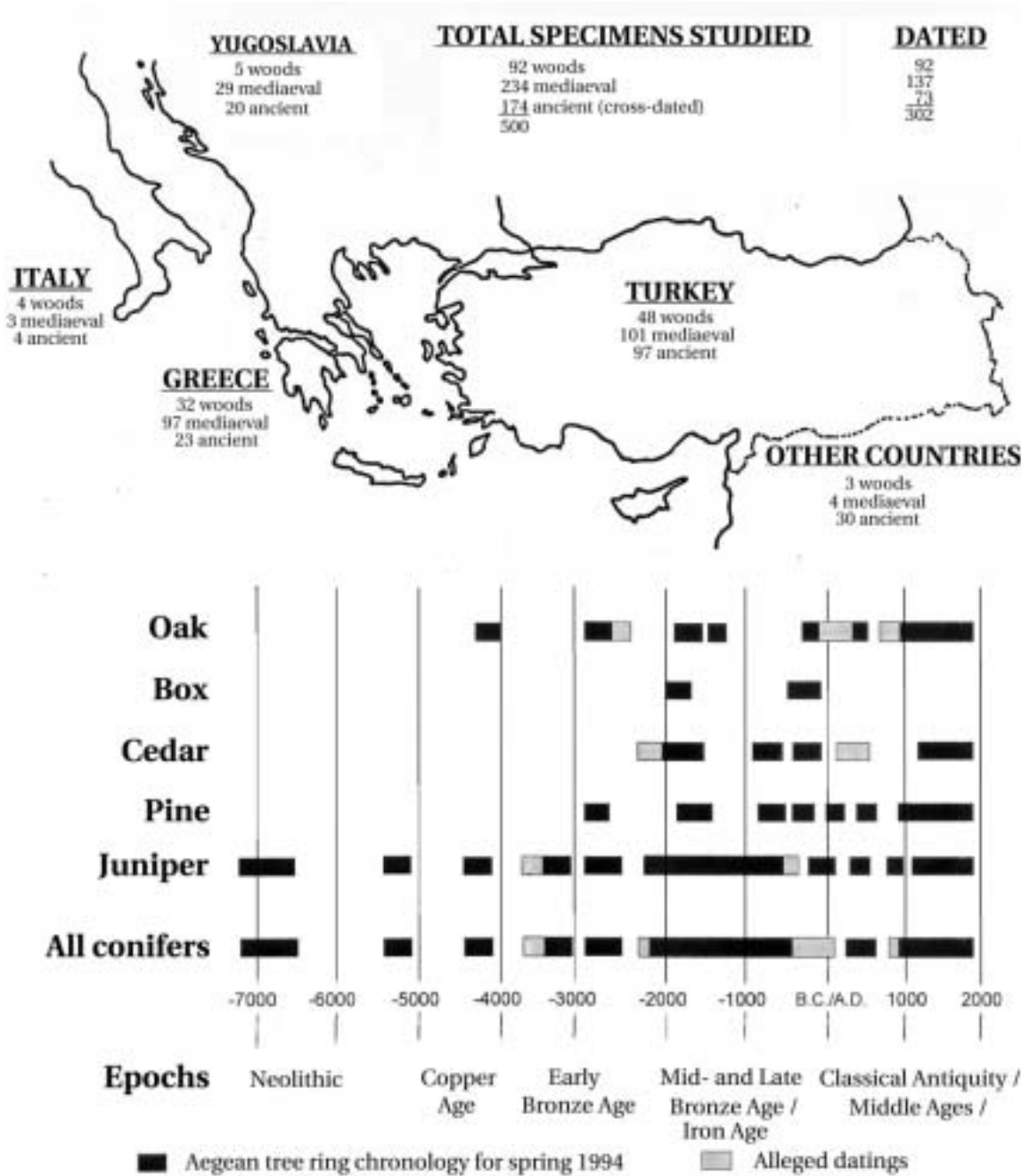
Fig. 1.58. The modern condition of the dendrochronological scales. One can observe that they are considered to extend until as late as the X century A.D. uninterrupted. The "scale" pertinent to earlier epochs is merely an assortment of unrelated fragments.

of a fragment of the dendrochronological scale around the first piece of wood. Relative datings of ancient findings within this fragment may be correct. However, their absolute dating, that is, the placement of this fragment on the temporal axis, is *wrong*. The reason is that the first dating has been based on the erroneous Scaligerian chronology.

Let us return to the basics of the dendrochronological methods. In theory, the dendrochronological scale is supposed to grow, beginning with the current period and extending into the past. This implies the collation of ring thickness scales of different specimens. What is the principle of this collation? A modern source [1055] gives an in-depth analysis of the problem on page 341. It turns out that the method used is a combination of mathematical statistical methods and "visual" subjective assessments. Hence, the boundary between dated and undated dendrochronological scales becomes a very vague one.

The book [1055] tells us rather frankly that:

"If we can find a collation position whose diagrams concur with those of the traditional chronology to the best of our certainty and knowledge, the new specimen is considered dated. If we fail to discover such collation position, the specimen remains undated, although even in this case a dendrochronologist can point out one or more collation methods whose concurrence is 'good,' but not 'perfect' (in his opinion). Needless to say, *the Dendrochronological Society has to agree on what is to considered perfect concurrence.*" ([1055], page 341)

Dendrochronology is thus affected by subjectivity and arbitrariness. Different dendrochronological datings have generally speaking different veracity. The veracity of a dendrochronological dating depends on the certainty of the collations on the dendrochronological scale. Dubious collations cast the shade of ambiguity over the entire scale. The book [1055], page 341, uses a special term for referring to such datings, namely, "the grey zone" (with the white zone referring to certain datings, and the black one, to the total absence of datings of any kind).

The recently published book by Christian Blöss and Hans-Ulrich Niemitz subjects the dendrochronological method to a number of very sharp criticisms that leave no stone unturned ([1038]).

14.2. Sedimentary layer datings. The methods of radium-uranium and radium-actinium analysis

The Scaligerian chronology implicitly or explicitly affects the scale graduations of methods, even the rough physical ones supposed to give the absolute age of objects.

A. Oleinikov tells us that:

"Over the eighteen centuries that have passed since the time of the Roman invasion [in reference to the territory of the modern Savoy – A. F.], the weathering processes have created a 3 mm erosion layer on the walls near the quarry's entrance. Comparing the thickness of this 1800-year-old layer [according to the Scaligerian chronology – A. F.] to the 35-cm erosion crust that covers the glacier-polished hills leads one to believe that the Ice Age left these latitudes about 216 thousand years ago… The proponents of this method have been well aware of the difficulty of obtaining a referential scale for something like erosion speed… it differs for various climates: the same type of rock erodes at varying speeds in the tropics and beyond the Arctic Circle. Erosion speed also depends on the temperature, humidity, rainfall and sunshine. This means that every biospheric zone requires the compilation of special scales and diagrams; besides, one cannot be certain that the weather conditions had remained unaltered since the exposure of the layer that we're interested in." ([616], pages 34-35)

There were many attempts of deducing absolute age by the speed of sedimentary layer formations. They didn't lead anywhere, which is perfectly understandable.

Oleinikov tells further that:

"The research in this direction had been conducted by the scientists of many countries; however, the results failed to meet the expectations. It became apparent that *similar types of rock erode at different rates even under similar conditions, and establishing a regular pattern of these processes is hardly possible at all*. For instance, ancient documents [a reference to the Scaligerian chronology yet again! – A. F.] tell us that the Egyptian Pharaoh Ramses II reigned about 3000 years ago. The buildings that were constructed in his lifetime are now covered by a three metre layer of sand. This means that about a metre of sand accumulated every millennium. At the same time, certain areas of Europe have

a *millenarian* rate of three centimetres of sediment, whereas for the firths in the South of the Ukraine this is an *annual* rate." ([616], page 39)

The development of other methods was attempted as well. "The radium-uranium and radium-actinium methods are valid for the time interval of 300 thousand years. They are convenient for the datings of geological formations when the required precision does not exceed 4-10 thousand years" ([616], page 70). However, this isn't precise enough for the ends of historical chronology, and cannot contribute to it in any substantial manner at all.

15.
ARE RADIOCARBON DATINGS
TO BE TRUSTED?

15.1. The radiocarbon datings of ancient, mediaeval, and modern specimens are scattered chaotically

15.1.1. Libby's initial idea. The first failures

The most popular method claiming the capability of dating ancient artefacts independently is the radiocarbon method. However, the accumulation of the radiocarbon datings has exposed the difficulty of the method's application.

According to Oleinikov,

"Another problem had to be considered. The intensity of the atmospheric radiation is affected by many cosmic factors. The radioactive carbon isotope production rate should also vary, and one needs to find a method that would consider these variations. Apart from that, over the period when highways and industrial plants have been introduced by the civilization, a gigantic amount of carbon from the combustion of wood, coal, oil, turf, oil-shales and their products emanated into the atmosphere. How does this atmospheric carbon affect the production of its radioactive isotope? In order to get veracious datings, one has to introduce complex corrections into calculations that reflect the changes in the content of the atmosphere over the last millennium. *This issue, as well as a number of technical difficulties, casts a shadow of doubt over the precision of many radiocarbon datings.*" ([616], page 103)

W. F. Libby, the author of the method, wasn't a historian, and did not question the veracity of the Scaligerian datings, which were used for the justification of his method according to his book. However, the archaeologist Vladimir Miloicic had proved this method to give random errors of 1000-2000 years, while its "independent" dating of the ancient specimens faithfully follows the datings offered by the consensual chronology. Naturally, there can be no talk of "proof" here ([391], pages 94-95).

Let us quote some rather meaningful details. As we have already noted, W. F. Libby had a priori been certain of the veracity of Scaliger's datings. He wrote that they "…had no contradictions with the historians in what concerned ancient Rome and Egypt. *We did not conduct extensive research related to this epoch* [sic! – A. F.], since its chronology in general is known to the archaeologists a lot better than whatever our methods could estimate, so the archaeologists were doing us a favour providing specimens [which are actually destroyed, being burned in the radiocarbon measurement process – A. F.]"([478], page 24).

This confession of Libby's tells us a lot, since the deficiencies of the Scaligerian chronology directly concern the regions and epochs that he and his team *"did not research extensively enough."*

We can see that the Scaligerian archaeologists had been most reluctant about letting the radiocarbon method enter the "certainty epochs" of Scaliger's history for fear of uncovering embarrassing discoveries. Archaeologists have naturally no objections against applying this method to the undocumented prehistory since nothing capable of compromising consensual chronology can possibly be found there.

In what concerns the several reference measurements that were conducted on ancient artefacts, the situation is as follows. The radiocarbon dating of the Egyptian collection of J. H. Breasted "suddenly discovered the third object that we analyzed to have been contemporary," according to Libby. "It was one of the findings… that had been considered… to belong to the V dynasty [2563-2423 B.C., or roughly four millennia before our time. – A. F.]. *It had been a heavy blow indeed*" ([478], page 24).

Why could it have been such a blow? The physicists appear to have restored the veracious dating of the Egyptian specimen, proving the old one to have been wrong. What's the problem with that?

The problem is of course the simple fact that any such dating would prove a menace to the Scaligerian chronology. Carrying on in that vein would lead Libby to compromising the entire history of ancient Egypt.

The specimen that Libby had been careless enough to have claimed as modern had to be *called a forgery* and disposed of ([478], page 24), which is only natural since the archaeologists could not have possibly let the heretical thought of the XVI-XVII century A.D. (considering the method's precision) origin of the "ancient" Egyptian finding enter their minds.

"The evidence that they [the proponents of the method – A. F.] use for proving the veracity of their method is rather insubstantial, with all the indications being indirect, the calculations imprecise, and the interpretation ambiguous, the main argument being the radiocarbon datings of the specimens whose age is known for certain used for reference… Every time referential measurements are mentioned, everybody quotes the results of the first referential datings that had been obtained *for a very limited number of specimens* [sic! – A. F.]" ([391], page 104).

Libby recognizes the absence of substantial referential statistics. Together with the *millenarian* dating deviations mentioned above (explained as a consequence of a series of forgeries), we may thus question the very validity of the method as used for dating specimens belonging to the period that we're interested in, covering the two millennia preceding our century. This discussion does not pertain to the use of the method for geological purposes, however, where millenarian deviations are considered insubstantial.

W. F. Libby writes that "there was no deficiency in materials belonging to the epoch preceding ours by 3700 years for checking the precision and the dependability of the method" ([478], pages 24-25). However, there is *nothing* here to compare radiocarbon datings to, since there are no dated written documents belonging to those epochs. Libby also informs us that his historian acquaintances "are *perfectly certain* of the veracity of the datings referring to the last 3750 years, however, their certainty does not spread as far as the events that precede this era" ([478], pages 24-25).

In other words, the radiocarbon method has been used most extensively for the period of time that doesn't allow the verification of the results by any other independent method, which makes life a lot easier for the historians. The example that we quote below is most typical.

"The radiocarbon datings of the three inscription-bearing plaques found in Romania have put archaeologists in a quandary… The ashes that they had been found in prove them to be 6000 years old at the very least. Could the discovery of literacy have happened in a rural community in Europe and not in the urban and highly-developed Sumerian civilization? [Such an awful lot of space for the flight of exalted fantasy – A. F.] The scientists consider this probability to be very low… There have been many theories put forward for the explanation of this discovery that apparently refuted the reigning opinion on the origins of written language. Some of the archaeologists, without doubting the scientific principles of the radiocarbon method have suggested *the method to be error-prone due to the effects of factors that haven't been studied as of yet*" ([478], page 29).

Could it be that the errors of the method are rather insubstantial and allow for an approximate dating of the specimens belonging to the last two or three millennia? The state of affairs appears to be a graver one. The errors of radiocarbon dating are too great and too chaotic. They can amount to several millennia in what concerns contemporary and mediaeval objects (q.v. below).

In 1984 the **Technology and Science** magazine had published the results of the radiocarbon method-related discussions from the two symposiums in Edinburgh and Stockholm (No 3, page 9):

"*Hundreds* [sic!] of analysis examples were quoted with dating errors ranging from 600 to 1800 years. In Stockholm the scientists lamented the fact that the radiocarbon method appears to produce the greatest distortions when applied to the history of ancient Egypt in the epoch preceding ours by 4000 years. There are other examples, some of them referring to the history of Balkan civilizations… Specialists have reached solidarity in their opinion that the radiocarbon method remains ambiguous due to the impossibility of proper calibration, which renders it unacceptable since it gives no calendarian datings."
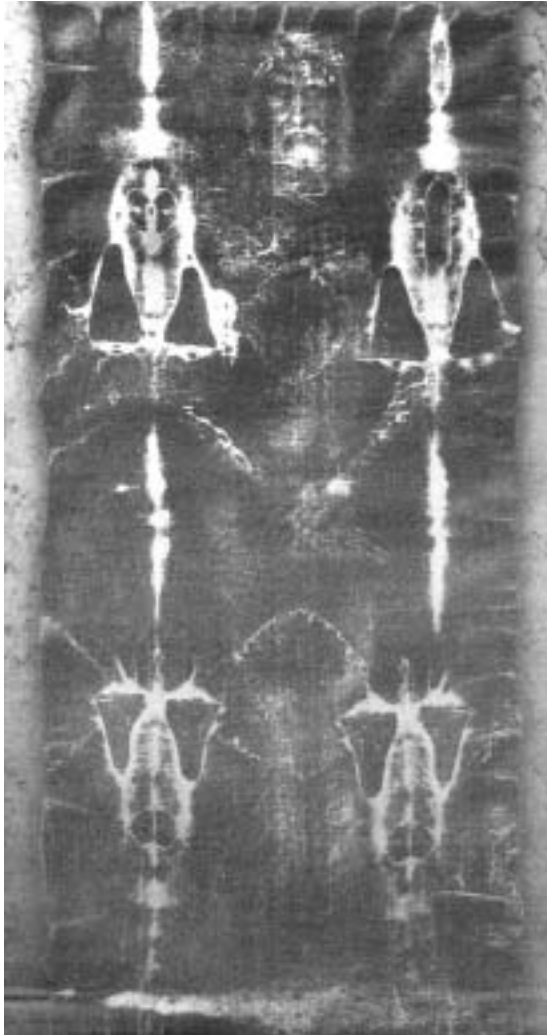
Fig. 1.59. Photograph of the celebrated Shroud of Turin ([387], pages 16-17).

15.1.2. A criticism of the application of the radio-carbon method to historical specimens

According to L. S. Klein, the radiocarbon datings "…have confused the archaeologists greatly. Some of them were characteristically overzealous… to follow the advice of the physicists… These archaeologists hastened to reconstruct the chronological schemes [which implies they aren't constructed firmly enough – A. F.]… The first archaeologist to have opposed the radiocarbon method was Vladimir Miloicic, who… attacked the practical usage of radiocarbon datings, as well as… criticising the very theoretical foundation of the physical method sharply and bitterly… The comparison of the individual measurements of modern specimens with their average value allowed Miloicic to support his scepticism with a series of brilliant paradoxes.

The shell of a *living* American mollusc has the radioactivity index of 13.8 as compared to the average value of 15.3, which makes it 1200 years old. A *live* North African wild rose flower with the radioactivity of 14.7 has been dead for 360 years, according to the physicists… as for the Australian eucalyptus with a radioactivity of 16.31, it isn't likely to exist anywhere in the next 600 years. A shell from Florida with a value of 17.4 shall only appear in 1080 years…

Since in the past radioactivity hasn't been spread any more evenly than it is now, similar fluctuations and errors may afflict ancient objects as well. A prime example is the result of the radiocarbon dating of a mediaeval altar fragment in Heidelberg… which showed that the wood used for the repair of the altar hadn't existed at that time… In the Iranian Welt cavern the lowest layers have been dated to 6054 B.C. (give or take 415 years) and 6595 (give or take 500 years) before Christ, whilst the layer on top was dated as 8610 B.C., give or take 610 years. The upper layer is thus 2556 years older than the lower, which is clearly an impossibility. There is a vast number of similar examples…" ([391], pages 94-95)

Thus, the radiocarbon dating method can only be used for the approximate datings of objects whose age amounts to dozens of millennia, when the error rate is *comparable with the actual specimen age* reaching *one-two or more thousand years.*

Live molluscs have been dated with the radiocarbon method, and proved to be *2300 years old* as a result, which is perfectly preposterous (q.v. in *Science* magazine, No. 130, dated 11 December 1959). The radiocarbon dating deviation amounts to *twenty-three hundred years* here.

A few more examples of relatively recent radiocarbon datings made around 1970-1971:

1) No. 225 of *Nature* magazine dated 7 March, 1970 reports the results of analyzing the C-14 content of organic material contained in the mortar of an English castle which is known to have been built 738 years ago. The radiocarbon dating gave the age

of 7370 years as a result, being *6500 years off the mark.* The radiocarbon dating deviation amounts to *six millennia and a half.* One wonders whether there was any point in quoting decades with such precision.

2) The radiocarbon analysis of seals that have just been shot defined their age as 1300 years, i.e. dating mistake of 1300 years. The seals mummified 30 years ago have been dated as 4600 years old, i.e. dating mistake of 4570 years. Quote from the *Antarctic Journal of the United States,* No. 6, 1971.

The examples given show that radiocarbon dating can deem the specimens thousands of years older than they really are. As we have seen, there are examples of the opposite, when the specimen is dated as belonging to the distant future.

One shouldn't wonder about radiocarbon analysis making mediaeval objects fabulously old.

Let us return to L. S. Klein's review. He writes that:

"Miloicic suggests to cease the tendentious "critical" *editing* of the radiocarbon datings, which is constantly done by the physicists, and calls upon their patrons the archaeologists to do away with the "critical" *censorship* that axes the publishing of the complete result. He appeals to both physicists and archaeologists to publish all of the results of their research without filtering out the dates that strike them as improbable. He also tries to convince the archaeologists to stop the practice of familiarizing the physicists with the age of the finding, and not giving them any figures until they publish theirs! Otherwise, after such editing which reflects the private viewpoints of the researchers themselves, the dating is bound to be subjective, so the study of the concurrence between historical and radiocarbon datings becomes impossible.

Thus, in Groningen, where the archaeologist Becker had been a supporter of the short [European – A. F.] chronology, radiocarbon datings are usually recent, whereas in Schleswig and Heidelberg, where Schwabedissen and others have been proponents of the longer version of chronology, these datings are usually a lot more ancient." ([391], pages 94-95)

We think that no commentary to this is required.

We may be told that the radiocarbon method may have attained a higher level of precision in the last couple of years. This may be true concerning the theory and the actual measurements. The question is, however, whether these improved methods are used

Fig. 1.60. A fragment of the Shroud. Taken from [46]. Also see [1055], page 138, ill. 7.1, as well as [358], pages 16-17.

in modern archaeological practice, and if so, what results are obtained in this manner. *Do the new radiocarbon datings concur with the Scaligerian chronology?* Let us quote a relatively fresh example.

15.2. The dating of the Shroud of Turin

The reports of the radiocarbon dating of one of the most famous Christian holy objects – the Shroud of Turin, q.v. in figs. 1.59, 1.60, 1.61 – had caused a great resonance in 1988. According to the traditional version, this piece of cloth bears the image of the body of crucified Christ and is dated to the I century A.D., allegedly being about two thousand years old. However, radiocarbon datings have given a different dating: roughly XI-XIII century A.D. The radiocarbon analysis has been conducted in three laboratories – in Oxford University, Arizona University, and the Swiss Technological Institute in Zurich ([769], page 80).

A scientific work specially dedicated to the radiocarbon dating of the Shroud of Turin claims the linen fabric that the shroud is made of to have been produced between 1050 and 1350 A.D. ([1055], page 141). The authors cite the results of the Shroud's radiocarbon analysis performed in the laboratory of the Oxford University ([1055], page 140). The laboratories of Arizona and Zurich have given more recent
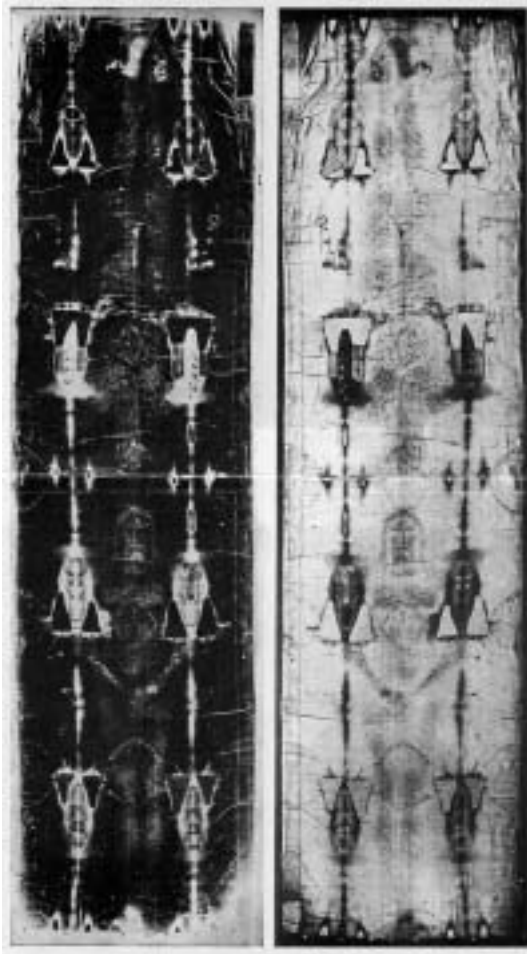
Fig. 1.61. Negative and positive images of the Shroud of Turin ([358], pages 16-17).

datings, 1304 and 1274 (with the error rates of 31 and 27 years) respectively ([769], page 82).

These results have proved shocking for many. "In September 1988… a report appeared telling of the analysis and the fact that it *gave a certain dating of the shroud's fabric which was a thousand years more recent than the alleged date of Christ's death… even if the Shroud is dated as a XI century artefact…*" ([46], page 25). The author ceases the discussion of the dating after this, and begins to ponder the veracity of Christ's image as seen on the Shroud.

One arrives to the following conclusions:

1) Either the Shroud of Turin is a forgery;

2) the radiocarbon datings can contain errors of several centuries or even millennia;

3) or the Shroud of Turin is original, but dated to the XI-XIII century A.D. If this be the case, it is natural to ask about the century that Christ's lifetime falls on. Could it really have been the XI?

The radiocarbon dating of the Shroud of Turin to the XI-XIII century A.D. made the historians rather worried, and provoked a series of attempts to refute the result. A. Agureyev, the ITAR-TASS correspondent, had made a report from New York in 1998 that can be found printed in the **Gudok** newspaper dated 4 April 1998. This report stated that the radiocarbon dating of the shroud "contradicts the Biblical tradition. However, according to the scientists of the University of Texas, their Italian colleagues *should not have used the radiocarbon analysis system*". The Shroud could allegedly "fall prey to a fungus" in the XI-XIII century, that may have affected the radiocarbon dating. "However, the scientists have no opportunity of conducting further research, since the Catholic church refused to provide any more specimens, and even insisted on the return of all of the ones that were at scientists' disposal" (same source).

Since the results of the radiocarbon dating of the Shroud gave results that contradicted the Scaligerian dating of the life of Jesus Christ, the radiocarbon method had to be exposed to public attention. The protection of the Scaligerian dating of Christ's life had been provided by the publication of new facts important enough to considerably aggravate the dubiety of the radiocarbon method in what concerns its applicability to historical chronology, already great enough. Let us quote some of the critical materials belonging to the proponents of the Scaligerian chronology ([358]). The publication belongs to Rev. Gleb Kaleda, a prominent geologist, Professor, and Doctor of Sciences. Also see [717] for critical material.

"There are several other factors, either local or planetary, that affect the concentration of C-14 in the atmosphere, hydrosphere, and organic matter, thus complicating and limiting the use of the radiocarbon method in chronology.

a) Natural or artificial radiation. Neutrons released in nuclear and thermonuclear reactions, as well as cosmic rays, turn N-14 into C-14. The atmosphere content of C-14 had *doubled* in the pe-

riod between 1956 and August 1963. A *drastic increase* in C-14 content began after the thermonuclear explosions in 1962.

…

d) The local effect of volcanic gases on C-14 content had been described by L. D. Sulerzhitsky and V. V. Cherdantsev ([717]).

In a number of cases radiochronological age calculations give *results that are clearly absurd* and contradict the entirety of accumulated geological and palaeontogical data. In such cases "absolute chronological figures" are to be ignored as blatantly erroneous. *The discrepancies between geochronological definitions using different isotope methods may reach a factor of 10x.*

In 1989 the British Science and Technology Council had analyzed the precision of the radiocarbon method (see the 8th issue of the *New Scientists* magazine for 1989). 38 laboratories from all across the world were involved in the research. All of them received specimens of wood, turf, and carbonate salts whose age had only been known to the organizers of the experiment, and not to actual analysts. Only seven laboratories (of thirty-eight! – A. F.) reported satisfactory results; *others proved wrong by factors of 2x, 3x and higher.* The comparison of the data received by different researchers that used various analysis methods had shown that the causes of the dating errors were not limited to the imprecision of a specimen's radioactivity estimation as it had been assumed; apparently, the technology of preparing specimens for analysis had also served as an entropy agent. The diagnostic errata are caused by the calefaction of specimens as well as some methods of preliminary chemical processing. *Everything points at the necessity of using the radiocarbon dating method with the utmost caution*" ([358], pages 14-16).

In 1997 the German authors Christian Blöss and Hans-Ulrich Niemitz have published a book titled suggestively enough *C-14 Crash* ([1038]). They have collected a great body of *modern* material demonstrating rather convincingly the fact that *the radiocarbon method in its current form cannot serve as a valid reason for absolute datings of historical artefacts.*

More on this can be seen in the bulletin [1491] that contains the following critical publications dated 1991-1995 that are of interest to us:

1) Christian Blöss und Hans-Ulrich Niemitz (1996), ***Der Selbstbetrug von C14-Methode und Dendrochronologie;***

2) Hans-Ulrich Niemitz (1995), ***Die "magic dates" und "secret procedures" der Dendrochronologie;***

3) Herbert Illig (1991), ***Dendrochronologische Zirkelschüsse.***

As we can see, radiocarbon dating might prove more or less effective in analyzing objects whose age is measured by tens and hundreds of millennia. The errors of tens and thousands of years naturally inherent to the methods are of minor importance here, although this is far from being obvious. However, the mechanical use of the method for the dating of objects no older than two thousand years, which is the historical epoch that interests us most in what concerns the reconstruction of the true history of documented civilization, appears perfectly impossible without being preceded by extensive and detailed statistical research and calibrations employing specimens of known ages. As far as we know, no such research ever took place, so there are no referential statistics to be had. There is also no knowledge of whether improving the method's precision is a possibility at all. Also see [718].

Other physical dating methods do exist; unfortunately, the spectrum of their applicability is considerably more limited than that of the radiocarbon method, and their precision is also insufficient for the historical epochs relevant to our ends. For instance, in the early XX century some scientists proposed to define the ages of buildings by the shrinkage of their foundations or the deformation of columns; however, no steps have been made in this direction due to the impossibility of calibrating this method and estimating the real shrinkage and deformation speed.

Two more methods have been suggested for dating ceramics: the archaeomagnetic method and the thermoluminescent method. However, they have calibration issues of their own. The archaeological datings offered by these methods for the Eastern Europe, for instance, are limited to the Middle Ages.

Let us return to the Shroud of Turin for a second in order to put forth the following hypothesis concerning the nature of the alleged human figure that one sees on the Shroud's fabric. One shouldn't exclude the possibility that an embalmed body had really been wrapped in this linen at some point. Let us remind that the "ancient" Egyptians had the practice of wrap-

ping a body up in several tight layers of cloth saturated with various elixirs. This may have resulted in a "carbon copy" of a body on the fabric of the cloth which was later removed for some reason, and stored with great care.

15.3 Modern radiocarbon analysis of Egyptian artefacts demonstrates serious contradictions

We shall once again consider the alleged reliability of the radiocarbon method as used for supporting the traditional version of the "ancient" history, particularly Egyptian, as reflected in a fundamental and detailed article published by the Manchester Museum in England in 1979 as part of the project named "The Mummies of the Manchester Museum" ([1196]). This most remarkable material was recommended to us by Professor A. Kravtsevich from the Alberta University Department of Mathematics, Edmonton, Canada.

The topic of the article is a dating that had amazed the authors of the article and put them in a quandary ([1196]). The radiocarbon dating of the mummy #1770 from the Manchester Museum collection had ascribed the mummy's bones to 1000 B.C., whereas the cloth that the mummy has been wrapped in received the dating of 380 A.D. The discrepancy between the datings of the mummy and the cloth equals to roughly 1400 years, although the dates should be equal. The cloth may have been somewhat older than the mummy if an old cloth had been used by the embalmers, but it couldn't possibly have belonged to a later age.

According to the authors of the article, this gap of nearly a millennium and a half cannot be explained by the possible errors of the radiocarbon dating, the way it is usually done today. That is why they had to come up with the rather amusing "explanation" that the old mummy had been exhumed after fifteen hundred years, and re-wrapped in a *new* cloth, and then restored to its rightful place as though it had remained unperturbed all the while.

We think this to be perfectly preposterous. Our take is that we encounter yet another imprecision of the actual method of radiocarbon dating which is apparently affected by effects of an undefined nature leading to great discrepancies in datings of 1,500 years, for instance (see the examples of the greatly

misdated modern specimens cited above, with the fluctuation amplitude reaching up to two millennia).

The authors of the article also confess to the fact that at the very dawn of the radiocarbon method *"ancient" Egyptian specimens* had been used for its calibration, *with their dates taken from history textbooks* ([1196], page 137). Here's a verbatim quote: "the use of the method commenced in 1948 in Chicago University and was initiated by Professor W. F. Libby… the Egyptian chronology played a great role in the naissance of the method, since Egyptian specimens, such as wood or charcoal, among others, have been used as standards for the known historical dates" ([1196], page 137). Thus, the radiocarbon scale used nowadays had initially been made largely dependent on the Scaligerian chronology of the "ancient" Egypt, and therefore needs to be revised.

16. CRITICAL ANALYSIS OF THE HYPOTHESES ON WHICH THE RADIOCARBON METHOD IS BASED

(Written by Professor A. S. Mishchenko, Doctor of Physical and Mathematical Sciences from the Moscow State University Department of Mathematics and Mechanics, a prominent scientist of the V. A. Steklov Mathematics Institute of the Russian Academy of Sciences, nominated State Premium of the Russian Federation Laureate in 1996, a specialist in topology and geometry, functional analysis, differential equations and their applications.)

16.1. W. F. Libby's initial idea

A better representation of the modern problems most frequently encountered in the archaeological application of the radiocarbon method requires that we return into the 50-s and the 60-s for a close study of the foundations that the edifice of historical and archaeological applications is based upon. The matter is that the first steps of the method's creation and development led to a large number of natural complications, many of which *afflict it to this day, and lead to further error aggravation.* Also see the book [1038], and the article [1491] recently published in Germany. These complications need to be addressed again in order to attract the attention *of the physicists* to the necessity of a fresh analysis of the foundations of this method's ar-

chaeological applications, especially considering what we learn about the Scaligerian chronology.

The actual concept of radiocarbon dating belongs to W. F. Libby ([1250]). "Shortly after the end of WW II, the American Willard Frank Libby had published the results of the discovery that made him world famous and had received the Guggenheim Award and the Nobel Prize. Studying the interaction between artificially produced neutrons and nitrogen atoms, Libby came to the conclusion (1946) that the nuclear reactions observed in his experiments should also occur naturally – that is, the neutrons produced by the atmosphere of the Earth should become absorbed by nitrogen atoms and transform into C^{14}, the radioactive isotope of carbon. Minute amounts of this radioactive carbon mix with the stable isotopes of carbon, C^{12} and C^{13}, taking part in the formation of carbon dioxide molecules that are subsequently consumed by plants, and animals (including humans) further up the food chain. Such molecules should be present in the tissues as well as the effluvia of living bodies. The discovery of mild radioactivity of the miasma emanated by Baltimore sewage in 1947 had been the first proof of the correctness of Libby's estimations. The radioactivity of growing trees, seashells etc had been estimated in the following two years, 1948-1949. As well as any other radioactive element, the radioactive carbon isotope has a constant hallmark decay rate. Its global concentration would keep on diminishing by a factor of two every 5568 years, according to Libby, if it hadn't been for the constant generation of C^{14} in the atmosphere that keeps the supply regular. The amount of C^{14} lost equalling the amount gained.

The death of a living organism excludes it from this process and makes it stop accumulating carbon from air (plants) or food (animals). The radioactivity of a dead organic body (a corpse, piece of wood, charcoal) keeps on falling – at a constant rate, which is an important fact.

Therefore it suffices to measure how much the overall radioactivity of a dead organism has decreased in comparison to the living ones in order to determine the time when this organism stopped refreshing its cells – the date when a tree had been cut down, a bird had been shot, or a human had died. This is naturally far from being an easy task, since the radioactivity of carbon as found in natural conditions is very weak

Fig. 1.62. Atmosphere neutron density as a height function. Taken from [986], page 138.

(even before the death of an organism – *one C^{14} atom per every 10 billion atoms of regular carbon).* However, Libby had developed the means and the techniques of measurement and numeric conversion that led to the naissance of the radiocarbon method of dating ancient objects" ([390], pages 52-53).

Let us now consider the basics of this method, particularly [390], [391], [1250], [1080], [986], [110], [1081], [1082], [1480], [414], [1431], [1432], [1433], [1025], [1124], [1473], [567], [480], and [478].

16.2. Physical basics of the radiocarbon method

Cosmic rays produce neutrons as they pass through the atmosphere of Earth. The density of the neutron current depends on the altitude. The results of density measurement of this current with aerostatic probes can be seen in fig. 1.62 on graph A ([986], page 138). The measurements were conducted in the state

of New Jersey, USA, and belong to the period preceding 1955. The peak of neuron content falls on the height of approximately 40 thousand feet (12 kilometres). Close to the actual surface of Earth, the neutron current density drops to zero. This leads us to the following two conclusions:

1) Neutrons are generated in the stratospheric layers of the atmosphere, thus being secondary cosmic ray particles that are born with the passing of the primary cosmic rays through the atmosphere.

2) All of these neutrons immediately engage in nuclear reactions, and only a minute part of them reaches the surface of the Earth.

Graph *B* in fig. 1.62 reflects the dependence of the neutron current on the height of 30 thousand feet on the geomagnetic latitude ([986], page 139). The measurements were conducted before 1955. This graph makes one think that the primary particles of cosmic radiation that give birth to neutrons are charged and reflected by the magnetic field of the Earth. It is significant that the neutron current density in the latitudes of 50 degrees (the latitude of Paris, Prague, Kiev and Kharkov) is *three times higher* than measured at the latitudes of 20-30 degrees (the Red Sea coast, the north coast of Africa).

The atmospheric neutron generation rate per minute equals roughly 6×10^{20} neutrons/min, with error rate equalling 25% ([986], p. 139). Thus, every minute $4.5 \times 10^{20} - 7.5 \times 10^{20}$ neutrons are generated on planet Earth. These neutrons collide with the atoms of atmospheric nitrogen and oxygen and react with them. The probability rate of a neuron reacting with a nitrogen atom is supposed to be a few thousand times higher than such for oxygen atoms ([986], pp. 139-140). Neutrons of low energy levels (heat neutrons) engage in C^{14} radioactive carbon reactions for the most part:

$$N^{14} + n \rightarrow C^{14} + H^1 \qquad (1)$$

The section of this reaction comprises roughly 1.7×10^{-24} cm². See [986], page 140. Fast neurons may react in two more ways:

$$N^{14} + n \rightarrow B^{11} + He^4 \qquad (2)$$
$$N^{14} + n \rightarrow C^{12} + H^3 \qquad (3)$$

However, compared to the section of the reaction (1), their sections are very small. The reaction (3) results in the production of tritium H^3 that has a half-

Fig. 1.63. The structure of the carbon exchange reservoir.

life period of 12.5 years and transforms into He^3, a stable helium isotope. The speed of tritium H^3 generation is estimated to equal 1% of that of C^{14} generation.

M. J. Aitken writes the following in his monograph titled *Physics and Archaeology:*

"A relatively small amount of neutrons reaches the surface of the Earth… and it would be *reasonable to suggest* (? – A. F.) that every neutron produced by the cosmic rays creates a radiocarbon atom, hence the speed of neutron generation equals that of radiocarbon production. This amounts to roughly 7.5 kilos of radiocarbon per year" ([986], page 104). Radiocarbon C^{14} decays according to the formula:

$$C^{14} \rightarrow N^{14} + \beta^- \qquad (4)$$

The half-life period equals approximately 5600 years, so 1% of radiocarbon decays in about 80 years. It is thus easy to estimate that the amount of C^{14} that is constantly present on Earth equals about 60 tonnes, with the error rate comprising about 25%, that is, 45 to 75 tonnes.

The generated radiocarbon mixes with other elements in the atmosphere, and is assimilated by oceans and living beings. The carbon propagation sphere is called the carbon exchange reservoir. This includes the atmosphere, the biosphere, sea surface and ocean depths, q.v. in fig. 1.63 ([986], page 30). The numbers on this picture refer to the carbon content in one part

of the carbon reservoir or the other, with atmosphere carbon content equalling 1. The part of carbon that escapes the reservoir as oceanic sediment is not shown on the diagram. "We use the term *radiocarbon age* in order to refer to the period of time between the point that the object ceases to be part of the exchange reservoir and the moment the C^{14} measurements are conducted" ([110], page 32).

16.3 The hypotheses that the radiocarbon method is based upon

In theory, the radiocarbon age measurement concept is a simple one. It suffices to know:

1) The radiocarbon volume for the moment of the object's departure from the exchange reservoir;

2) the exact half-life period of radiocarbon C^{14}.

After that, provided the possession of a sufficient specimen volume, one has to measure the current radiocarbon content, and calculate the time passed since the object stopped taking part in carbon exchange by simple subtraction and division. However, this seemingly simple idea encounters a number of serious complications in practical application. We should also note right away that any *diminishing* of the relative C^{14} content in the specimen for any reason at all leads to the *increase of its alleged age*.

16.4. The moment of the object's departure from the exchange reservoir

So, what does "the moment of the object's departure from the exchange reservoir" actually mean? *The first hypothesis* of Libby's is that this moment should coincide with the time of the object's death. However, despite the fact that the moment of death might differ from the moment that interests the historians (for instance, a piece of wood from a Pharaoh's tomb may belong to a tree that had been cut down a lot earlier than the sepulchre had been built), it is obvious that identifying the moment of death with that of an object's departure from the carbon exchange reservoir only seems correct initially. The matter is that carbon exchange *does not stop with death*. It just slows down and assumes a different form, and one has to bear this in mind. At least three processes may alter the radiocarbon content in a body ([110], page 31):

1) Organic decomposition;

2) Isotopic exchange with foreign carbon;

3) The absorption of environmental carbon.

According to M. J. Aitken, "The only possible kind of decomposition results from the production of carbon oxide or dioxide. However, this process *isn't relevant to us*, since it only concerns the *carbon lost by an object*" ([986], page 149). M. J. Aitken seems to imply that since the oxidation of carbon isotopes has the same speed, it does not affect the percentage of radiocarbon. However, in a different place he proceeds to tell us the following:

"Although C^{14} is identical to C^{12} chemically, its greater atomic mass manifests as a result of natural processes. The exchange mechanism between the atmospheric carbon dioxide and the oceanic carbonates provides for a higher (by 1.2%) concentration of C^{14} in carbonates; on the other hand, the photosynthesis of atmospheric carbon dioxide by the plants of Earth leads to their possessing a somewhat lower (by 3.7% in average) concentration of C^{14}." ([986], page 159)

Craig Harmon offers the following table of carbon and radiocarbon propagation for the various parts of the exchange reservoir ([1080] and [986], page 143).

	Carbon content, trillions of tonnes	Division effect for C^{14}
Atmosphere	0.64	1.037
Living biosphere of the Earth	0.30	1.000
Humus	1.10	1.000
Biosphere of the sea	0.01	1.024
Sea-solved organic substances	2.72	1.024
Inorganic substances in the sea	35.40	1.049

Therefore, *biosphere and humus are the lowest in radiocarbon content, whereas inorganic substances and sea water are the highest.*

The book [110] tells us nothing of the difference between the carbon isotope oxidation speed differences in decomposition processes, but the information cited above gives reason to believe them to be quite visible. In any case, *the carbon oxidation process is the reverse process to that of its photosynthesis from atmospheric gas, hence the isotope C^{14} should oxidize faster (or with greater probability) than the isotope C^{12}. Thus, decomposing (or decomposed) specimens should have a*

lower content of radiocarbon C^{14}, which should make the specimens appear a lot older than they really are. This is one of the mechanisms that leads to the gathering of *extra age* by the specimens that distorts the true picture. We have witnessed actual examples of such artificial ageing above, which distorts radiocarbon datings often throwing them considerably off the mark.

Counting other possibilities of carbon exchange between the specimens and the exchange reservoir is *altogether next to impossible.* It is supposed that "wood and organic matter appear to be the most inert in what concerns carbonization, whereas a large quantity of bones and shell carbonates show frequent changes in isotope content" ([110], page 31). *Since measuring the actual carbon is de-facto an impossibility, it gets ignored, by and large.* Standard methods and procedures of radiocarbon measurements are at best concerned with the ways of possible cleansing of the specimen from foreign radiocarbon and reasons of specimen contamination. S. V. Boutomo finds it sufficient to merely state that "charred organic matter and wood in *a good condition* (?! – A. F.) are dependable enough in most cases" ([110], page 31).

M. J. Aitken adds that "in order to work with any specimen at all, one has to clean it thoroughly from foreign roots and other fibres, and treat it with acid in order to solve all sedimentary carbonates. The removal of humus is achieved by washing the specimen in a base solution" ([986], page 149).

Note that the important question of whether this chemical cleansing might affect the specimen's radiocarbon content had not been raised back in the day – and we're talking about the time when it was claimed that the radiocarbon method "gives solid proof to historical chronology".

16.5. Radiocarbon content variations in the exchange reservoir

The second hypothesis of Libby's is that the radiocarbon content in the exchange reservoir *remains constant all the time.* Quite naturally, this hypothesis is also an *erroneous* one, and one has to consider the effects that affect the radiocarbon content of the exchange reservoir. The estimations of the general volume of radiocarbon on Earth as cited above imply that in a modern specimen the ratio is one radiocarbon atom

per every 0.8×10^{12} atoms of regular carbon. This means that every minute *about 15 decays* occur in a gramme of natural carbon ([986], page 143). Thus, if the radiocarbon content in the exchange reservoir for the moment of a specimen's death differed from the current by a ratio of 1%, the calculations of this specimen's age shall contain an error of about 80 years, 2% shall give an error of 160 years etc (!). A deviation of 10% shall give a dating error of 800 years, and higher deviations shall also alter the linear rule, and so a 20% deviation shall lead to an error of 1760 years, and not 1600, and so on. The radiocarbon content in old specimens for the moment of their departure from the carbon reservoir cannot be estimated in any other manner but via the comparison with the radiocarbon content of the modern specimens considering several effects that alter the radiocarbon content in specimens with the passage of time. M. J. Aitken cites the following well-known effects that influence the radiocarbon content in the exchange reservoir:

1) The change of radiocarbon generation speed in accordance with the changes in the intensity of cosmic radiation;

2) The change of the size of the exchange reservoir;

3) The finite speed of mixing between the different parts of the exchange reservoir;

4) The separation of isotopes in the exchange reservoir.

M. J. Aitken makes the justified remark that "any concrete data concerning points 1 and 2 is hard to obtain in any other way except for measurements conducted on the specimens veraciously dated with other methods" ([986], page 153). This pours light on the existence of a very important circumstance. The physicists required veracious external reference for the correct graduation of the radiocarbon scale. Having absolute trust in the historians, they took the dates from history textbooks and chronological tables. It appears that the physicists have been misinformed from the very beginning, since the radiocarbon method had been based on the same old *Scaligerian chronology* of historical specimens. Its reconstruction shall invariably affect at least some of the fundamental concepts that define the actual method.

Furthermore, one has to notice two more modern effects that affect the current radiocarbon concentration, namely, the increase in radiocarbon content

due to experimental thermonuclear explosions, and the decrease (the so-called Süss effect) thereof that is caused by the burning of fossil fuels – oil and coal, whose radiocarbon content should be minute due to their great age. The estimation of the change in radiocarbon production speed (see point 1) had been attempted by many authors. Crowe, for instance, had researched the "materials with veracious historical datings" and shown that there was a correlation between the errors of radiocarbon dating and the changes in the magnetic field of the Earth ([1082], also [110], page 29). The measurements of the yearly layers formed by sequoia trees are cited nearby for comparison ([110], page 29; [1480]).

It is assumed that the specific activity has been varying within the range of 2% in comparison to the average from 600 A.D. to the present time, with the maximal alterations occurring every 100-200 years ([110]). We see yet again that the creation of the "radiocarbon scale" involved the materials that the Scaligerian chronology dated as belonging to 600 A.D. or maybe even earlier. We do already know, however, that this chronology isn't to be trusted with anything that concerns the times preceding the XIII-XIV century. The physicists have been deceived by the Scaligerian chronology yet again.

Thus, the radiocarbon dating is implicitly based on the same old incorrect chronology of Scaliger and Petavius. In order to separate it from the very basics of radiocarbon dating, we shall have to trust the historical objects that can really be dated veraciously. However, we're beginning to understand that the age of such "trustworthy objects" cannot be more than 500-600 years, since none of them predate the XIV century A.D. Thus, *all the work on the calibration of the radiocarbon method shall have to be done again.* The results that the physicists will achieve in this case may come as some surprise.

"Apparently, the changes in cosmic radiation occurred before, but due to the brevity of their period, the effect of these fluctuations is *hard to consider.* We base our assumption that the intensity of cosmic radiation over the last 35000 years has been constant within the error range of 10-20% on the coincidence of the calculated value of specific activity and on the proximity of the age of oceanic sediment estimated with the aid of mutually independent carbon and io-

nium methods" ([110], page 29). Let us remind the reader that the "constancy" within the range of 20% means an error of 1760 years in the dating of the specimen. It isn't that significant an age compared to 35000 years, but the fluctuation rate is unacceptably high for what concerns the issues of the so-called "ancient" history. We have already given examples of discrepancies amounting to *a millennium or two* between the radiocarbon datings and Scaliger's "ancient" chronology. The fluctuations of 10-20% mentioned by the physicists are a reality, and not just theory.

In America – the regions withdrawn from the entire "Classical scene" – the dendrologists of the Arizona University have discovered plantations of bristlecone pine (*Pinus aristata)* whose age exceeded 4000 years. Some dead standing trees have been found nearby which have remained in their current condition for several thousand years ([414], page 6). It is assumed that cross-dating, that is, the temporal superposition of living and dead tree specimens, allowed for the creation of a dendrochronological scale spanning 7117 years ([1431], [1432], [1433]). However, this American dendrochronological scale, even if it is indeed correct, cannot help "ancient" European and Asian dendrochronology in any way at all, q.v. above.

In [414] on page 7 we can see a schematic drawing of the correlation of dendrochronological and radiocarbon datings based on the measurements conducted with the aid of over 300 specimens. If we're to consider the dendrochronological dating absolutely veracious (which is wrong, as we have already pointed out), the maximal radiocarbon dating error equals to the following values:

Dendrochrono-logical dating	Radiocarbon dating	Error
300	30	- 270
500	250	- 250
800	900	+100
1500	1000	+100
1900	2100	+200
2700	2400	- 300
4000	3500	- 500
5000	4300	- 700

The error rate keeps on growing with a negative value.

This American data can be interpreted in the following manner. The radiocarbon content in American bristlecone pine has been varying over the years in the following manner (in comparison to its current radiocarbon content):

Years	Radiocarbon content
1965	1
1700	1.035
1500	1.031
1200	0.988
100	0.975
- 700	1.038
- 2000	1.063
- 3000	1.100

Furthermore, on page 7 the authors of [414] write that "it is estimated, that the C-14 variations are of a global character – that is, they happen simultaneously all across the planet". No argumentation is given. It would thus be appropriate to inquire about the possible grounds for making hypotheses that arose from the analysis of nothing but American materials, and ones belonging to a rather small and very specific geographical location at that, valid for the entire planet.

The authors of [414] also make the conclusion that the difference between the dendrochronological and radiocarbon datings is a result of a *temporal* variation of radiocarbon content in the exchange reservoir. However, this very difference might lead one to an alternative hypothesis that a growing tree *continues to take part in carbon exchange* after the formation of the rings, which isn't even mentioned in [414]!

On page 4 of [414] we see the schematic drawing also included in [1025] that displays the correlation between the historical dates of the "ancient" Egypt and the hypothetical radiocarbon datings, and comparisons of the same dates to European monuments and artefacts. The commentary is that "this drawing shows us that the datings of the Roman period are virtually identical, whereas the datings of the early dynastic period differ by 500-700 years" ([414], page 7). Apart from this, we have already seen the data showing that the radiocarbon datings of at least some of the "ancient" Egyptian specimens really gives *late mediaeval* datings.

In 1964 Kigoshi had conducted precise measurements of C^{14} concentration in the tree rings of an old Japanese cryptomeria whose age reached 1890 years ([567], page 172). This data is also of little utility for the European dendrochronology and radiocarbon scale. The results of this research proved somewhat different from the ones related to a small area in America as cited above, but show the radiocarbon concentration for 1000 A.D. to have been 2% lower than it is currently ([567]). The conclusion is apparently valid for some small area in Japan.

The variations in the exchange reservoir (see point 2 above) are primarily determined by the alterations of the ocean level. Libby claims that a change of 100 metres in the sea level curbs the volume of the reservoir by 5% ([986], page 157). If this had been accompanied by a temperature drop, during the Ice Age, for instance, the concentration of carbonates in the water would diminish, and the entire carbon exchange reservoir would shrink by 10%. We are to be aware that we are considering hypotheses that are extremely hard to prove nowadays, and all such proof is, it turn, based on other hypotheses that are as hard to prove.

The data that concern the mixing speed as mentioned in point 3 are somewhat contradictory. Ferguson, for instance, having studied the radioactivity of tree rings (also in a small geographical area) reckons that this speed is rather high, and that the average time that it takes the carbon molecule to reach a different part of the reservoir equals seven years maximum ([986], page 158). On the other hand, thermonuclear test explosions have produced about half a tonne of radiocarbon, which shouldn't affect the general radiocarbon mass of 60 tonnes that greatly in theory – however, the activity of the specimens *grew by 25% as measured in 1959, and this growth had reached 30% by 1963.* This speaks in favour of the *low mixing level* hypothesis.

According to Süss, it takes about 1500 years for all of the water to mix in the Pacific, and 750 is the figure given for the Atlantic ocean by E. A. Olson and W. S. Brecker ([480], page 198). But the mixing of ocean waters is greatly affected by the temperature.

Specimens	Geomagnetic latitude	Per minute decay frequency for one gramme
White fir (Yukon)	55 degrees in lat. North	14.84 ±0.30
Norwegian fir (Sweden)	55 degrees in lat. North	15.37 ±0.54
Fir (Chicago)	53 degrees in lat. North	14.72 ±0.54
Ash (Switzerland)	49 degrees in lat. North	15.16 ±0.30
Honeysuckle leaves (USA)	47 degrees in lat. North	14.60 ±0.30
Pine branches (USA, 3.6 km above sea level)	44 degrees in lat. North	15.82 ±0.47
Heather (North Africa)	40 degrees in lat. North	14.47 ±0.44
Oak (Palestine)	34 degrees in lat. North	15.19 ±0.40
Unidentified timber (Iran)	28 degrees in lat. North	15.57 ±0.31
Manchurian ash (Japan)	26 degrees in lat. North	14.84 ±0.30
Unidentified timber (Panama)	20 degrees in lat. North	15.94 ±0.51
Chlorophora excelsa timber (Liberia)	11 degrees in lat. North	15.08 ±0.34
Sterculia (Bolivia, 2.7 km above sea level)	1 degree in lat. North	15.47 ±0.50
Ebony tree (The Marshall Isles)	0 degree	14.53 ±0.60
Unidentified timber (Ceylon)	2 degrees in lat. South	15.37 ±0.49
Eucalyptus (Australia)	45 degrees in lat. South	16.31 ±0.43
Seal-oil (The Antarctic)	65 degrees in lat. South	15.69 ±0.30

A 50% increase in the mixing of both shallow and deep waters shall increase to a 2% shrinkage of the atmospheric radiocarbon concentration.

16.6. Variations in radiocarbon content of living bodies

The third hypothesis of Libby's is that the radiocarbon body content is *equal for all of the organisms on the entire Earth,* and thus independent from the *latitude* and the species. In order to verify this hypothesis, Anderson (Chicago University) had conducted an in-depth research and discovered *that the radiocarbon content does indeed fluctuate, as one should have expected* ([480], page 191). See the table above.

Thus, modern radiocarbon activity varies from 14.03 (North African heather) to 16.7 (Australian eucalyptus) decays per minute depending on the geographical location and the species of the tree. This gives a deviation rate of 8.5% as compared to the average radiocarbon content value. Libby tell us the following:

"Over the ten years that have passed since that time, this information has not been refuted; the only exceptions concern the carbonate rock formations, where ground waters dissolve and wash away a significant part of ancient carbon, thus making carbon-14 content lower in comparison with the average planetary rate of the atmosphere-biosphere-ocean system. Such cases are extremely rare (? – A. F.), and can easily be accounted for" ([480]).

17. SUMMARY

Let us sum up the information that we have just considered. We have learnt that the real activity of ancient specimens may alter from the average value for the following reasons:

1) A temporal change in timber activity: 2% deviation range;

2) Cosmic ray intensity changes (theoretical estimation): 20% deviation range;

3) Short-term changes of solar activity: additional 2%;

4) An increase in the mixing rate of the oceanic water: minus 2%;

5) Variations in radiocarbon concentration depending on the geographical location and the tree species: 8.5% deviation range;

6) Variations in radiocarbon content resulting from decomposition processes: ? (unknown);

7) Variations in radiocarbon content resulting from a specimen's chemical processing: ? (unknown);

8) The variations in the exchange reservoir radiocarbon content resulting from the washing out of carbonate rock formations: ? (unknown);

9) Variations in radiocarbon content caused by large quantities of carbonates produced by volcanic eruptions: ? (unknown). This reason can provide for significant distortion of radiocarbon datings for the areas close to volcanoes, such as Italy with its Vesuvius and Etna.

One should also bear in mind the dating deviation resulting from the temporal gap between the cutting of a tree, for instance, and the use of the wood for the object or building researched. Finally, one has to consider the imprecision of the currently used C^{14} half-life value, that has been corrected *by almost 10%* as of late, and the errors of experimental measurement of a specimen's radioactivity (background radioactivity consideration etc). We do not cover these errors (whose correction cost the physicists lots of labour) here, since having learned of all the factors mentioned, we deem it nonsensical to attempt the precise measurement of a value whose theoretical *uncontrolled error rate* may equal 10% if we're to make modest assumptions. *The most optimistic calculations give a radiocarbon dating uncontrolled error range of 1200 years of arbitrarily added or subtracted age.*

This makes the placidity of the following conclusion made by B. A. Kolchin and Y. A. Sher most peculiar indeed: "Summing up the brief overview of the centurial C^{14} variation research, one has to point out that apart from its mere failing to undermine the trust that we have in radiocarbon chronology, this research had made its precision even higher (?! – A. F.)" ([414], page 8). Another specialist in radiocarbon datings, S. V. Boutomo, is of a more realistic opinion: "due to the *considerable fluctuations* of C^{14}'s specific activity rate, the radiocarbon datings of *relatively young specimens (under 2000 years of age) cannot be used as fundamental referential data for the absolute chronological scale*" ([110], page 29). However, from the point of view of the "Classical age" studies, including those of the "ancient" history of Egypt, these "relatively young specimens" are of the greatest interest. Thus, certain specialists in the field of radiocarbon dating confess openly (albeit in special scientific literature) that the use of the radiocarbon method in its current state for the specimens whose age is 2000 years or less appears a most dubious endeavour.

We could have finished our overview of the radiocarbon dating method here if it hadn't been for the criticisms of the method coming from archaeologists and certain oddities in the behaviour of the radiocarbon method specialists themselves. We have quoted some of the examples above. The first thing to attract one's attention is the absolute certainty of the authors in the infallibility of historical datings, who write that "the ages of specimens younger than 5000 years concur well (?! – A. F.) with the historical estimations" ([986], page 155). Such statements appear very odd indeed considering what we have just learnt.

Libby wrote that "further research had been undertaken involving specimens of known ages… The results… span a historical period of 5000 years… Thus, the general reliability of the radiocarbon method is well-proven" ([986], page 135). As we have already demonstrated, the popular myth of the "concurrence" between the Scaligerian chronology and the radiocarbon datings is based on flimsy foundations, and proves immaterial at closer study; the myth's popularity is clearly of an unnatural origin. Let us remind the reader of something that Libby himself had mentioned in this respect: "One of the exceptions had been found when we have worked on the materials of a large collection collected by James H. Breasted in Egypt together with the specialists of the well-known Chicago Institute for Oriental Studies. The third object suddenly turned out to have proved modern after analyzing. The finding belonged to a collection ascribed to the time of the V dynasty. It had really been a heavy blow" ([478], page 24). As we have already mentioned, this object was claimed a forgery. The fact that Libby mentions this "strange occurrence" makes one wonder how many of those he remained taciturn about.

As we have already demonstrated, the calibration of the radiocarbon method had been largely based on the Scaligerian chronology. It would be most expedi-

ent to check *whether the radiocarbon method can actually be made independent from written sources.*

Libby cites the table of modern carbon activity for various rock formations claiming that "it has been shown that there are no significant differences between the studied specimens collected at various latitudes from pole to pole" ([480], page 191).

Wait a second, we have just learnt that the deviation range equals 8.5% in one direction or the other, that is, *over 700 years.* How is it possible to claim five pages further on that "the carbon content that we have estimated concurs well with the expected value, all deviations being nothing but acceptable reference point errors" ([480], page 196). Could it be that Libby had been certain that the readers will not be interested in the details of Anderson's table? Libby also says that their "conclusions may have proved wrong if the measurement errors of all kinds – those of cosmic ray intensity, mixing rate and ocean depths, had been in correlation. However, since this is not the case, we reckon that large error rates are improbable" ([480], page 193).

We are not quite certain as to what kind of improbability is being talked about here, since the cosmic ray intensiveness, mixing speed, and other physical values affecting the initial radiocarbon content in a specimen for the moment of its departure from the exchange reservoir are *far from being random – all of these values had all equalled something at a given point in time.* If we do not know these values and have to make a choice from some interval of possible values, *the radiocarbon dating error shall equal the sum (!) of all the errors that have been made in the estimation of the source data for the specimen.*

Libby writes that "despite the *great differences* between the cosmic ray intensiveness values at different geographical latitudes (they are a lot higher in the northern and southern latitudes than they are around the equator), *one has to expect* (? – A. F.) the radioactive carbon propagation rate to be *homogenous* for the entire planet" ([478], page 23). The effect mentioned may nevertheless result in "extra age" gathered by specimens in Egypt, for example.

Libby proceeds to tell us the following:

"The coincidence of the age of the core and the entire tree shows that the sap from the core of gigantic sequoias is not chemically balanced in comparison to the fibre and other molecules of the tree. In other words, the carbon in the central part of the tree had been stored there about 3000 years ago, although the actual tree had only been cut down several decades ago" ([480], page 195).

However, three years after this, the radioactivity of tree rings had been researched by Süss, who had found the discrepancies between the radiocarbon datings and the dendrochronological ones. Did he make the conclusion that Libby's initial hypothesis was wrong? He did not. Süss made the claim that the radiocarbon content in the ancient times had been higher than it is today instead. What we see is a vicious circle.

L. S. Klein gives a similar example in [391]. First Libby proves the veracity of the radiocarbon method using the historical chronology of the "ancient" Egypt; however, when control measurements showed deviations, Libby immediately questioned the Egyptian chronology concerning these particular specimens ([391], page 104). Similarly, Libby had used dendrochronology in support of the radiocarbon method, explaining arising deviations by the fact that several tree-rings may be formed in a year. However, Libby is far from being the only one to demonstrate the lack of logic where its presence is undesired.

In the article by Kolchin and Sher ([414]) we read that "the dates calculated in assumption of the constancy of atmospheric C^{14} content from the ancient times to our age need to be revised. Does this mean they aren't true? The following analogy appears congruent…" ([414], page 6). The authors proceed to tell us how the distance between the Earth and the Moon had been calculated in several stages, each time with a greater precision. The same allegedly applies to the radiocarbon method where gradual corrections make the calculations more precise as time goes by. This may well be so in theory. However, we read in the very same article that "the half-life period for C^{14} is 5570 years, with the possible deviation range of 30 years in each direction…" (page 4), and that "the half-life period for C^{14} is set (!? – A. F.) at 5730 years, give or take 40". 160 years – that's some correction!

M. J. Aitken writes that "an important characteristic of all these methods is their output, that is, the carbon content in the original volume that is transformed into gas. It would be expedient to have an output of 100% in order to eliminate all possibility of C^{14} turning into gas more readily than C^{12}, or the

other way round" ([986], page 168). We also learn that "the shortcoming of the synthesis of the latter is that only 10% of the carbon is transformed into benzol; this increases the possibility of an error resulting from isotope separation" ([986], page 17. The author appears to have full awareness of the necessity of considering the isotope separation effect in all chemical reactions. However, in 6.3, while discussing the issues of a specimen's suitability for measurements, M. J. Aitken writes that "charcoal and wood in good condition are considered the best specimens: their taking part in exchange is improbable (? – A. F.), and the only possible kind of decomposition results from the production of carbon oxide or dioxide. However, this process *isn't relevant to us*, since it only concerns the *carbon lost by an object*" ([986], page 149). What about isotope separation? The radiocarbon content in a specimen may change as a result of decomposition!

Such careless attitude of specialists to the effects that may greatly affect the research results remains enigmatic for us. We have listed some of these effects in the general list. Some of them may really be difficult to evaluate currently. *However, a number of effects reflected in literature may be quantitatively assessed after a series of experiments. No careful activity reports of either living or dead specimens have been made for any of the below:*

1) latitude;

2) longitude;

3) proximity to certain geological and geographical formation on dry land and in the ocean;

4) altitude above the sea level;

5) climate etc.

Without such analysis, the self-righteous claims of the alleged independence of specimen activity from their locations and other characteristics are altogether impossible to understand.

Therefore, we have to concede the following:

1) The radiocarbon method in its current condition has deviation rate of 1000-2000 years for the specimens whose age is estimated as being under 1000 years. This means there's not much to be learn about the events of the last two millennia from this method.

2) The radiocarbon method needs a fresh graduation that would not be based on the Scaligerian chronology at the very least.

3) Other physical dating methods are even less precise, ergo, they can tell us nothing of the dating of objects younger than 2000 years.

4) The actual archaeological methods that aren't based on documented chronology can give no absolute dates; these methods can only aid the estimation of relative chronology of some findings in a limited number of cases.

5) The Scaligerian chronology implicitly or explicitly affected the graduations of scales used for archaeological methods and even physical methods, including the radiocarbon one. This also questions the usability of the method in its current shape for the dating of historical objects.

6) According to a number of archaeologists (see above), the unacceptable practice of familiarizing the physical laboratories that perform radiocarbon datings with the opinions of the archaeologists about the estimated ages of findings still exists.

18.
NUMISMATIC DATING

It is assumed that in some cases certain archaeological findings can be dated by the ancient coinage found on the site. However, one should be aware that the so-called numismatic dating as used today *is wholly dependent on the Scaligerian chronology.* This chronology was created in the XVI-XVII century, and all the kings and rulers described in chronicles and other documents took their chronological places. Then the ancient coins were distributed along the temporal axis – for instance, coins bearing the legend "Nero" were dated as the I Scaligerian century A.D., the ones saying "Justinian," as the VI Scaligerian century A.D., etc., since those were the centuries in which Scaliger's chronology placed the Roman emperors Nero and Justinian.

After that, all of the coins found in the XVIII-XX century have either been dated by the same "method," or compared to the ones that have already received datings, and placed on the temporal axis accordingly.

It is perfectly obvious that any alteration of the Scaligerian chronology that this "method" is based upon shall automatically alter the "numismatic datings" as well. Furthermore, an independent comparison of different coins that isn't based on external chronological considerations, *cannot even tell us any-*

thing about the relative chronology of the coins compared, let alone their absolute chronology. Comparing actual coins as metallic objects bearing graphical designs of some sort cannot give us exact knowledge of which coin is older and which is newer. Analyzing the metal of the actual coin can point at its *geographical point of origin* in some cases. However, the calculation of the *date* – absolute or relative – sadly remains an impossibility. Maybe the development of a method that would allow for the determination of a more or less absolute metal alloy that the coin is made of is possible in time. However, as far as we know, no such method has yet been developed. This opens a great many opportunities for physicists, chemists and metallurgists.

The historians write that "numismatics as a science is a *relatively recent phenomenon.* The transition period between the collection of coins to scientific methods of their study… can be estimated to fall into the very end of the XVIII century" ([345], pages 13-14). We shall thus repeat that all of the numismatics are based on the Scaligerian chronology that was built on written sources, and can in no way be considered an independent dating method.

As a result, we encounter many oddities nowadays when we compare "ancient" coins with the mediaeval ones. An abnormally large number of parallels and even direct coincidences appear between the "ancient" and the mediaeval – sometimes even late mediaeval – coinage. These parallels have been known for a long time, and their number keeps on growing. Historians try to explain them by elaborate and nebulous theories of "imitation", "copying," etc. The English Edwardian pennies allegedly dated 1042-1066 A.D. *copy* the Constantinople solidi of Justin II dated 565-578 A.D. in the Scaligerian chronology ([1163], page 449). The chronological difference between the "original" and the "copy" exceeds 450 years here! No such cases of "copying" coins from 450-year-old "originals" have been registered in either late mediaeval or newer history.

The coinage history has allegedly seen an "ancient dawn," then the Dark Ages are supposed to have come, and later on the Renaissance epoch. It is assumed that starting with the VIII century A.D. and until the XIII century, nearly all Roman golden coinage disappears from Italy ([1070]). This strange effect is noticeable

enough to have entered the names of chapters of certain monographs on history and numismatics, such as "The End of Roman Coinage (V century)," or "Imitation epoch (VI century)" ([1164]), or "The Lack of Gold Coinage" ([64], page 151).

Let us pay close attention to the following information provided by numismatist historians. It turns out that in the Middle Ages "the West of Europe did not try to compete with Byzantium and the Muslims in this respect [coin minting – A. F.]. The idea of having regular gold coinage had been given up, and most mints produced silver coins" ([1070], page 20; [1435]). It is also said that "regular golden coinage had *practically ceased* in VIII-century Western Europe, and towards the end of the same century on the Italian peninsula as well. Even in Muslim Spain *no golden coinage had been minted* between the beginning of the VIII century and the beginning of the X" ([1070], page 20).

Numismatists attempt to give some sort of explanation to this mysterious "mediaeval gap" in coinage history. It is suggested that "gold coinage had been ceased by an order issued by Pepin". The council at Reims allegedly forbade the use of the golden solidi of imperial Rome, and the type of coinage used allegedly "became barbaric" in the VIII century ([64], page 151).

Doesn't this imply that the "ancient" Western European coinage is really mediaeval and minted after the XIV century A.D., cast way back in time by the Scaligerian chronology?

Historians proceed to tell us that "there are *no Papal coins* from the time of Benedict VII (who died in the alleged year 984 A.D. – A. F.) to that of Leo IX [allegedly the middle of the XI century – A. F.] *in existence*; this is purely incidental, since the coinage must have existed, naturally… There is only one coin from the times of Leo IX… Even stranger is the fact that not a single coin remained from the times of Gregory VII" ([196], Volume 4, page 74, comment 41).

Where did all these mediaeval coins go? Let us formulate a hypothesis. All of these coins have been misdated, and been thrown back into the past, having been "transformed into ancient coins" as a result. Some of them are exhibited in museums as "very old ones" nowadays.

Apparently, the naissance of golden and silver

coinage in Western Europe really began in the XIII century A.D. at the earliest. Confronted by the non-existence of mediaeval Western European coins pre-dating the XIII century A.D., the numismatists have had to invent various theories for explaining the eco-nomical stagnation of Europe that allegedly followed the "flourishing Classical age". The strange "stagna-tion" in Roman minting between the VIII and XIII century A.D. is all the more amazing since it follows a very fruitful and glorious period of Roman coinage of the alleged I-VI century A.D. Golden coins of this "ancient" empire are on a par with the mediaeval ones dated as XIII-XVII century in quality and detail. This oddity is most probably explained by the mis-dating of the XIII-XVII century coins that have been moved a long way into the past.

Let us point out another strange effect. According to the historians, the coin caches of the X-XIII cen-tury found in the territory of Russia *hardly contain any* Italian, French, or Spanish coins of X-XIII cen-tury A.D. ([685]). Only *single Italian coins* (!) of the X-XIII century have been found among the tens of thousands of coins belonging to that period. His-torians have created a theory that is supposed to ex-plain this strange occurrence – namely, that there have been no economical or trade connexions be-tween Russia and Italy in the X-XIII century ([685], pages 200-211). This "numismatic theory" contra-dicts written sources explicitly mentioning extensive

trade and economical relations ([685], page 201). The historian's commentary is that "the contradictions between the numismatic and other data is purely il-lusionary" ([685], page 201). However, no explana-tions of any kind are given. We shall formulate the fol-lowing supposition: Western Europe and Italy in par-ticular really minted a very small number of gold coins before the XIII century, which is why they aren't found in treasure caches in the territory of Russia.

However, in 1252 A.D. full-scale golden coinage is allegedly "resurrected" in Rome all of a sudden, which becomes international currency over a very short pe-riod of time, chasing the Byzantine coinage off the market ([1070]). This sudden appearance of Italian gold coinage in the XIII century is considered to be "a dramatic change of the situation prevailing for the first half of the mediaeval period" ([1070], pages 20-21). However, most probably, no such dramatic oc-currences really took place. What we appear to witness here is more likely the real naissance of European coinage in the XIII-XIV century as a result of serious changes that happened in the life of Western Europe. See more about the nature of these changes in CHRON5.

The concept of uniform mass coinage is extremely close to that of printing engravings and books. Thus, qualified coin minting shouldn't predate the birth of book-printing by too long, and that event is dated as the XV century nowadays ([797], page 352).

CHAPTER 2

Astronomical datings

1.
THE STRANGE LEAP OF PARAMETER *D″* IN THE THEORY OF LUNAR MOTION

Nowadays we have special calculation tables – the so-called canons – whose compilation was based on the theory of lunar motion ([534]). They contain the date of each eclipse, the area to be covered by the lunar shadow, the phase, etc. See the well-known astronomical canon by Ginzel, for instance ([1154]). If an ancient text describes some eclipse in enough detail, we can determine what characteristics of the eclipse had been observed – the phase, the geographical area that the shadow passes over, etc. The comparison of these characteristics to the referential ones contained in the tables may give a concurrence with an eclipse possessing similar characteristics. If this proves a success, we can date the eclipse. However, it may turn out that several eclipses from the astronomical canon fit the description; in this case the dating is an uncertain one. All the eclipses described in the "ancient" and mediaeval sources have been dated by the following method to some extent at least ([1154], [1155], [1156], [1315], [1316], [1317], etc.).

Nowadays the datings of the "ancient" eclipses are occasionally used in astronomical research. For instance, the theory of lunar motion has the notion of the so-called parameter *D″* – the second derivative of lunar elongation that characterizes acceleration. Let us remind the reader of the definition of elongation.

Fig. 2.1 shows the solar orbit of the Earth and the telluric orbit of the moon. The angle between the vectors *ES* and *EM* is called lunar elongation *D* – the angle between the lines of sight drawn from the Earth to the Sun and the moon. Apparently, it is time-dependent. An example of the elongation of Venus can be seen in the picture on the right. Maximal elongation is the angle where the line of sight as drawn from Earth to Venus (*E′V′*) touches the orbit of Venus. One has to note that the orbits in fig. 2.1 are shown as circular, while being elliptic in reality – however, since the eccentricity is low here, the ellipses are schematically drawn as circles.

Some computational problems related to astronomy require the knowledge of lunar acceleration as it had been in the past. The problem of calculating
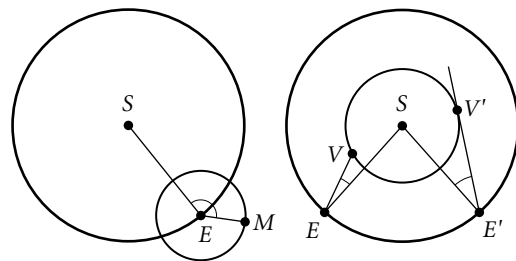

Fig. 2.1. Lunar elongation is the angle between the vectors *ES* and *EM*. The elongation of Venus is the angle between *ES* and *EV*. The maximal elongation of Venus is the angle between *E′S* and *E′V′*.
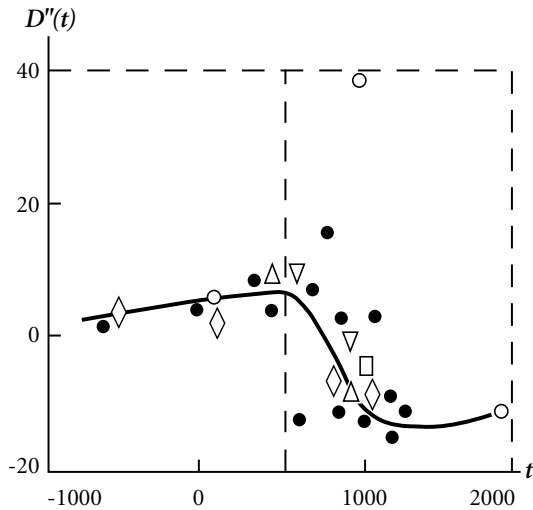
Fig. 2.2. The D'' graph calculated by Robert Newton. Parameter D'' performs a sudden leap on the interval of the alleged VI-XI centuries A.D. Taken from [1303] and [1304].

D'' over a large time interval as a time function was discussed by the Royal Society of London and the British Academy of Sciences in 1972 ([1453]). The calculation of the parameter D'' was based on the following scheme: the equation parameters of lunar motion, including D'', are taken with their modern values and are then varied in such a way that the theoretically calculated characteristics of ancient eclipses should coincide with the ones given for dated eclipses in the ancient documents. Parameter D'' is ignored for the calculation of actual eclipse dates, since the latter are a rougher parameter whose calculation does not require the exact knowledge of lunar acceleration. Alterations in lunar acceleration affect secondary characteristics of the eclipse, such as the shadow track left by the moon on the surface of the Earth, which may be moved sideways a little.

The time dependence of D'' was first calculated by the eminent American astronomer Robert Newton ([1303]). According to him, parameter D'' can be "defined well by the large amount of information containing dates scattered over the interval from 700 B.C. until the present day" ([1304], page 113). Newton calculated 12 possible values of the parameter D'', having based them on 370 "ancient" eclipse descriptions. Since R. Newton had trusted the Scaligerian

chronology completely, it is little wonder that he took the eclipse dates from the Scaligerian chronological tables. The results of R. Newton combined with the results obtained by Martin, who processed about 2000 telescopic observations of the moon from the period 1627-1860 (26 values altogether) have made it possible to draw an experimental time dependency curve for D'', q.v. fig. 2.2.

According to R. Newton, "the most *stunning* fact… is the drastic drop in D″ that begins with 700 [A.D. – A. F.] and continues until about 1300… This drop implies the existence of a "square wave" in the osculating value of D''… Such changes in the behaviour of D'', and such rates of these changes, *cannot be explained* by modern geophysical theories" ([1304], page 114; [1453]). Robert Newton wrote an entire monograph titled ***Astronomical Evidence Concerning Non-Gravitational Forces In The Earth-Moon System*** ([1303]) that was concerned with trying to prove this mysterious gap in the behaviour of D'', which manifested as a leap by an entire numeric order. One has to note that these mysterious non-gravitational forces *failed to manifest in any other way at all*.

Having studied the graph that was drawn as a result of these calculations, R. Newton had to mark that "between the years (-700) and (+500), the value of D'' had been the lowest as compared to the ones that have been observed for any other moment during the last 1000 years" ([1304], page 114).

Newton proceeds to tell us that "these estimations combined with modern data tell one that D'' may possess *amazingly large values,* and that it has been subject to *drastic and sudden fluctuations* over the last 2000 years, *to such an extent that its value became inverted around 800 A.D.*" ([1453], page 115).

SUMMARY:

1) The D'' value *drops suddenly,* and this leap by an entire order begins in the alleged V century A.D.;

2) Beginning with the XI century and on, the values of the parameter D'' become more or less constant and close to its modern value;

3) In the interval between the alleged V and XI centuries A.D. one finds D'' values to be in complete disarray.

This strange fact has a natural explanation within the paradigm of the New Chronology.

2.
ARE THE "ANCIENT" AND MEDIAEVAL ECLIPSES DATED CORRECTLY?

2.1. Some astronomical data

Let us give a brief digest of the information that shall provide for a better understanding of the current chapter. More detail can be found in such sources as [534], for instance.

When the moon gets into the cone of telluric shadow, one can observe a *lunar* eclipse on Earth – more specifically, on its nocturnal hemisphere, the one that faces the moon. A lunar eclipse can be observed from any point of the Earth's nocturnal hemisphere. An eclipse doesn't last longer than three hours and is only possible during a full moon; however, due to the irregularity of the movement of the moon, it doesn't happen every time the moon is full. The repetition of lunar eclipses is roughly and approximately periodic, and conforms to the so-called *Saros cycle.* A Saros period equals about 18 years. 28 lunar eclipses occur over this time, so one can find an eclipse practically every given year. A Saros is easily determined over 50-60 years of systematic observation, and might have already been known at the dawn of astronomy. The prediction of lunar eclipses based on the Saros cycle is nevertheless somewhat uncertain, not only due to the imprecision of the Saros cycle, but also because of the fact that the eclipse might occur when the hemisphere where the observer is located is illuminated by sunlight, which renders the moon invisible.

A *solar* eclipse occurs when the observer gets into the cone of the lunar shadow. If the solar disc is completely covered by the moon, the place where the eclipse can be observed becomes darkened to the extent of one being able to see the stars. This is a full eclipse whose duration does not exceed 8 minutes in the equatorial zone, and 6 in moderate latitudes. The lunar shadow moves across the surface of the Earth at the speed of about 110 meters per second, forming a narrow line. The width of this line does not exceed 4 degrees. The track of the umbral shadow is bordered by stripes of penumbral shadow, whose width as counted from the centre of the umbral shadow comprises about 30 degrees in moderate latitudes and about 15 degrees near the equator. The observer in the penumbral shadow only sees a partial covering of the solar disc by the moon: a partial eclipse. The maximal degree of the covering of the solar disc by the lunar shadow is called the depth, or the phase of the eclipse. The estimations of the phase are usually expressed by the b value that is calculated by the formula $b=12h,$ with h being the ratio between the shadow-covered part of the solar diameter and the entirety of the latter. Hence, a total eclipse of the Sun will have a phase value of 12. A solar eclipse becomes visible as a darkening of the solar disc starting with the phase values of 3"-4"'.

The lunar eclipse phases are calculated differently – namely, another item that is proportional to the duration of the eclipse if the latter is more than full is added to the phase value of 12". Thus, the phase value of a lunar eclipse might reach up to 22.7".

In cases of *solar* eclipses there may arise situations when the cone of the moon's umbral shadow does not reach the Earth. In this case, an annular solar eclipse is possible, when the stars are not visible, as is the case with all partial solar eclipses. A solar eclipse is only possible when the moon is new; however, not every new moon is marked by a solar eclipse, since the Earth may slip past the cone of the lunar shadow due to the incline of the lunar orbit towards the ecliptic (or the plane of the telluric orbit). This is why there are only 2-7 solar eclipses happening every year. Every geographical area of the Earth gets an eclipse with a minimal phase value of 6" in the span of 10-20 years from any date.

Predicting solar eclipses is a truly formidable task due to the complexity of the lunar movement that is defined by a large number of external factors. One may attempt to predict solar eclipses by the Saros cycle that includes about 43 solar eclipses – 15 of them being partial, 14 annular, 2 belonging to the category of the so-called "total-annular," and 12 total. However, the eclipses from the Saros cycle can occur in different areas of the Earth, and so a prediction for a given location is true in one case out of 400 in general. That is to say, the probability of a correct prediction based on the Saros cycle equals 1/400 ([544], Volume 4, page 415). In theory, the so-called triple Saros, whose duration is 24 years, should be more precise; however, the probability that it may give a correct prediction equals about 1/99, so it is of little prac-

tical utility. From the astronomical point of view, the empirical triple Saros can only be discovered as a result of long-time solar eclipse observations. Due to the low recurrence rate of the eclipses separated by the triple Saros, let alone the problems of mathematical processing of the empirical data necessary for the calculation of an undefined recurrence rate, any such discovery would imply a well-developed system of natural sciences.

A more or less certain prediction of solar eclipses is apparently only made possible by the existence of a sufficiently advanced theory of lunar motion that would at least account for the principal irregularities of the latter. Thus, the prediction of solar eclipses remained a de facto impossibility a hundred years after Copernicus. We should thus treat the eclipse prediction reports preceding the XVI-XVII centuries with the utmost caution, or even suspicion.

2.2. The discovery of an interesting effect: an unprejudiced astronomical dating shifts the dates of the "ancient" eclipses to the Middle Ages

Dealing with certain celestial mechanics issues in the 1970s, the author of the current book discovered the possibility of a link between the alleged gap in the value of D'' (see [1303]) and the results of N. A. Morozov's research concerning the datings of ancient eclipses ([544]). A study of the issue and a new calculation of the parameter D'' attains an *altogether different quality;* namely, one sees the *complete elimination* of the mysterious leap. The parameter D'' appears to be subject to minute fluctuations around one permanent value coinciding with that of the same parameter used nowadays (q.v. in A.T. Fomenko's articles [1128], [883]). All of this can be summed up as follows.

The previous calculation of the parameter D'' had been based on the dates of ancient eclipses used in the consensual chronology of Scaliger-Petavius. All the astronomers' attempts to explain the strange gap in D'' didn't get anywhere near the issue of the correctness of datings considered "ancient" and early mediaeval nowadays – in other words, in how far the parameters of the eclipse described in the chronicle do correspond with the calculated parameters of the real

eclipse that the Scaligerian chronology suggests to be described in the chronicle in question.

The following method of independent astronomical dating has been proposed in [544]: obtaining all of the characteristics described in the chronicle, such as the phase, the time, geographical observation location, etc., and copying all of the eclipse dates fitting these characteristics from the reference tables mechanically. N. A. Morozov discovered that the astronomers have been under the pressure of Scaliger's chronology, and so only considered the dates that Scaliger's chronology had already ascribed to the eclipse in question and the events related to it ([544]).

As a result, in many cases the astronomers failed to find an eclipse corresponding to the chronicle description in the required century, and had to resort to approximations, without the merest thought of questioning the Scaligerian chronology indicating an eclipse that would fit the chronicle description partially. Having revised the datings of the eclipses considered "ancient," Morozov found that the reports of these events fall into two categories:

1) Brief and nebulous accounts with no details given. In many cases it is altogether unclear whether the event described is an eclipse at all. The astronomical dating in this category either has no meaning whatsoever, or gives so many possible solutions that they can basically fit any historical epoch at all.

2) Exhaustive, detailed reports. The astronomical solution for those is often singular, or there are two or three solutions at most.

Apparently, all of the eclipses with detailed descriptions belonging to the period between 1000 B.C. and 500 A.D. get independent astronomical datings that differ significantly from the ones offered by the Scaligerian chronology and belong to a much latter epoch, namely, the interval between 500 and 1700 A.D. Being of the opinion that the Scaligerian chronology had been correct about the interval 500-1800 A.D. for the most part, Morozov did not analyze the mediaeval eclipses of the years 500-1700 A.D., assuming that no contradictions would be found there. Let us dwell on this for a short while.

Morozov hadn't possessed the sheer deliberation needed for the realization that the Scaligerian chronology had been erroneous up until the epoch of the XI-XIII century A.D. He had stopped with the VI century

A.D., assuming more recent chronology to be correct in the form offered by Scaliger and Petavius. His erroneous presupposition naturally affected the analysis of "ancient" eclipses. We see today that Morozov's analysis was not completely objective, since he had obviously been reluctant to alter the post-VI century chronology. This isn't hard to understand, as the transition from the artificially extended Scaligerian chronology spanning millennia to the one beginning with the XI century A.D. looked absurd even to N. A. Morozov.

In Volume 4 of [544], for instance (in Section 4, Part II, Chapter 2), Morozov discusses one of the eclipses that is today ascribed to the V century A.D., being of the opinion that its Scaligerian dating is confirmed. However, this discourse clearly shows that no confirmation of the Scaligerian chronology could have possibly taken place. The description of the eclipse is quite nebulous, and the use of comets for dating purposes is impossible due to reasons that shall be related in the chapter of CHRON5 where we shall consider comet lists specifically. Being certain that Scaliger's history was following the correct chronology ever since the V century A.D., Morozov was inconsistent in his analysis of post-V century eclipses. Had he encountered an equally nebulous description referring to a *pre-IV century* eclipse, he would have justly considered it a description that cannot be proved astronomically.

Morozov made a similar mistake in his descriptions of other eclipses dated nowadays to the alleged V-VI century A.D. He treated them a lot more benevolently than their pre-IV century precursors. The eclipses of the VI-XI century weren't checked by Morozov at all, since he had thought the Scaligerian datings to have been satisfactory. Unlike Morozov, we have continued with the critical research, having covered the post-V century period up until the XVII century A.D., and discovered that Morozov should not have stopped with the IV-V centuries. The datings of the eclipse descriptions that are ascribed nowadays to the X-XIII centuries A.D. contradict astronomy to just as great an extent as those preceding the IV century A.D. In those cases where there's a concurrence of sorts, one almost always finds traces of the fact that these eclipses have been *calculated a posteriori*, that is, affixed to a certain point in the past by the mediaeval chronologers of the XVI-XVII centuries

in order to confirm Scaliger's chronology, whose naissance occurred around that time. Having calculated the dates for certain lunar eclipses of the past, the Scaligerite chronologers included them in the "ancient" chronicles that they were creating in order to give "solid proof" to the false chronology. It is of course possible that the odd occasional veracious description of the VI-XIII century eclipses would reach the chronologists of the XVI-XVII centuries every now and then. However, it would surely have to pass the filter of the Scaligerian version and "brought into accordance" with the "correct" dates.

Thus, continuing the research that began in [544], the author of this book conducted an analysis of other mediaeval eclipses in the interval between 400 and 1600 A.D. It turned out that the "transfer effect" affecting the "ancient" eclipses as described in [544] also applies to those usually dated to 400-900 A.D. This either means that there are many possible astronomical solutions, which make the dating uncertain, or there are just one or two, in which case they all fall in the interval between 900 and 1700 A.D. Only starting with approximately 1000 A.D. – and not 400 A.D., according to Morozov in [544] – does the Scaligerian dating begin to concur with the results of Morozov's method satisfactorily enough, becoming more or less certain by as late a date as 1300 A.D.

Let us give a few extremely representative examples demonstrating the transfer forwards in time of eclipses and related chronicles considered "ancient."

2.3. Three eclipses described by the "ancient" Thucydides

The Scaligerian history tries to convince us that Thucydides was born in approximately 460 B.C., or 456-451 B.C., and died around 396 B.C. ([924], page 405). He was a wealthy aristocrat and politician from Athens. During the Peloponnesus war Thucydides had been in command of the Athenian fleet, albeit unsuccessfully. He had then been banished from Athens for 20 years. He had written his famous tractate during his sojourn in Thracia. Thucydides had received amnesty near the end of the war; he returned to Athens and died shortly afterwards.

Historical tradition trusts Thucydides in his descriptions of military events, considering him an eye-

witness and a participant. Thucydides himself writes the following: "I was writing down the events witnessed by myself as well as what I had heard from others, after as meticulous a study of each fact as circumstances allowed… I have survived the entire war… understood it, and studied it attentively" ([923], V:26).

Thucydides is the only source that we have in what concerns the history of the Peloponnesus War. Historians write that "after Thucydides… nobody turned to the history of the Peloponnesus war ever again. Many have however thought it would prove flattering for them to be seen as his followers, and started their own works where the tractate of Thucydides ended" ([961], page 171). It is supposed that the work of Thucydides either hadn't had any title at all originally ([924], page 412), or had been called *Communal Account* in Greek, but received the name *History of the Peloponnesus War* in later translations. The entire account of the history of the 27-year war between the Ionians and the Dorians (could Doria mean "Horde" when read in reverse?) is given by Thucydides clearly and consequentially, though it remains incomplete.

The entire work of Thucydides, whose volume comprises about 800 pages when printed ([923]), is written in a brilliant style. Numerous commentators have pointed out the following hallmarks of his book a long time ago:

1) Thucydides demonstrates great erudition and writing experience;

2) The phrase constructions are complex and contain non-trivial grammatical structures;

3) One sees a clear development of an elegant realistic concept in the account of historical facts;

4) The author is sceptical about everything supernatural in people's lives.

We are being convinced that this work is a creation of the V century B.C. when writing materials had been scarce and expensive – the Mesopotamians use styluses to scribble on clay, the Greeks aren't familiar with paper yet, and write on pieces of tree bark or use sticks for writing on wax-covered plaques.

The oldest written copy of the *History* of Thucydides is supposed to be the *Codex Laurentinianus* parchment dated as the alleged X century ([924], page 403). All other old manuscripts belong to the alleged XI-XII centuries ([924], page 403). Some papyrus fragments of the second book by Thucydides were found

in Egypt in the XIX century. A papyrus commentary is also in existence, published as late as 1908. However, the condition of these fragments is very poor indeed ([544], Volume 4, page 495). Let us note straight away that the datings of all the "oldest" manuscripts listed are based on palaeographical hypotheses exclusively, and therefore don't seem very trustworthy. Any alteration of the chronology changes all of these "palaeographical datings" automatically.

There are no calendar dates mentioned in the *History* by Thucydides, and no planetary horoscopes. However, it contains the descriptions of three eclipses – two solar ones, and one eclipse of the moon. We shall be referring to this combination as a triad. Apart from that, the first book (I:23) contains mentions of solar eclipses – however, those are rather general and vague, and cannot serve for an astronomical dating. The descriptions of the triad, however, are quite sufficient for an unequivocal solution. We shall be considering it below.

The second volume of the *History* contains a rather detailed description of the eclipse. (The Russian original refers to the well-known professional Russian translation of Thucydides done by F. G. Mishchenko in the XIX century [923].) Thucydides writes that "the summer that the Athenians have chased the Aeginians with their wives and children from Aegina [Thucydides is referring to the first year of the war – A. F.]… The very same summer, when the moon was new – apparently, that is the only time when such things can happen – *the sun became darkened after midday and became full again, having attained the shape of a crescent, and several stars appeared*" ([923], II:27-28). The Greek text can be seen in fig. 2.3.

Let us pay attention to the fact that the author appears to understand the mechanism of the eclipse well, mentioning the new moon to be a sine qua non, which is a reference to a long-time practise of eclipse observation in the epoch of Thucydides.

Τοῦ δ' αὐτοῦ θέρους νουμηνίᾳ κατὰ σελήνην . . . .
ὁ ἥλιος ἐξέλιπε μετὰ μεσημβρίαν καὶ πάλιν ἀνεπληρώθη
γενόμενος μηνοειδὴς καὶ ἀστέρων τινῶν ἐκφανέντων.

Fig. 2.3. The Greek text of Thucydides describing the first eclipse from the "Thucydides triad" – a solar eclipse. Taken from [1154], page 176.

τοῦ δ' ἐπιγιγνομένου θέρους εὐθὺς τοῦ τε ἡλίου ἐκλιπές τι ἐγένετο περὶ νουμηνίαν . . . . .

Fig. 2.4. The Greek text of Thucydides describing the second eclipse from the "Thucydides triad" – a solar eclipse. Taken from [1154], page 178.

μελλόντων αὐτῶν . . . ἀποπλεῖν ἡ σελήνη ἐκλείπει· ἐτύγχανε γὰρ πανσέληνος οὖσα.

Fig. 2.5. The Greek text of Thucydides describing the third eclipse from the "Thucydides triad" – a lunar eclipse. Taken from [1154], page 178.

The second eclipse of the triad, also a solar one, happens in the *eighth* year of the Peloponnesus war, in the beginning of the summer. Thucydides writes in the fourth volume that "the winter had ended, and with it – the seventh year of this war whose history has been described by Thucydides. *In the beginning of the next summer, with the advent of the new moon, a partial solar eclipse had occurred*" ([923], IV:51-52). The text in Greek can be seen in fig. 2.4. Apparently, the summer month mentioned as the month when the aestival campaign began had been March, the month of Mars when military campaigns were usually started. It shall be interesting to verify this statement *after* the finite solution of the problem is obtained.

The third (lunar) eclipse is described in the seventh volume: "The winter was coming to an end together with the eighteenth year of the war whose history has been described by Thucydides. As soon as the next spring began, the Lacedaemonians and their allies invaded Attica, in the earliest season" ([923], VII:18-19). The events of the summer are related in detail further on. The analysis of the manoeuvres described shows that the next sections (50 and 51) most probably refer to the *end of summer.* This is where Thucydides writes that "when everything was ready, and the Athenians were preparing to sail away, *a lunar eclipse occurred; it had been full moon then*" ([923], VII:50). See Greek text in fig. 2.5.

Let us sum up. The following information can be obtained from the text by Thucydides with absolute certainty:

1) All three eclipses were observed from the square fitting into the following geographical coordinates: longitude between 15 and 30 degrees, latitude between 30 and 42 degrees;

2) The first eclipse is solar;

3) The second eclipse is solar;

4) The third eclipse is lunar;

5) The time interval between the first two eclipses equals 7 years;

6) The interval between the second eclipse and the third equals 11 years;

7) The first eclipse occurs in the summer;

8) The first solar eclipse is a full one, since one can see the stars – that is, its phase value equals 12. Remember, one cannot see the stars during a partial eclipse;

9) The first solar eclipse occurs after midday, local time;

10) The second solar eclipse occurs in the beginning of summer;

11) The lunar eclipse takes place around the end of summer;

12) The second solar eclipse occurred within the temporal vicinity of March. As a matter of fact, this consideration doesn't have to be included in this list.

The problem can be formulated as follows: finding the astronomical solution that would satisfy the requirements 1-11.

The historians and chronologists have naturally paid attention to such a precise description of three eclipses in an "ancient" work, and tried to date them accordingly. Apparently, the chronologists immediately ran into serious difficulties that haven't been overcome since. We shall proceed to give a more detailed account of the problem of dating the triad of Thucydides, following the well-known astronomical work of Ginzel ([1154], pages 176-177).

In the XVI century the chronologer Dionysius Petavius found the date that fitted the first eclipse: 3 August, 431 B.C. Johannes Kepler later confirmed the fact that there had indeed been an eclipse that day. The beginning of the Peloponnesus war was dated with the very same year, 431 B.C.

Petavius found the date for the second eclipse as well, which was 21 March, 424 B.C. I. Kepler also confirmed the fact that a solar eclipse took place that day.

The date that D. Petavius found for the third eclipse was 27 August, 413 B.C.

This is how astronomy seems to have dated the

events described by Thucydides to the V century B.C. However, a secondary analysis of the "astronomical solution" offered by Petavius unearthed serious complications that have been repeatedly discussed in astronomical and chronological literature in the XVIII-XX centuries. These rather heated debates have recurred and abated several times; however, modern historians prefer to remain taciturn in everything that concerns this long and difficult discussion, pretending that the problem doesn't exist and has never existed.

The main dating problems that the chronologers ran into concerned the first eclipse. The fact of the matter is that the eclipse of 3 August in 431 B.C. *proved an annular one, and so it couldn't have been total anywhere on Earth.* This was realized after the inclusion of the Scaligerian "astronomical dating" of the beginning of the Peloponnesus war into Scaliger's chronological tables. This eclipse is claimed to have been annular by Ginzel's canon as well ([1154], page 176). The fact that the eclipse in question was an annular one can also be proved by the existing computer software for eclipse calculations. We have verified it using a simple programme called Turbo-Sky that was created by the Muscovite astronomer A. Volynkin in 1995, which is easy to use and convenient for approximate calculations. The eclipse of 3 August that occurred in 431 B.C. was in fact an annular one.

However, Thucydides tells us explicitly that stars were visible during the eclipse. As we have already stated, one cannot observe the stars during a partial eclipse. Furthermore, it turned out that the phase value of the "Petavius eclipse" of 431 B.C. had been a rather small one in Athens, which means that Kepler had also made a mistake in his *Optics* telling that the phase value of this eclipse had equalled twelve, or, in other words, that the eclipse had been a full one. Such a statement on the part of Kepler is most probably explained by the imperfection of the eclipse calculation methods of his age. The calculation of the phase of an eclipse is a delicate matter. However, we should not exclude the possibility that Kepler, who had been involved in many chronological matters, had been perfectly aware of the fact that one can only see the stars during a total eclipse, and slyly transformed the annular eclipse of 431 B.C. into a full one in order to make it satisfy the description given by Thucydides

Fig. 2.6. The erroneous astronomical "solution" for the "Thucydides triad" of eclipses as offered by D. Petavius. The track of the lunar shadow for the first annular solar eclipse of 431 B.C. is represented by a dotted line. The track for the second solar eclipse of 424 B.C. is represented by a solid line, with the large dot standing for the zenith point of the lunar eclipse of 413 B.C. Taken from [544], Volume 4, page 505.

and protect the edifice of the nascent Scaligerian chronology from such an unpleasant dissonance. Kepler had been in constant contact with Scaliger, who had been his correspondent.

Due to the abovementioned circumstances, the astronomers and the chronologists began re-calculating the phase of the eclipse of 431 B.C. All sorts of empirical corrections were made in the equations of lunar movement in order to make the phase value of the

eclipse as observed from Athens and neighbouring areas approach 12. Amongst the most prominent astronomers of the time that have dealt with the "Thucydides triad problem" have been such names as Petavius, Zech, Heis, Struyck, Kepler, Riccioli, Hofman, Ginzel, Johnson, Lynn, Stockwell and Seyffarth.

According to Petavius, the phase value of the eclipse equalled 10"25 ([1337], page 792). The phase value equalled 11" according to Struyck, 10"38 according to Zech, 10"72 according to Hofman, and only 7"9 according to Heis (!) ([1154], pages 176-177). Ginzel devoted the most attention to the problem of the "stars of Thucydides." He obtained a phase value of 10" ([1154], pages 176-177). It became perfectly clear that apart from having been an annular one, the eclipse could have only been observed from Athens as partial, and with a rather small phase value at that. The lunar shadow track on the surface of Earth during the eclipse of 3 August 431 B.C. is shown in fig. 2.6 as a dotted line, which signifies the fact that the eclipse was an annular one. No umbral shadow was to be observed anywhere.

The fact that the phase value of the Athens eclipse of 431 B.C. only equalled 10" means that 1/6th of the solar disc was open. This is all but bright daytime, and one naturally cannot see any stars or planets. Furthermore, as we can see in fig. 2.6, this eclipse had only passed Crimea around 17:22 local time (17:54 according to Heis). Thus, it can hardly be called an afternoon eclipse as Thucydides explicitly states. It should rather be called an evening one.

Having used the modern application Turbo-Sky that is convenient for approximate calculations, we have computed the respective positions of the moon and the sun at the moment when the phase value had been maximal for the observation point – the city of Athens and the area around it. One can see the screenshot in fig. 2.7. It is obvious that a large part of the solar disc is open, and neither stars nor planets can possibly be seen.

Thus, the eclipse of 3 August 431 B.C. couldn't have been the one described by Thucydides, since conditions 8 and 9 aren't satisfied, as shown above.

This discovery was naturally a most unpleasant one for the Scaligerian chronologers and historians. The astronomer Ginzel went so far as to claim that "the low phase value which equalled 10" for Athens

431 BC
3 August
14:57 GMT
Athens, maximal phase

Fig. 2.7. The solar disc during the maximal phase of the 431 B.C. eclipse as seen from Athens. A large part of the sun remained uncovered. Neither stars nor planets were visible. Calculated with Turbo-Sky software.

according to the latest calculations *caused a shock and significant doubt about the fact that 'the stars could be seen,' as Thucydides claims*" ([1154], page 176).

Since the stars clearly couldn't have been visible during the eclipse of 431 B.C., Heis and Lynn decided to calculate the disposition of bright planets in hope that they might save the situation. However, it turned out that Mars had only been 3 degrees above the horizon. Venus had been high enough, about 30 degrees above the horizon. Ginzel makes a cautious remark in regards to Venus and Mars saying that these two planets "may have been visible" ([1154], page 176). However, this probability is low in what was practically broad daylight. All other hopes have been for Jupiter and Saturn, but it turned out that Jupiter was *below the horizon* during the eclipse, and therefore invisible; and as for Saturn, although it had been above the horizon, its position was in Libra, a long way off to the south, and, according to Ginzel, its "visibility had been *very dubious* [*sehr zweifelhaft*]" ([1154], page 176).

We have used the Turbo-Sky software in order to compute the planet locations for the time of the eclipse that occurred on 3 August 431 B.C. (see fig. 2.8). What one sees here is a view of the sky from Athens for the maximal phase of the eclipse at 14:57 GMT. It is clear that Venus, Mars, and the much dimmer Mercury are

Fig. 2.8. Planet disposition at the moment of the eclipse in 431 B.C. Venus and Mars are close to the sun, and most probably aren't visible with a large part of the solar disc exposed. Mercury is altogether dim, whereas Jupiter is below the horizon. Saturn is far away to the south, and its hypothetical visibility is "quite dubious", as Ginzel justly points out.

close to the sun, and thus rendered invisible by the rays of the partially obscured radiant orb. Their visibility in broad daylight is extremely improbable.

The gravity of the situation that the proponents of the Scaligerian chronology had been well aware of made Johnson suggest a different eclipse, one that occurred on the 30th of March in 433 B.C.; however, it isn't included in any triad. The nearest triads are 447, 441 and 430 B.C., and 412, 405 and 394 B.C. They don't fit for different reasons. The phase value of the eclipse suggested by Johnson also turned out to have equalled a mere 7"8, which is even less than the eclipse mistakenly suggested by Petavius ([1154], page 177).

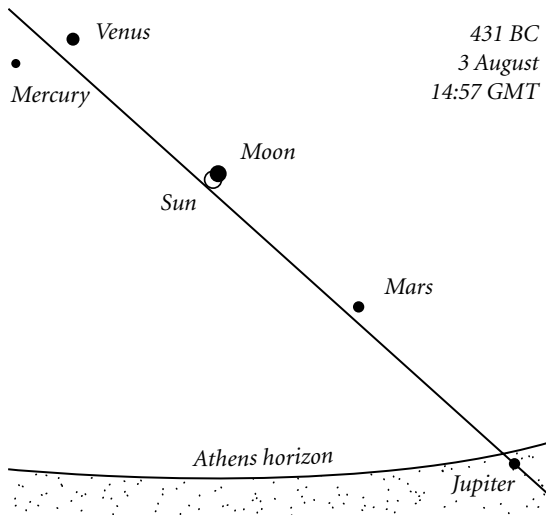Stockwell then tried to revise the phase calculations in order to make it maximal. However, the very peak of his ingenuity only allowed him to obtain the result of 11"06. However, Ginzel's reaction to Stockwell's calculations was quite sceptical.

Seyffarth put forward a hypothesis that Thucydides may have been referring to the eclipse of 27 January 430 B.C. ([1154], page 177). However, despite the fact that this eclipse is far from fitting the description given by Thucydides (for instance, it can-

not be included into any triad at all), a thorough check showed that the eclipse could not have been visible near Athens ([1154], page 177).

The shock that Ginzel mentioned eventually became replaced by a confusion of sorts, which led to the use of altogether different considerations that led farther and farther away from astronomy; among those – pure demagogy. Zech, for instance, had tried to eliminate the problem by his references to "the clear skies of Athens and the sharp eyes of the ancients" ([1154], page 177). Apparently, our contemporaries would fail to see any stars at all, but the ancients were an altogether different race. Their vision was a lot keener. They ran faster, too.

Hofman went even further in his suggestion to consider the stars of Thucydides a mere rhetorical embellishment ([1154], page 177). This translates as "we trust him in every other respect, but refuse to do so in this particular instance." Hofman tries to find linguistic proof for his theory, implying that Thucydides reports the appearance of stars when the sun had already assumed the shape of a crescent. We have asked the philologist E. V. Alekseyeva (Department of Philology, MSU, 1976 – see CHRON1, Appendix 2.1) to perform a philological analysis of the text that can be seen in fig. 2.3. The linguistic verdict was that the following four events are described by Thucydides:

1) The occultation of the sun;
2) The crescent shape assumed by the sun;
3) The appearance of stars;
4) The restoration of the entirety of the solar disc.

Thus, the entire eclipse process is described. The darkening of the disc at the beginning, its transformation into a crescent, and the subsequent visibility of the stars (this only happens at the maximal phase of a total eclipse), and the return of the disc to its original form. The consequence of events 1-4 is quite natural, and is unequivocally defined by the grammatical structure of the phrase. Actually, that was exactly the way that the professional translator quoted above, F.G. Mishchenko, had translated this fragment from the ancient Greek in the XIX century. The analysis performed by E. V. Alekseyeva confirmed the correctness of the classical translation yet again – it wouldn't have been questioned in the first place, if it hadn't been for the problem with astronomical dating that arose in this respect.

Therefore, Hofman's opinion, that was also shared by the modern astronomer Robert Newton, is really based on the wish to save the Scaligerian chronology at any cost, and not the actual translation.

We see that the attempt to substitute astronomy for linguistics does not solve the problem.

Despite all this, the erroneous date offered by Petavius wasn't altered, and any modern history textbook gives the date of the beginning of the Peloponnesus war as 431 B.C., albeit for no other reasons than Petavius' opinion. *His chronology has been legitimized despite its blatant deviation from the clear and unambiguous description of Thucydides.*

The description offered by the original text is a detailed and fundamental one, which makes all attempts of rectifying the case by altering the text look ridiculous. Apart from Hofman's "solution," it was proposed to alter the durations of the intervals between the neighbouring eclipses (the ones that equal 7 and 11 years according to Thucydides). However, even the authors of this proposal refused to elaborate on it.

It is hard to doubt that Thucydides was referring to a full eclipse when describing the first one of the triad. In the case of the second one (which had been partial) he explicitly states that "a *partial* eclipse of the sun occurred when the moon was new" ([923], IV:52). The word "partial" is used here; apparently, the author understood the difference between a total eclipse and a partial one well. That is why he emphasized the visibility of the stars in the first case, which is a hallmark of a total eclipse.

Let us give a summary. The astronomers failed to find any other fitting astronomical solutions in the interval between 600 and 200 B.C. However, no one had thought of broadening the search interval so that the Middle Ages would be included. It is well understood – they have all been raised on the Scaligerian chronology, and have trusted it, by and large. As a result, the erroneous triad of Petavius had been kept, despite the fact that this "solution" contradicts the text of Thucydides. The use of the independent dating method in the entire interval between 900 B.C. and 1700 A.D. shows that a *precise astronomical solution does exist; furthermore, there are only two solutions that fit exactly.* The first one was discovered by N. A. Morozov in [544], vol. 4, p. 509; the second, by A. T. Fomenko during a new analysis of the "ancient" and mediaeval eclipses.

The first solution *(N.A. Morozov)*:
    1133 A.D., 2 August (total solar);
    1140 A.D., 20 March (total solar);
    1151 A.D., 28 August (lunar).
The second solution *(A.T. Fomenko)*:
    1039 A.D., 22 August (total solar);
    1046 A.D., 9 April (partial solar);
    1057 A.D., 15 September (lunar).

Even condition 12, stipulating a time around March for the second eclipse, is met here. More importantly, the first eclipse is a *total* one, the way Thucydides describes it. Thus, once we managed to venture out of the Procrustean paradigm of the Scaligerian chronology, we found the answer to a question that has been of great interest to astronomers – that of the astronomical descriptions contained in the book by Thucydides.

Taking all the facts that we already know into consideration, we should conclude that the solution closest to historical reality is apparently the one suggested by Morozov – the more recent triad of eclipses falling on the middle of the XII century – namely, 2 August 1133 A.D., 20 March 1140 A.D., and 28 August 1151 A.D. The XI-century solution is most probably too early. Morozov's 1133, 1140, and 1151 A.D. solution is illustrated in fig. 2.9. One can see the lunar shadow tracks on the surface of the Earth for total solar eclipses of 1133 and 1140 as well as the zenith visibility point for the lunar eclipse of 1151 A.D.

We have verified the two solutions listed above with the Turbo-Sky software. Let us quote the exact data characterizing the total eclipses of 22 August 1039 and the 2 August 1133. They are listed as full in the Oppolzer eclipse canon ([544], Volume 5, pages 77-141). The Turbo-Sky application identifies them as total eclipses as well. We shall give the geographical coordinates of the beginning, middle, and end of the lunar shadow trajectory on the surface of the Earth for the total eclipse of the 2 August 1133. The first line gives the longitude, and the second, the latitude.

$$-89 \qquad +8 \qquad +72$$
$$+52 \qquad +53 \qquad +9$$

The umbral lunar shadow had been at the central point of the trajectory (with the sun being in the zenith) from about 11:15 to 11:17 GMT (according to the Turbo-Sky application).

For the eclipse dated 22 August 1039 of the sec-

Fig. 2.9 The triad of eclipses described by the "ancient" Thucydides: 1133, 1140, and 1151 A.D. The solution was found by N. A. Morozov. One sees the lunar shadow tracks for the first two eclipses and the zenith visibility point for the lunar eclipse of 1151. Taken from [544], Volume 4, page 509.

ond triad (the XI-century one), the umbral shadow of the moon was at the central point of the trajectory at about 11:15 GMT. The coordinates are 7 degrees of Eastern longitude and 45 degrees of Northern latitude (Turbo-Sky).

N. A. Morozov made the following justified remark regarding the full eclipse of 2 August 1133 in the XII-century triad: "The sun appeared to rise in total occultation on the southern coast of the Hudson Bay, it had been matutinal in England as well, came to Holland at noon, to Germany, Austria, *the vicinity of the Bosporus,* Mesopotamia, and the Gulf of Arabia, and set in complete darkness in the Indian ocean" ([544], volume 4, page 508). The eclipse was full and its phase maximal, everything went dark, and one could naturally see the stars in the sky.

Thus, the XII-century triad discovered by N. A. Morozov can be seen as follows:

1) The first total eclipse of the sun occurred on 2 August 1133 A.D. and happened in the following manner:

$$\begin{array}{ccc} -89 & +8 & +72 \\ +52 & +53 & +9 \end{array}$$

The central point of the lunar shadow trajectory on the surface of the Earth was passed between about 11:15 and 11:17 GMT (see fig. 2.9; also see [544], Volume 5, page 122).

2) The second full eclipse happened on 20 March 1140, as follows:

$$\begin{array}{ccc} -96 & -30 & +48 \\ +20 & +42 & +55 \end{array}$$

The central point of the lunar shadow trajectory on the surface of the Earth passed at approximately 13:40 GMT (Oppolzer's canon; see [544], Volume 5, page 123, and fig. 2.9).

3) The partial lunar eclipse of 28 August 1151 A.D. had the maximal phase value of 4" at 23:25 GMT. The zenith visibility of the moon concurred with the point whose geographical coordinates were 8 degrees of Eastern longitude, and 7 degrees of Southern latitude ([544], Volume 5, page 51).

This XII-century triad is ideal in all respects. The second eclipse really occurred in March, as one should have expected from the text of Thucydides.

The XI-century triad discovered by A.T. Fomenko:

1) The first solar eclipse, of 22 August 1039 A.D., happened in the following way:

$$\begin{array}{ccc} -82 & +7 & +64 \\ +55 & +45 & +2 \end{array}$$

The central point of the lunar shadow trajectory on the surface of Earth was passed at about 11:15 GMT (see fig. 2.9; also see [544], volume 5, page 118).

2) The second solar eclipse (partial) of 9 April 1046 A.D. occurred as follows:

$$\begin{array}{ccc} +22 & +87 & +170 \\ +19 & +47 & +50 \end{array}$$

The central point of the lunar shadow trajectory on the Earth surface was passed about 5:46 GMT (Oppolzer canon; see [544], Volume 5, page 123 and fig. 2.9).

3) The partial lunar eclipse of 15 September 1057 A.D. had the maximal phase value of 5" at 18:09 GMT. The zenith visibility of the moon concurred with the

point whose geographical coordinates were 86 degrees of Eastern longitude, and 1 degree of Southern latitude ([544], Volume 5, page 49).

The Thucydides eclipse triad is a very substantial argument proving that the *History of the Peloponnesus War* by Thucydides couldn't have been written earlier than the XI century A.D. It is most improbable that the triad is a fantasy of the author, since in that case a fitting astronomical solution would most probably have been nonexistent. It is also hard to consider the eclipses an apocryphal part of the "ancient" text, since they fit the consecutive and detailed narration incredibly well.

N. A. Morozov appears to have been correct in writing that "the book of Thucydides isn't ancient, it isn't mediaeval, it is [from] the thirteenth century of our era at least, the Renaissance epoch" ([544], Volume 4, page 531).

2.4. The eclipses described by the "ancient" Titus Livy

Let us give a few more examples. Omitting the details this time, we shall just report that the eclipse from the *History* by Titus Livy (XXXVII, 4, 4) that the modern chronologers ascribe to 190 B.C. or 188 B.C., also fails to satisfy the description of Titus Livy. The situation with the eclipses of Thucydides is repeated yet again. It turns out that an independent astronomical dating yields just one precise solution in the interval between 900 B.C. and 1600 A.D.: 967 A.D. ([544]).

The situation with the lunar eclipse that Titus Livy describes in his *History* (LIV, 36, 1) is exactly the same. The Scaligerian chronologers suggest that Livy is referring to the eclipse of 168 B.C. However, analysis shows that the characteristics of this eclipse do not fit the description given by Livy. The eclipse that he describes could really have happened on one of the following dates:

• Either in 415 A.D., at night between the 4th and the 5th of September;

• In 955 A.D., at night between the 4th and the 5th of September;

• Or in 1020 A.D., at night between the 4th and the 5th of September.

This pattern of false dating goes on and on. A list of such examples includes all the ancient eclipses that have detailed descriptions. We shall present the whole picture of this effect of moving ancient eclipse dates forward in time, below.

3. TRANSFERRING THE DATES OF THE "ANCIENT" ECLIPSES FORWARD IN TIME INTO THE MIDDLE AGES ELIMINATES THE ENIGMATIC BEHAVIOUR OF THE PARAMETER D''

The author of the current book proceeded to re-calculate the parameter D'' values using the new dates for ancient eclipses that were produced as a result of the method described above. The discovered effect of moving ancient eclipses forward in time led to the identification of many "ancient" eclipses with the mediaeval ones. This, in turn, allowed us to expand and alter the list of such mediaeval eclipses. New data was obtained from the descriptions considered "ancient" earlier on, and added to the mediaeval eclipse descriptions. Nevertheless, research has shown that previous values of D'' basically didn't change in the interval of 500-1990 A.D. A new curve for D'' can be seen in fig. 2.10.

The new curve is qualitatively different from the previous one. In the interval between 1000 and 1900 A.D. the parameter D'' reflects in an even curve on the graph, one that is practically horizontal and fluctuates around one constant value. It turns out *there have never been any drastic leaps in the parameter, whose value has always equalled the one it has today.* Therefore, one doesn't have to invent any mysterious non-gravitational theories.

The fluctuation rate of D'' values that is rather low in the interval of 1000-1900 A.D. grows significantly when we move from 1000 A.D. to the left, towards 500 A.D. This means that either the scarce astronomical descriptions that chronologists ascribe to this period are very nebulous, or, what is more probable, these chronicles are also misdated, and the events they describe are in need of re-dating. However, due to the utter vagueness of the remaining astronomical descriptions, they cannot be used for dating purposes since they offer too many solutions. The re-dating of the events preceding the XI century shall have to be done by other means and methods, some of which shall be related below.

Further on, to the left from 500 A.D., we see the zone of no observation data. We know nothing at all about this epoch.

The resulting picture reflects the natural temporal distribution of the observation data. The initial precision of the mediaeval observations of the IX-XI centuries was naturally rather low, and then grew together with the precision and perfection of the observation techniques, which resulted in a gradual decrease in the fluctuation of D'' values.

4.
ASTRONOMY MOVES THE "ANCIENT" HOROSCOPES INTO THE MIDDLE AGES

4.1. The mediaeval astronomy

The naked eye can see five planets: Mercury, Venus, Mars, Jupiter, and Saturn. Their visible movement trajectories are adjacent to the solar ecliptic, or the line of its annual movement. The very word "planet" means "wandering star" in Greek. Unlike stars, the movement of the planets is relatively fast. Their movement on the "sphere of immobile stars" is characterized by significant irregularities that can be explained by the fact that the planet trajectory as observed from Earth is a result of the projection of the telluric orbit onto the immobile celestial sphere through the moving planet. Most of the time, the planets as observed from Earth follow the sun in their movement. However, after certain periods of time that differ for various planets, they begin to move *in the opposite direction.* This is the so-called *retrograde movement* of the planets. We should note that Mercury and Venus don't go far from the sun in their movement as observed from the Earth. Other planets can get far away from the sun, since their orbits are located *beyond* the telluric orbit, unlike those of Venus and Mercury.

Complex and seemingly chaotic movement of the planets gave birth to the belief, back in the days of yore, that there is a feedback between planets and human lives. Objectively, this belief was based on the undeniable correlation between the change of seasons and the position of celestial objects. This is how astrology was born – a science of planets, stars, and the effect on people's lives.

A significant part of mediaeval literature contains

Fig. 2.10. Comparison of D" graphs as calculated by R. Newton and A. T. Fomenko. The new D" graph has neither gaps nor leaps, and fluctuates around a constant value.

astrological texts, especially astronomical tractates up until Kepler's age and even after that. The existence of several competing astrological schools led to the use of lavish symbolism by mediaeval astrologers, which makes it hard to speak of unified astrological definitions. Furthermore, each school developed its own linguistic and symbolic system. However, we shall soon see that many countries have surprisingly enough used a more or less *uniform astrological symbolic system* –

for zodiacal constellations, for example. This can mean that astrology had been born relatively recently, in the epoch when the means of communication between the astronomers of different countries had already been developed well enough to provide for regular information exchange and a similar "astrological language" – in Europe and in Egypt, for instance.

It would be expedient to remind the reader that the modern names for planets have been introduced by astrologers. The names for days of the week in such languages as English, French and German are also in direct relation to astrological concepts ([470]).

Planets have roughly the same trajectory across the sky. The circle of their movement along the ecliptic plane is called the zodiac. It is separated into 12 parts or constellations ([571]). Astrology was of the opinion that there is a special relation between the planets and each zodiacal constellation ([470]). A detailed theory was developed in this respect, wherein each constellation and each planet have been assigned a "character": Mars is alleged to be aggressive, Jupiter divine, Saturn deathly, etc. In the so-called *Four Books* of the mediaeval astrologers, one may read that "Mars scorches and burns; his colour is red, the colour of fire" ([470]). Colour used to be ascribed to the planets as well – thus, Mars was considered red, Saturn pale, etc. ([470]). The combination of planets and constellations was given special attention. For instance, bloodthirsty Mars entering the sign (constellation) of Leo was considered an extremely dangerous omen of war and bloodshed. Ill-boding Saturn, the "god of death," when entering the sign of Scorpio, was regarded as an omen of epidemics and plague. Saturn and Scorpio were actually considered symbols of death ([470]).

As we have already mentioned, the projections of planets onto the immobile stellar sphere move in leaps as the Earth revolves around the sun. In its movement between the stars from the west to the east, each planet located *outside* the orbit of the Earth slows down at some point, then stops and begins to move in the opposite direction. It stops after that, begins to move back, stops again, and resumes its movement from the west to the east. An elongated loop appears as a result – the projection of the telluric orbit onto the immobile stellar sphere through a planet. These *leaps* were naturally observed a long time ago, and led to the comparison with *horses* running across the sky.

A *horoscope* is a name used to refer to the disposition of planets in zodiacal constellations: Mars in Virgo, Saturn in Pisces, etc. Horoscopes can be calculated. The question of a planet's location in one constellation or the other is a question of its fitting into the sector about 30 degrees wide. For many problems, the longitudinal precision of 5 degrees to one side or the other is quite sufficient. The *latitude* of the planet doesn't have to be calculated. Their deviations from the ecliptic are minute from the point of view of fitting into a constellation. This is why the old documents that contain horoscopes usually only give the zodiacal, or longitudinal, planetary disposition.

Horoscopes are calculated in the following way. Having fixed the constellational distribution of planets for a given moment (today, for instance), and knowing the numeric values of the periods of the planets' revolutions around the sun, we can move to the front or to the back using periods divisible by the revolution length, and get zodiacal planetary dispositions for the past or the future. Tables of various precision exist nowadays, ones defining the zodiacal positions of planets. Such tables have been compiled by P. Neugebauer, Newcomb, Leverrier, Morozov and others. Also see [1293]. Such tables exist to answer the question of what the zodiacal position of a given planet was on a given day in a given year. N. A. Morozov and M. A. Viliev have also compiled reverse tables showing when a given planetary disposition may have really taken place ([544], volume 4). Relatively recently a number of good computer applications have appeared that are used for horoscope calculation. We have employed some of them.

Nowadays we have a rather vague concept of the way of thinking pertinent to mediaeval astrologer astronomers. The astrological hue had been dominant in the perception of many mediaeval scientists, not just astronomers. Mediaeval books on astronomy are filled with astrological symbolism despite the fact that they describe real celestial events. These books weren't written in a cipher – this was the usual way of writing down celestial observations understood to both writers and readers. For instance, dates of death on gravestones and monuments, or memorable dates, have been often written down as horoscopes – in other words, drawn as the zodiacal positions of planets for a given moment in time.

Astrology occupied one of the leading positions as a fundamental cosmological discipline. This ideology is largely lost for us nowadays. That is why the understanding of such books requires the knowledge of the symbolism used in them. An ideological overview of mediaeval astrology is given in [849], for instance. Troels-Lund, a specialist in history of religion, gives an illuminating description of the mediaeval Western European scientific *Weltanschauung*. This is what he writes about planets in particular:

"Such strange movement could only have been interpreted as a manifestation of will, as proof of independent life… the opaque celestial dome rotates above all of this, and it has 'stars affixed to it, in figures bearing semblance to animals'… This had been nothing but *astronomy transformed into a religion*… Thus happened the birth of the art and science that would never fail to attract human attention for centuries to come, and considered the crown of human knowledge." ([849], pages 24-26)

The book [849] quotes Biblical fragments that are astronomical in their nature according to Troels-Lund. We shall get back to this issue soon.

The flourishing scientific astrology invariably spawned an offshoot, the so-called applied astrology, or the science of predicting the destinies of people, states and monarchs by planetary movements, or "by the stars." Astrology enjoyed state support in mediaeval Western Europe ([849]). Astronomy (mixed with astrology) was also extensively used by the Roman church, which employed it for calendarian purposes in particular ([849]).

"Astrology became the leading science of the time, the basis for all other sciences" ([849], page 166).

"If we shall regard the XVI century astrology objectively nowadays… Our first reaction shall be that of surprise at how great a role the belief in stars and the way they affect one played in that epoch… It had not just been the ignorant masses that believed in astrology, even the greatest minds followed suit… It suffices to take a look at the great variety of works on astrology that appeared in the XV and XVI centuries. Just the ones that can be found in the two main Copenhagen libraries, would make a rather voluminous pile… Their authors aren't obscure anonymous scribblers – au contraire, these books were written by the greatest minds of the time. There

is no name in the XVI century Scandinavia that could equal Tycho Brahe, one of the greatest representatives of natural sciences… a popularizer of Heinrich Rantzau, the viceroy of Schleswig-Holstein." ([849], page 169)

About Tycho Brahe: "all of his scientific activity had been dedicated to [astrology's] development to a certain extent" ([849], page 169).

The same can be said about Melancthon and Kepler in Germany. Astrology flourished at the courts of European monarchs in France, England, and Italy. It is known that Rudolf II, Louise of Savoy, Catherine de Medici, Charles IX, Henry IV, and other Western European rulers were active proponents of astrology ([849], pages 170-171).

Melancthon claimed that the Bible gives direct indications of the divine origins of astrology ([849], page 175). *The fact that many fragments of prophetic books of the Bible, for example, are astronomical and contain horoscopes in cipher was considered indisputable in the Middle Ages* ([849], page 180).

It is considered that the authority of astrology had been dealt several mortal blows by Copernicus, Newton and Laplace. Therefore, the astrological symbolism of many ancient texts lost its importance and mystery, became lacklustre and were soon forgotten. Nowadays the majority of readers will fail to understand it for the most part. The discovery of the chronometer and other instruments rendered quotidian sky observations void of value, which completely crushed the foundations of astrological ideology.

"There has been no other epoch when people's direct perception of the sky had been quite as meagre [in reference to the XIX-XX centuries – A. F.]. There is hardly one person in a hundred in London, Paris and Copenhagen that knows whether the moon is full or new today, or what the current location of Ursa Major is. The light of the nocturnal sky had assumed a purely decorative role." ([849], pages 212-213)

Unlike the Western European countries, the Russian Orthodox Church is considered to have had a very negative attitude towards astrology.

"A very demonstrative episode occurred in the Kremlin in 1559, when Ivan the Terrible had returned the present of a sophisticated clock embellished with moving representations of celestial bodies to the Danish ambassadors, who were told that 'the present

is of no use for a Christian ruler who believes in God and does not concern himself with either planets or (celestial) symbols.'" ([775], pages 125-126)

At the same time, astronomy was used in Russia for Paschalian calculations. We shall be relating this in more detail in Chron6. Apart from that, we quote some facts in Chron6 that shall greatly aid in the explanation of the negative attitude of the Orthodox church towards astrology that has been prevalent ever since the second half of the XVI century and continues until the present day.

4.2. The method of unprejudiced astronomical dating

As we have already mentioned, the idea of using the horoscopes contained in old documents for the astronomical dating of the events described in the texts originated as early as the XVI century. It has been occasionally used by astronomers and chronologists of more recent epochs. If some document contains a horoscope, then the use of theoretical calculation tables for reference can allow for the attempt to select a fitting horoscope whose astronomical characteristics would satisfy the description of the old document. A certain date would be the result of these calculations, or a number of dates in the case of several astronomical solutions, which will happen if the description is vague or incomplete. However, the practical use of this apparently simple idea ran into great practical complications whose reasons were far from astronomical – the culprit was the existing Scaligerian chronology.

N. A. Morozov had discovered that under the pressure of the Scaligerian chronology, the astronomers of the XVII-XIX centuries had to resort to *arbitrary fittings* to a greater or a lesser extent in order to make the "historical tradition" that they believed in correspond to the results of their astronomical calculations ([544]). The thing is that the astronomers of the XVII-XVIII centuries had lived in an epoch when Scaliger's chronology *had already been shaped*. Ergo, the principal historical reigns, wars, characters, etc. had been distributed across the temporal axis by the historians for the most part. This is why the astronomers had already "known" the approximate datings of old texts that they had to date astronomically

from historical chronology. The role of the astronomers would thus become limited to making marginal corrections of the historical datings with the "astronomical method." If the astronomers failed to find a precise astronomical solution in the "necessary" epoch, they preferred to *question the old document's exactness, and not historical chronology.* In such cases astronomers usually utter something along the lines of "the scribe must have made a mistake putting Saturn into Pisces, since it has to be in Virgo so that the events described would fall in the V century B.C." Correcting Pisces for Virgo, the astronomers ipso facto "confirmed" the opinion of the Scaligerian historians who dated the document as V century B.C.

N.A. Morozov's great achievement was that he was the first to question the consensual historical chronology, and not the astronomical reports contained in the old documents. He suggested extending the search interval of astronomical solutions so that it would include *the entire* historical epoch up to the Middle Ages. However, even N.A. Morozov hadn't been entirely consistent and usually preferred not to venture further in time than the VI century A.D.

It turned out that the accurate use of the astronomical method reveals dates that are *a lot more recent* than the ones offered by Scaliger. Furthermore, in some cases the new dates turn out to belong to *the late Middle Ages!* All of this is notwithstanding that the astronomical results obtained by Morozov cannot be regarded as *finite.* Being certain that only the "ancient" chronology was incorrect, he had been gullible enough to have trusted the mediaeval chronology beginning with approximately 300-500 A.D. This is why he usually failed to research the entire possible time interval, most often contenting himself with the attempts at finding the solution in the period between 2000 B.C. and 600 A.D., and only occasionally further into the Middle Ages.

Morozov most often did not consider the later epoch between the XIV and XVIII centuries at all. He was of the opinion that "ancient" eclipses and horoscopes couldn't possibly have moved forward in time to such an extent that they wound up in the XIII or even XVII century A.D. Thus, moving forwards along the time axis in his search of astronomical solutions, he would most probably stop at the first fitting solution.

This is why we treat his astronomical results as preliminary when we report them. It is possible that if we carry on with his unfinished research, we shall find astronomical solutions that will be a lot more recent, and occasionally more precise.

However, we can already state the following with certainty: if new and more precise astronomical solutions are really found – this is the case with the Dendera zodiacs and the Apocalypse (see below) – they shall be even closer to us than the ones found by N. A. Morozov, since he had already analyzed the period between ancient times and the VI century A.D.

4.3. Many "ancient astronomical observations" may have been theoretically calculated by late mediaeval astronomers and then included into the "ancient" chronicles as "real observations"

One shouldn't forget that in the creation of the "correct history according to Scaliger," the chronologers of the XVI-XVII centuries often turned to astronomers asking them to perform this or the other kind of calculations.

We have already mentioned the heavy astrological influence that the mediaeval science was subject to. The astrological schools of the XV-XVII centuries may have occupied themselves with solving such "scientific" problems as the planet disposition during the coronation of Justinian I (who had lived in the VI century A.D. according to the erroneous opinion of the mediaeval chronologers) with astronomical/astrological methods.

Another problem they may have been busy with was giving exact datings to the lunar eclipses of the Roman Empire epoch that the mediaeval chronologers had already erroneously ascribed to the III-VI centuries A.D.

Yet another one may have been the estimation of the Easter Sunday in the year of the Nicaean council, whose erroneous dating of allegedly the IV century A.D. had already been "calculated theoretically" a few years earlier, in the XVI-XVII centuries.

All of these "astronomical calculations" have been slyly included in the final editions of ancient chronicles. All of this probably happened in the XVI-XVII and even XVIII centuries. It was a great body of work,

which would have been useful if the chronology created by the mediaeval historians had been *correct*. However, this chronology proved *erroneous*, and so the mediaeval astronomers have aggravated the mistakes of the historians, calculating the planet dispositions for the VI century A.D. (when Justinian I is supposed to have lived), and entering something like "on the day Justinian I was crowned, the planets were in such-and-such constellations" into the chronicles. As a result, the chronicles may have been given an erroneous chronological and astronomical skeleton, which was apparently just a result of latter mediaeval calculations represented as true "ancient astronomical observations" in the chronicles.

Afterwards this partially erroneous and partially falsified material rigidified, gathered some authority dust, and reached us in this exact form. Our contemporaries, both historians and astronomers, read ancient chronicles and rejoice to find "astronomical data" in them. The alleged observations – fruits of *theoretical calculations* of the XVI-XVIII centuries – are dated with modern astronomical methods, and everybody is clearly brimming with satisfaction when the results obtained concur with the Scaligerian chronology. Thus, the chronology of Scaliger-Petavius receives additional "proof," which *leads to a vicious circle.*

Of course, one occasionally finds discrepancies with modern astronomy due to the fact that the astronomical calculation methods of the XVI-XVIII centuries (those dealing with past dates) were imprecise, and a lot worse than the ones currently used. Having located such a discrepancy, modern historian astronomers patronizingly correct the "ancient observer," which creates an even greater illusion of the veracity of the Scaligerian chronology.

What should one do when the results of modern astronomical calculations *radically* contradict the Scaligerian chronology? In such cases modern historians start talking about "the ignorance of the ancient observers."

Our new results show that *mediaeval chronology can only be trusted from the XVI century on* (see CHRON5). One needs to perform an even greater body of work in the field of finite independent dating of eclipses and horoscopes present in written sources. According to the latest research, N. A. Morozov's astronomical solutions are often complemented with

new, *considerably more precise and recent* solutions scattered across the interval between the XIII and XVI centuries.

4.4. Which astronomical ″observations of the ancients″ could have been a result of late mediaeval theoretic calculations?

Our idea is as follows: the chronologers of the Scaliger-Petavius school first created the erroneous chronology of ancient and mediaeval history, having arbitrarily extended the real history of the XI-XVII centuries A.D. into the past.

After that, in the XVI-XVII centuries a great body of work was started in order to make this scheme "*look scientific*" *as a result of astronomical calculations.* If we're to call a spade a spade, it really was a deliberate falsification of history.

1) The ″*Ancient calendar theories*″ were put forward. The chronologers of the XVI-XVII centuries began to "reconstruct" the ancient calendarian systems that people had allegedly used in antediluvian times for hundreds and thousands of years. Calendarian "starting points" would appear as a result of theoretical calculations, as well as such dates as that of the Genesis, the Great Deluge, etc. The results of these calculations would be *written into* the "ancient" chronicles without any hesitation whatsoever in order to "help maintain chronological order." What this meant in fact was the confirmation of mistakes or blatant falsifications of the Scaliger-Petavius school. Real mediaeval events assumed wrong datings that moved them a long way into the past. Nowadays these "ancient" datings are considered to prove the Scaligerian history by historians who remain unaware of the fact that many of these "calendarian observations" are a result of *theoretical calculations* of the chronologers of as late an epoch as the XVI-XVII century A.D. – yet another vicious circle.

2) Certain *horoscopes* may have been calculated into the past. Rough calculations of planet dispositions may already have been known in the late Middle Ages. The chronicles would then undergo special editing, after which they began to contain such phases as "in the VIII century since the foundation of Rome, on the day Julius Caesar was murdered, the planets occupied the following positions." The planet dispositions would be calculated exactly for the I century B.C., since the astronomers of the XVI-XVII centuries "already knew" in their blind trust of Scaliger-Petavius that Caesar had lived in the I century B.C. Nowadays historians believe these "astronomical observations" to be the real thing, and try to present them as proving the correctness of the Scaligerian chronology, which leads to a vicious circle. For instance, one of the astronomer/astrologers of the Middle Ages would first calculate that some astronomical event occurred in the I century B.C. Afterwards the fact that this dating had been calculated would fall into oblivion, and the result of the same mediaeval calculation would be called *proof* – of the fact that Julius Caesar had really lived in the I century B.C., for instance.

3) First and foremost, a number of *lunar eclipses* were calculated into the past. Let us mention that *the lunar eclipse calculations are rather simple.* They were successfully performed already in the epoch of the XVI-XVII century. *Solar eclipses are different, and involve a lot more complex calculation.* However, in the XVII, let alone the XVIII century, the astronomers were already capable of counting solar eclipses into the past as well. The "calculated" lunar and solar eclipses may have been included into the erroneous history of Scaliger and Petavius in the following manner: "On the day such-and-such emperor died, an eclipse occurred." The process was apparently as follows: having calculated that some eclipse occurred in the beginning of the II century A.D., the astronomer would take the "Petavius textbook" and see what emperor's reign coincided with the date of the eclipse that he had calculated. For instance, the Scaligerian chronology would claim that some ruler had died that year. The edited chronicle would then become altered to include some phrase like "the moon (or the sun) had darkened when he died." The examples of mediaeval calculations that have been claimed as "ancient observations" a posteriori were given in abundance by the modern astronomer Robert Newton in his well-known work titled ***The Crime of Claudius Ptolemy*** ([614]).

4) The appearances of certain *comets* may have been calculated into the past. Late mediaeval scientists starting with Tycho Brahe and Kepler were already able to calculate their recurrence periods based on trustworthy observations. The Galley comet may

serve as an example. Then the alleged dates of comet appearances were calculated by extending several recurrence periods into the past. After that the erroneous "Petavius textbook" was used for reference, and the edited chronicles would be altered to contain such phrases as "in the nth year of reign of emperor such-and-such a comet with a fuzzy tail adorned the sky."

Nowadays we are being convinced that the ancient astronomers had really observed all of these "appearances of the Galley comet" in times immemorial. What's more is that these "observations" are nowadays presented as proof for the Scaliger-Petavius history textbook. This is not the case in reality. We shall cover comet "datings" in general and the Galley comet in particular in the chapters of Chron5 that deal with the history of China.

In the XIX-XX centuries even some of the professional astronomers have been taken in, thinking that they dealt with true ancient observational material, which led to the construction of theories that should have made the calculated trajectory of the Galley comet's movement "more precise." However, such "reconstructions" invariably lead to the distortion of the very mathematical theory of the comet's movement, since certain constants in motion equations have to be obtained from empirical observations. If such observations are incorrect or simply fictitious, the constant values also turn out wrong, not the way they're really supposed to be.

One sees just how serious the consequences for the history of science may prove, the ones that arise from such late mediaeval chronological calculations that have been slyly presented as "true astronomical observations" later on.

These considerations are primarily valid for written sources. It must have been easy enough to take a quill and *write* the "ancient observation" down on the page of the chronicle.

Such suspicions are less applicable to *trustworthy archaeological findings* or ancient monumental architecture, although the utmost caution is required there as well. However, if a horoscope is presented as a large bas-relief on the ceiling of an old cathedral, or on a coffin in an old sepulchre, one has reason to believe that we see the result of a *veracious* astronomic observation, and not a latter calculation based on Scaliger-Petavius chronology.

5.
A BRIEF ACCOUNT OF SEVERAL EXAMPLES OF EGYPTIAN ZODIACS

In this section we shall give a rather brief account of the results of our research that is related in detail in Chron3, Part 2.

5.1. Some general observations

The ancient horoscopes that have reached our days are a valuable body of chronological material. A horoscope's dating can be based on modern astronomical theory. Generally speaking, horoscopes may possess several astronomical solutions, but usually only one of them falls into the historical time interval. In this case we may obtain a precise dating of this horoscope.

However, the dating of horoscopes is a tricky business. The concept of using astronomy for the purposes of dating old documents was already familiar to I. Scaliger and the rest of the XVI-XVII century chronologers. Thus, the ones responsible for the forgery of history may have employed this concept and must have certainly done so. Since the written sources have largely been edited in the XVII-XVIII centuries, as we understand, the astronomical information contained therein may also be a forgery – especially in cases when this did not require much time and effort, as with horoscopes. The astronomers of the XVI-XVII centuries already knew planetary revolution periods well, and could calculate horoscopes for any given date, including those belonging to days long gone.

Thus, in order to obtain certain chronological datings based on the horoscopes that are independent from the Scaligerian chronological scale, it only makes sense to use the horoscopes whose calculation in the XVI-XVIII centuries is improbable. From this point of view, a horoscope *carved in stone on the wall of an ancient temple* is a lot more dependable than a horoscope included in an "ancient" manuscript. Carving a large and detailed bas-relief in stone would require lots of effort; apart from that, the construction of a temple is an event of high social significance that directly involves a large number of people. Writing something about the constellation that housed the planets on a given "ancient date" on a sheet of paper isn't nearly as difficult. This is office work. The history

Fig. 2.11. A rare old picture showing a dilapidated arch, and the Great Dendera Temple behind it. We see its main northern entrance. The drawing was made by the French painters who accompanied the Napoleonic troops during the Egyptian invasion. Taken from [1100], A., Volume IV, pl. 5.

swindlers have been involved in precisely this sort of activity. It was only after the Scaligerian history had become consensual that it began to affect monumental construction as well, in the XVII-XVIII centuries. Furthermore, it is a lot easier to correct the horoscope in a manuscript while editing it than altering one carved in stone on a cathedral wall, which is hardly a possibility at all.

Thus, the horoscopes contained in written sources are of little interest in what concerns independent dating. This particularly refers to the "ancient" Greek horoscopes collected in the well-known work titled *Greek Horoscopes* by O. Neugebauer and H.B. Van Hoesen ([1290]).

5.2. The Dendera Zodiacs

The images called nowadays the Round and the Long Zodiac have been found in the Dendera tem-ple in Egypt. Multiple attempts by XIX-XX century astronomers to find "ancient" solutions that would fit the horoscope depicted on the Zodiacs, have failed to yield any results. Such eminent scientists as Laplace, Fourier, Letron, Biot and Helm have tried to solve this problem. The search for a correct solution was eventually given up after many unsuccessful attempts. Nowadays the temple and the horoscopes are dated to 30 b.c. and 14-37 a.d. However, it turns out that there are *exact astronomical solutions*. We shall only briefly touch on the matter here, since part 2 of Chron3 gives a detailed account of this problem.

Dendera is a town in Egypt, north of Thebe, on the bank of Nile. The ruins of the ancient town of Tenteris, with its remains of a beautiful temple, are located nearby. We shall cite several unique old drawings made by the French artists who accompanied Napoleon's military units on his Egyptian expedition

Fig. 2.12 A reconstruction of the Dendera Temple done by French painters of late XVIII – early XIX century. We only show the right portion of the "reconstructed" façade here. The reconstruction in general was apparently done rather conscientiously; however, one immediately notes the curious fact that the faces of the statue columns on the "reconstruction" significantly differ from those on the original drawing ([1100], A., Volume IV). Also see Chron3, Part 2. The original stone faces with chipped noses have high cheekbones differing from the ones depicted by the "restorers" of Egyptian history. It isn't quite clear just what considerations the French artists were guided by, and why they would have to substitute "becoming Graeco-Roman faces" for the original ones with high cheekbones. Taken from [1100], A., Volume IV, pl. 29.

of violent conquest, towards the end of the XVIII century. These drawings present priceless proof; they are extremely important documents since they present us the state of the Egyptian monuments near the end of the XVIII century – right after the troops and the artillery of Napoleon fought their way through the terrain. They can be considered "photographs" of sorts, reflecting Egypt the way it was in the late XVIII/early XIX century, taken by eyewitness members of the Egyptian campaign. Of course, they are far from being real photographs, but we have no reason to doubt that Napoleon's artists faithfully reflected what they saw.

In fig. 2.11 we can see a dilapidated arch and a view of the main, northern, entrance to the Dendera temple. We can see that the buildings are largely in a decrepit state. We give a "reconstruction" of the temple in fig. 2.12 for comparison. Its authorship can most probably be credited to the very same artists who made the other drawings. What we see is thus their concept of what the temple "really looked like" prior to its destruction. The reconstruction is most satisfactory in general (see fig. 2.12), although the "reconstructed faces" on the columns are visibly different from the semi-obliterated stone originals, q.v. in Chron3, Part 2.

In figs. 2.13 and 2.14 we can see the rear view of the Great Temple of Dendera. This was how Napoleon's artists would have seen it when the front line could finally advance, and Napoleon's troops had entered Dendera. It is clearly visible that it wasn't "almighty time" that caused most of the destruction. We see a scene of utter devastation here; the buildings have either been shelled, or simply exploded with gunpowder.

In figs. 2.15, 2.16 and 2.17 one sees modern photographs of the Dendera temple. Pay attention to the immaculate stonework of the wall surrounding the

Fig. 2.13. Rear view of the Great Dendera Temple. We see utter devastation most probably caused by artillery or powder kegs placed under the foundations of the buildings. Taken from [1100], A., Volume IV, pl. 3.

temple (fig. 2.15). The piers supporting the foundation of one of the buildings that used to stand in front of the temple are clearly visible. The building is destroyed, q.v. in fig. 2.16. The stonework quality and the ingenuous construction solutions give us an idea of the highly professional work of the "ancient" builders of the temple. In fig. 2.17 we see a bird's eye view of the Dendera temple and its environs. One thing in particular that draws our attention is the tall wall surrounding a large area around the temple, and containing remnants of other buildings. One gets the idea that the entire set was planned as a Christian monastery – possibly a relatively recent one.

Two sculptural compositions from the dome of the Great Temple of Dendera survived – the so-called Round and Long Zodiacs. They are ancient bas-reliefs carved in stone. The Round Zodiac is about 2.5 by 2.5 metres ([1177], Volume 1, page 121). The Round Zodiac was taken to Paris, and is now kept in the Louvre. The Long Zodiac was also taken to Europe. In fig. 2.18 we can see the drawing of the Round Zodiac done by Napoleon's artists ([1100], A., Volume IV, pl. 21). It was published in the fundamental oeuvre titled *Description de l'Egypte* ([1100]), compiled by the artists and archaeologists who accompanied Napoleon's troops in Egypt. The work was published

Fig. 2.14. Rear view of the Great Dendera Temple. The devastation wasn't necessarily caused by the French troops; it may have been the result of the Ottoman=Ataman conquest of the XV-XVI centuries, when the troops of Moses that came from Horde-Russia, or the children of Israel (the army of Joshua), were conquering "their very own" Egypt, cleansing it from the "plague" that reigned there. From the epidemics, in other words, q.v. in Chron6. Over the centuries passed since that time, a large part of the ruins have become buried in sand. However, the sand may have gathered over a matter of decades, or even have already accumulated by Napoleon's era, which means it would only have taken several years. This is quite possible, since the strong dry winds of Egypt carry sand continuously. Taken from [1100], A., Volume IV, pl. 3.

Fig. 2.15. Modern condition of the Dendera Temple. The low wall around the temple is built from large blocks; the stonework is done accurately. Taken from [1062], page 10.

under a direct order from Napoleon, which is explicitly stated in the subtitle: "Publiée sous les ordres de Napoléon de Bonaparte."

Both Zodiacs – the Round one and the Long one – contain images of planets presented as various human figures located in zodiacal constellations. Thus, what we have in front of us is a pair of horoscopes which can be dated astronomically.

These images have been discussed in astronomical literature as well as historical. The consensual dating of the Zodiacs attributes them to 30 B.C. and 14-17 A.D., respectively ([1453], No. 4, page 64).

However, this dating falls apart at the first criticism, q.v. in CHRON3, Part 2.

The fact that the Zodiacs of the Dendera temple contain horoscopes is reflected in their very names, and the zodiacal positions of the planets that they depict have been noted by astronomers some time ago. The constellations and the planets are represented as human and animal figures in a standard Egyptian symbolism, some of the figures are combined in the procession.

An event as unique as the discovery of a horoscope in an ancient temple invoked great interest among as-

Fig. 2.16. Modern condition of the Dendera Temple. Taken from [1062], page 63.

Fig. 2.17. A bird's eye view of the Dendera Temple and its environs. The temple and the constructions around it were erected as a Christian monastery. One sees a tall wall containing a considerable amount of space around the temple. Taken from [1062], page 64.

tronomers. However, as we have already pointed out, astronomical research shows that during the distant past and up until the III century A.D., the planets did not form those celestial configurations observable on the Dendera Zodiacs. On the other hand, the detailed accuracy of the bas-reliefs was so great that the chronologists reluctantly formulated a hypothesis that the bas-reliefs depicted pure fantasy, bearing no relation to actual celestial events. After that no further attempts at dating the Zodiacs were made. None of the astronomers thought of extending the researched time span forwards, beyond the III century A.D.

Attempts at deciphering the Round Zodiac started a long time ago. One should name Brugsch, Morozov, and Turayev in this respect. Zodiacal constellations are depicted very skilfully, and form a zodiacal belt, as one should rightly expect. Its visual representation is hardly any different from the ones in Bayer's star charts, for instance, or even the astronomical tractates of the XVIII-XIX centuries. Identifying the planets, however, proved a lot more complex.

N. A. Morozov offers a partial deciphering of the Round Zodiac in [544], Volume 6, and the dating that was obtained as a result. Morozov's idea was simple, but truly revolutionary. If there was no satisfactory planet combination before the III century A.D., one should carry on with the calculations and go forwards in time in order to cover those epochs closer to us. Morozov conducted all of his calculations on the interval between the III and the XIII centuries A.D. ([544], Volume 6, pages 662 and 667). As a result, he found one astronomical solution that could provide the key to the cipher (assuming Morozov's partial deciphering), namely, 15 March 568 A.D. ([544], Volume 6). This solution (assuming the same Morozov's deciphering) was then verified by the astronomer N. I. Idelson. See the details of his confirmation in the tables in [544], Volume 6.

The Muscovite physicists N. S. Kellin and D. V. Denisenko made another attempt at dating the Round Zodiac in 1992. Their work was published in [MET2]:1 and [MET1]:6, pages 315-329. The date they obtained (given in the so called 'Old Style' calendar) is 22 March 1422 A.D.

Fig. 2.18. A copy of the Round Zodiac done by the painters of Napoleon's Egyptian expedition. Taken from [1100], A., Volume IV, pl. 21. Left sheet.

Fig. 2.19. A picture of the zodiac and the planets from a mediaeval French astronomical manuscript. Planets are depicted as human figures. The figure of a warrior with a sword and shield is unequivocally subtitled "Mars. . . ." As we see, similar symbolism – wanderers with staves – is also used for planets in the "ancient" Egyptian Round Zodiac. Taken from [1046], ill. 80.

Fig. 2.20. Close-up of the fragment depicting Mars as a warrior. Taken from [1046], ill. 80.

Later on, in 1999, a partial deciphering and dating of the Round Zodiac were performed by T. N. Fomenko, who based her method on an altogether different concept and calculated everything from scratch (see [MET3]:3). The result was as follows: either 15 March 568, or 22 March 1422 ([MET3]:3). The results of an extensive research of several important Egyptian Zodiacs, such as the Round and the Long Zodiac of Dendera, and the Greater and the Lesser Zodiacs of Esna, were published by T. N. Fomenko in Chapter 12 of the book [MET]:3.

The final solution formulated by A. T. Fomenko and G. V. Nosovskiy in 2001 is given below.

The identification of the figures from the Round and the Long Zodiacs with contemporary astronomical symbols as reflected in [MET1]:6 was based on the following method. The figures on the Dendera Zodiacs were compared to the pictures of planets and constellations known to us from mediaeval atlases. It turns out that the symbols contained in both Zodiacs are practically identical to the ones used on mediaeval and even late mediaeval star charts.

The planets on the Dendera Zodiacs are represented as human figures – namely, wanderers carrying staves. Planets were depicted in a similar manner in a number of European mediaeval books on astronomy. In fig. 2.19 we can see a zodiac with planets from a mediaeval French manuscript on astrology ([1046], ill. 80). The planets here have the form of *wanderers* proceeding on their journey across the sky. Mars, for instance, is pictured as a warrior who walks with his shield, and a sword in a raised hand, q.v. in fig. 2.20. The inscription near the picture unequivocally identifies this figure as Mars.

In a number of such cases the pictures can be identified with planets without any complications what-

Fig. 2.21. Mediaeval picture of the planet Jupiter. The Thunder God is holding a thunderbolt in his hand and has a royal crown on his head. Jupiter's chariot is rolling over the zodiacal constellations. Taken from a book by Ioanne Tesnierio titled *Opus Matematicum Octolibrum, Coloniae Agrippinae*, 1562. The book archive of the Pulkovo Observatory (St. Petersburg). Also see [543], page 71.

soever. The mediaeval representations of the planet Jupiter sometimes emphasized the fact that Jupiter was a Thunderer, and the chief deity in Roman mythology. Jupiter's symbol is a royal crown. One of such mediaeval pictures can be seen in fig. 2.21. We see a thunderbolt in his hand, a crown of his head, and the symbol of Jupiter next to the thunderbolt. Another detailed old picture of Jupiter can be seen in fig. 2.22

Mediaeval pictures of the planet Saturn often referred to the imagery of Saturn, the Roman god of death. The standard astronomical representation of Saturn is that of a person with the scythe of Death in his hands ([543], pages 181, 241, and 157). The mediaeval astronomical symbols of Saturn include the sickle and the scythe. A well-known book by Leopoldus of Austria allegedly dating from 1489 ([1247]) has a picture of a scythe and the inscription "Saturn" next to it, q.v. in fig. 2.23. Tesnierio's book of 1562 depicts the planet Saturn with a scythe and devouring a child ([1440]). The scythe or the sickle are often located over the head of Saturn and bear visible resemblance to the Ottoman crescent, or "horns" (see fig. 2.24). It may be that the fear and respect that the inhabitants of the mediaeval Western Europe had for the Ottomans=Atamans caused the Ottoman crescent to become a symbol of punishment.

The identification of the Egyptian god Anubis with the Roman Saturn is described in the oeuvres of the

Egyptologist H. Brugsch ([99]), and the expert in the history of religions J. Frazer ([918] and [919]). The Egyptian Anubis is most frequently portrayed with long pointed jackal ears, somewhat curved, q.v. in figs. 2.25 and 2.26. It is possible that the Ottoman crescent would occasionally be compared with long pointed Jackal ears.

In Tesnierio's book [1440], Saturn's chariot is drawn by a griffin and an asp – monsters of death.

The representation of the planet Saturn on the Round Zodiac is as follows: behind the Virgo constellation and beneath it we see two male figures crowned by crescents, one of them bearing a staff, and the other – a large scythe. No other figure on the Round Zodiac, including constellations, has a scythe.

Virgo is portrayed here in exactly the same manner as it is on the mediaeval astronomical charts – as a *woman holding an ear of wheat*, q.v. in fig. 2.27. Let us remind the reader that this constellation contains a well-known star – Spica, or the Ear of Wheat.

The figure of Saturn has got a jackal head. The numerous Egyptian pictures of Saturn accompanying people to the Underworld, are well known. See figs. 2.28, 2.29, 2.30 and 2.31, for instance. By the way, one clearly recognizes the well-known Christian Doomsday subject in the "ancient" Egyptian pictures in figs. 2.30 and 2.31 – one of the most popular sub-

Fig. 2.22. A mediaeval picture of the planet Jupiter from a book by Albumasar titled *Dé Astrú Sciéncia*, 1515. The book archive of the Pulkovo Observatory. Also see [543], page 181, ill. 92.

jects in mediaeval Christian art. We see Jesus Christ sitting on a throne and pronouncing judgement. The scribe in front of him is reading a scroll, or the Book of Fate, where all the deeds of the dead are listed. The god Anubis is weighing the good and the bad deeds on his scale in order to determine whether the person should go to heaven or to hell. This is clearly an illustration of the Christian Apocalypse, or the Revelation of St. John the Divine. This means all such "ancient" Egyptian drawings belong to a Christian epoch – which couldn't have preceded the XI century A.D. according to the New Chronology.

Furthermore, the mediaeval pictures of Venus emphasized the fact that Venus was the only female among planets, not counting the moon and the sun, naturally. Astronomical maps practically always represent Venus as a woman. The mediaeval symbols of the planet Venus can be seen in figs. 2.32 and 2.33. The first picture is a close-up of a fragment of an ancient picture taken from a French astronomical manuscript cited above (see fig. 2.19). In fig 2.33 we see an ancient miniature called "The Planet Venus" ([1046], ill. 71). Venus is also represented as a woman and has her name written over her head, q.v. in fig. 2.34. Let us remind the reader that Venus resembles Mercury in being positioned relatively close to the sun.

Fig. 2.23. A mediaeval picture of the planet Saturn with a scythe over its head. The scythe looks like an Ottoman crescent. Taken from *Compilatio de Astrorum Scientia* by Leopoldus of Austria, 1489 ([1247]). The book archive of the Pulkovo Observatory. Also see [543], page 181, ill. 92.

Fig. 2.24. A mediaeval picture of the planet Saturn with a scythe over its head. The scythe looks like an Ottoman crescent. Taken from *Dé Astrú Sciéncia* by Albumasar, 1515. The book archive of the Pulkovo Observatory. Also see [543], page 241, ill. 123.

We see the astronomical symbol for the sun in mediaeval books – a large disc with a point in its centre, q.v. in the drawings in the mediaeval book by Tesnierio ([1440], fig. 2.35), as well as the mediaeval book by Albumasar ([1004], see fig. 2.23). The usual astronomical symbol for the moon is a narrow crescent, q.v. in fig. 2.36.

How did the ancient Egyptians draw the sun and the moon? On the Round Zodiac, directly over Pisces we can see a disc that contains an alectryon's eye. Let us remind the reader that the cock that cries at dawn is a natural symbol of the moon or the rising sun. On the other hand, the brightest star in the constellation of Aries is called The Eye, and the disc with an eye could really indicate that the sun or the moon were in Aries.

The fact that in certain cases the "alectryon disc" could be associated with the moon is also reflected on another stone bas-relief on the dome of the Great Dendera Temple, close to the entrance. There is no planetary horoscope here; however, one sees a large number of separate depictions of celestial objects. We can see a *disc with an alectryon's eye* yet again, with *a crescent circumscribing it*. The reference to either the moon or the sun is apparent, q.v. on figs. 2.37 and 2.38. Furthermore, we see an identical *alectryon-eye*

Fig. 2.25. "Ancient" Egyptian picture of the god Anubis with a jackal's head and pointed ears resembling the Ottoman crescent, or a pair of horns. The specialists in the history of religion call this picture "The Mummy of Osiris Prepared for Burial by Anubis." Taken from [1415], page 100. Also see [966], Volume 1, page 128.

Fig. 2.26. A picture of Anubis from the famous Egyptian *Book of the Dead.* The pointed ears on the god's jackal head are painted in such a way that they resemble the Ottoman crescent or a pair of horns. Taken from [1448], pl. 3.

disc on this bas-relief, this time accompanied by *fourteen* identical human figures. The reader will recall that a lunar month contains 28 days, so what we see here are probably representations of halves of lunar months, or fortnights. Each day is represented by a small figure. All of the figures are identical, as "similar days" coming one after another. This may be the way the artist represents the 14-day interval between the *new moon* and the *full moon* that is separated into two weeks each with seven figures for days. Furthermore, this second "lunar disc" is sailing the skies in a boat that clearly resembles a *crescent*, q.v. in fig. 2.39. Let us also point out that both "lunar discs" on the dome near the entrance clearly depict some celestial deity, since they are worshipped by other figures.

However, in this case our identification of the "alectryon disc" with the Moon or the Sun coincides with the one offered by the Scaligerian Egyptologists. They are of the opinion that Osiris had the double name Osiris-Moon, and a disc such as this one used

to be one of his symbols ([1062], pages 22, 68 and 69. See figs. 2.40 and 2.41). However, one should also bear in mind that Osiris used to symbolize the sun.

We can see that a final identification of any particular disc on the Egyptian Zodiac with the Moon or the Sun is only feasible after all possible options are tried and all the necessary astronomical calculations performed – which is exactly what we shall do in Chron3, Part 2.

Mediaeval drawings of Mercury were based on the idea that both Mercury and Janus were considered gods of trade, and patrons of contracts of all sorts. Janus is an "ancient" Roman god with *two faces* ([533], Volume 2, p. 684). His two faces face different sides, q.v. in figs. 2.42 and 2.43. Mercury is always close to the Sun and never drifts too far away from it. In Tesnierio's book [1440] we see Mercury's famous caduceus resembling a *trident* in the hands of the planet Mercury (see fig. 2.44). Another depiction of Mercury, allegedly dating from the XVI century, can be seen in fig. 2.45.

We shall limit ourselves to these examples, since in Chron3, Part 2, we shall study all possible planet identification options for the Egyptian zodiacs with the greatest care, and select a finite version.

However, one shouldn't think that what we encounter in the Egyptian zodiacs is the fixed result of a *real* astronomical observation. The fact is that in the Middle Ages certain important dates were apparently written down as picture horoscopes, or "celestial dates" of sorts. This is why when a temple commemorating some ancient event would be erected in

Fig. 2.27. An ancient picture of the constellation of Virgo from an astronomical book by Bacharach. Virgo is holding a bunch of wheat ears. Near her hand is the star called Spica, or the "Ear of Wheat". Taken from [1021]. Also see [543], page 81, ill. 44.

Fig. 2.28. Famous Egyptian *Book of the Dead.* The "ancient" Egyptian god Anubis is weighing the good and the bad deeds of humans on a scale. The subject is clearly a Christian one, popular in the Middle Ages. Taken from [1448], plate 3. Also see the photograph on the back of the book cover [1448].

the XVI-XVIII century, for instance, the zodiacal dislocation of the planets could well be calculated for the "ancient date" in question, and then depicted on the dome of a temple.

Let us now report the datings of the horoscope depicted on the Long Dendera Zodiac. This bas-relief used to be on the dome of the temple, in the hall one enters via the main entrance.

N. A. Morozov offered the following astronomical solution, basing it on his partial deciphering: 6 April 540 a.d. ([544], Volume 6).

Fig. 2.29 Another "ancient" Egyptian picture from the *Book of the Dead.* The subject is the same one – the comparison of good and evil deeds of humankind at doomsday; its origins are clearly Christian. Anubis is weighing human deeds on a scale. Taken from [1448], plate 31.

N. S. Kellin and D. V. Denisenko extended the analysis methods, and offered the 14 April 1394 as an astronomical solution.

An even more detailed, albeit partial as well, deciphering of the Long Zodiac as well as its dating were performed by T. N. Fomenko. The result was the 7 or 8 of April, 1727 ([MET3]:3).

The finite answer obtained by A. T. Fomenko and G. V. Nosovskiy in 2001 shall be formulated below.

5.3. The horoscopes of Brugsch and Flinders Petrie

In 1857 the eminent Egyptologist Henry Brugsch found an "ancient" Egyptian wooden coffin in Egypt that was in a remarkable condition, as if it had been created in a very recent period, q.v. in fig. 2.46. It contained a typical "ancient" Egyptian mummy ([1054]). On the inside of the lid there was a symbolic representation of the starlit sky with planets affixed to constellations – a horoscope, in other words, q.v. in CHRON3, Part 2.

The entire burial rite, the artwork, and especially the demotic scripture doubtlessly indicated (according to the Scaligerite historians) that the finding was exceptionally ancient. Brugsch himself dated it to the I century a.d. at the earliest ([1054]).

Fig. 2.30. "Ancient" Egyptian picture of the Christian Judgement Day as described in the Biblical Apocalypse. Jesus Christ is judging people; in front of him we see a scribe with a scroll, and somewhat further on is Anubis, weighing the deeds of the people on a scale. This bas-relief, distinctively Christian, is kept in the Egyptian Thèbes, Memnonium. Taken from [1100], A., Volume II, pl. 36.

Fig. 2.31. A similar Christian Judgement Day scene from an "ancient" Egyptian papyrus. Jesus Christ is judging people, with Anubis weighing their deeds. It is evident that such drawings could only have appeared after the description of the Apocalypse, not in the dateless antiquity that they are nowadays supposed to date from. Taken from [1100], A., Volume II, pl. 67.

The demotic inscriptions are close to the figures of some zodiacal constellations and make direct references to the planets they contain.

The situation is extremely advantageous. Indeed, all the necessary astronomical information is given clearly and accurately by the creators of this remarkable "ancient" Egyptian sepulchre.

All the researchers of the horoscope were hypnotized by the alleged antiquity of the demotic scripture (first discovered by Ackerblade 20 years prior to Champollion deciphering hieroglyph writing), and dated the artefact to the historical epoch pertinent to the Scaligerian chronology of Egypt. What ensued was a series of attempts made by astronomers to identify the horoscope with the very historical epoch that concurs with the Scaligerian version of the Egyptian chronology. This, however, failed to yield any results, since, as was the case with the Dendera Zodiacs, the ancient sky, from deep antiquity and until the first centuries of the new era, had never been positioned the way the lid of the sarcophagus depicts it.

The astronomer M. A. Viliev went a little further on along the time axis than the other astronomers. However, he didn't go beyond the first couple of centuries of the new era. It is interesting that despite N. A. Morozov's numerous suggestions, M. A. Viliev *refused* to carry on with the research so that it would include the Middle Ages as well, since this would blatantly contradict the Scaligerian chronology, which Viliev did not doubt in the least ([544], Volume 6). N. A. Morozov proceeded with the calculations and went forwards in time ([544], Volume 6, pages 694-728). N. A. Morozov
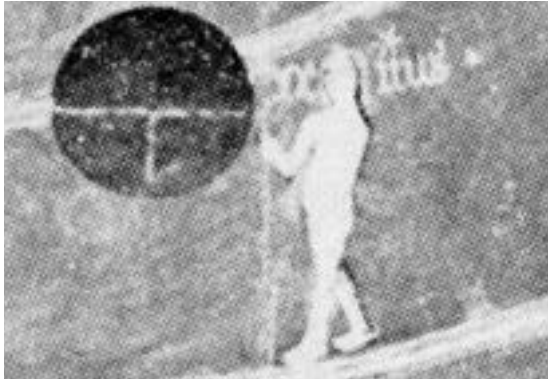
Fig. 2.32. A close-up of the picture of the planet Venus on an old French miniature. The complete title of this astronomical miniature was "Zodiac and the Planets," and it can be seen in its entirety on one of the preceding illustrations. We see Venus depicted as a woman in motion, with the inscription above her head saying "Venus." Taken from [1046], ill. 80.

discovered the following astronomical solution, basing his calculations on his own partial deciphering of the Zodiac found by Brugsch: 17 November 1682. The final 2001 solution of A. T. Fomenko and G. V. Nosovskiy will be formulated below.

In 1901 the eminent Egyptologist W. M. Flinders Petrie found an artificial cave in Upper Egypt, near Sohag, that had been used as an "ancient" Egyptian sepulchre. Its walls were covered by ancient artwork and graffiti, and there were two colour horoscopes on the ceiling (see *Athribi* by W. M. Flinders Petrie in Volume 14 of the *British School of Archaeology in Egypt Research Account*, 1902. Details in CHRON3, Part 2.)

In 1919, academician B. A. Turayev suggested to N. A. Morozov performing an astronomical dating of the horoscopes. Their preliminary analysis and deciphering were performed by E. B. Knobel in Britain ([1224]), who also gave preliminary datings to the horoscopes. The dates he obtained were as follows: 20 May 52 A.D. and 20 January 59 A.D.

However, E. B. Knobel remarked that he found the position of Mercury in the second horoscope quite dubious. In other words, the solution he offered only satisfied the conditions if one was to close one's eyes at some inconsistencies. As for the first horoscope – he put forth the hypothesis that the planetary positions had been calculated by the astronomer who had painted it, and had not actually been observed. The

planets were far away from the positions indicated on the horoscope on 20 January 59 A.D. ([1224]). Apart from Mercury, E. B. Knobel had his doubts about the position of Venus in the first horoscope.

This led E. B. Knobel to try out a few other "ancient" versions pertinent to the epoch where the Scaligerian Egyptologists had a priori placed them, guided by the style of burial. However, all attempts by Knobel to find a better astronomical solution yielded no result whatsoever. All the other options that he researched proved to satisfy the given conditions even less.

Furthermore, when M. A. Viliev verified Knobel's calculations, it turned out that Knobel had also been somewhat imprecise with Mars and Saturn as well. This made both of Knobel's dates (52 A.D. and 59 A.D.) highly questionable.

Then M. A. Viliev performed another series of calculations, and offered his own solution of 186 B.C. and 179 B.C. However, it turned out that the subconscious (or conscious) desire of M. A. Viliev to make the solution fit into the historical interval a priori defined by the Scaligerian chronology of "ancient" Egypt, led him to make unjustified allowances. In [544], Volume 6, pages 733-736, all of Viliev's calculations are cited, with all of their errors and deviations pointed out as a good example of what a desire to save the Scaligerian chronology by all means might lead to.

Then M. A. Viliev put forth a hypothesis that the couple 349 and 355 A.D. would provide a better fit. However, numerous verifications proved this pair to be even worse than the first solution. Another similar attempt also led to a complete fiasco.

N. A. Morozov carried on with the research. However, he also failed to find a precise astronomical solution. This started to look most peculiar indeed. The character of the painted horoscopes clearly indicated that the ancient painter was fully aware of what he was painting, and not just making it up as he went along.

Then N. A. Morozov began to suspect that the horoscope had been deciphered incorrectly. He analyzed the horoscope and suggested another interpretation, a more logical one in his opinion. It was partial as well; however, the astronomical solution for the problem presented itself as 6 May 1049 for the upper horoscope and 9 February 1065 for the lower.

Now we are ready to consider the finite answer obtained by A. T. Fomenko and G. V. Nosovskiy in 2001.

Fig. 2.33. Ancient miniature titled "The Planet Venus" from the *Livre des echés amoureux*. The planet Venus is depicted as a woman with the name Venus written above her head. Taken from [1046], ill. 71.

Fig. 2.34.
A close-up of a fragment
of the previous picture
of Venus. Taken from
[1046], ill. 71.

5.4. Finite datings of the Egyptian Zodiacs based on their complete deciphering, as obtained by A. T. Fomenko and G. V. Nosovskiy in 2001

Let us quote a part of our introduction to Chron3, Part 2.

Previous attempts at deciphering the "ancient" Egyptian Zodiacs – primarily, those of N. A. Morozov, N. S. Kellin, D. V. Denisenko and T. N. Fomenko – have all been partial, since some part of the zodiacal depictions remained unidentified. The complications they had to face are perfectly understandable, since to try out all possible permutations one would have to perform a gigantic amount of calculations impossible to do manually. The deciphering we obtained in 2001 was the first one to be completed, with an exhaustive computer search of *every* symbol on the zodiacs that was interpreted ambiguously. The singular complete deciphering possible was the only one that accounted for everything depicted on the zodiacs, and allowed for an astronomical solution to boot. This fact is extremely important. The very existence of such a complete and datable deciphering is anything but obvious. Furthermore, the astronomical solution that we have discovered is the only one possible. This makes our deciphering finite.

It turns out that the complete deciphering that we performed includes the partial decipherings formerly offered by N. A. Morozov and T. N. Fomenko, but differs from them somewhat in details. These differences have the shape of circumstantiations in the complex situations where one had to choose between a great number of possible options. This concerns the differing symbols for the sun and the moon that the mediaeval astronomers used. All of the previously mentioned researchers did not perform a computer search, and based their choice on analysis of the "ancient"

Fig. 2.35. Picture of the Sun from a mediaeval book by Tesnierio dating from 1562. The symbol of the Sun – a disc with a dot in the centre – can be seen to the left of the baculus in Sun's hand. Taken from [1440], also see [543], page 71, ill. 31.

Fig. 2.36. Mediaeval picture of the Moon. Its astronomical symbol is a crescent. Illustration in the book by Tesnierio dated 1562 ([1440]). Here the crescent is also drawn on the head of the woman (the moon), but already in the shape of a pair of "horns." This is the manner in which Moses used to be portrayed in ancient Bibles – with "horns" on his head. As it is pointed out in CHRON6, this means that the mediaeval painters would have had to be carrying on an ancient tradition of depicting the Biblical Moses with a crescent on his head. Taken from [1440]. Also see [543], page 71, ill. 32.

Egyptian symbols in general. Their interpretations weren't finite in a number of cases; therefore, the dates they obtained did not fit ideally. This explains the fact that the precise datings that we have obtained differ from the ones previously obtained by N. A. Morozov, N. S. Kellin, D. V. Denisenko and T. N. Fomenko; however, it is significant that all the exact dates remain mediaeval. It turns out that no finite astronomical solution for the Egyptian zodiac goes further back in time than the XII century A.D.

Let us re-emphasize that computer calculations allowed us to discover that the previous partial decipherings provided for the foundation of the finite complete interpretation of the zodiac, confirming that the research preceding ours was conducted in the correct general direction.

The computer datings we have obtained for the "ancient" Egyptian zodiacs are as follows:

- The Round Zodiac of Dendera:
  morning of 20 March 1185 A.D.
- The Long Zodiac of Dendera:
  22-26 April 1168 A.D.
- The zodiac from the Greater Temple of Esna:
  31 March – 3 April 1394 A.D.

- The zodiac from the Lesser Temple of Esna:
  6-8 May 1404 A.D.

The Athribean horoscopes of Flinders Petrie:
- The upper zodiac:
  15-16 May 1230 A.D.
- The lower zodiac:
  9-10 February 1268 A.D.
- The Horoscope of Thebe by H. Brugsch:
  - The horoscope of demotic subscripts:
    18 November 1861 A.D.;
  - The "Horoscope without Staves":
    6-7 October 1841 A.D.;
  - The "Horoscope with Boats":
    15 February 1853 A.D.
- The "Colour Horoscope of Thebe" (Luxor):
  5-8 September 1182.

This research of ours proved to include a great body of material, and was quite complex. It turned into an entire book that we include in CHRON3.

5.5. On the errors of E. S. Goloubtsova and Y. A. Zavenyagin

This could mark the end of our account of Egyptian zodiacs and their datings, if it wasn't for the publication of an article by E. S. Goloubtsova and Y. A. Zavenyagin often quoted by the proponents of Scaligerian chronology. The article in question is titled "One More Study of the 'New Methods' and Ancient Chronology" and was published in *Voprosy Istorii (Historical Issues)*, No. 12, 1983, pages 68-83 ([179]). The authors of the article tried to question the dating of the Round Zodiac as obtained by N. A. Morozov. It will be edifying to study the article of Goloubtsova and Zavenyagin, since it appears to be concerned primarily with using a computer for solving the problem, which makes the conclusions offered seem scientific and objective.

E. S. Goloubtsova and Y. A. Zavenyagin write that "the complication lies in the fact that it is perfectly unclear which figure (of the five on the Round Zodiac) should stand for which planet." This is why they suggest considering the Zodiac to depict the following planets: Saturn, Venus, Mercury, Mars and Jupiter. However, the authors *don't offer any proof* for such an interpretation of the Zodiac ([179]). Furthermore, they cite the following table and suggest that the

Fig. 2.37. A fragment of a bas-relief located on the ceiling of the Great Dendera Temple, close to the entrance. Both discs are depicting the same celestial deity worshipped by surrounding figures. The first disc with an alectryon's eye is inscribed within a crescent. What we are seeing most probably represents the solar and the lunar symbols. The second disc with an alectryon's eye contains 14 identical glyphs that we presume to represent a half of the lunar month, namely, the interval between the new moon and the full moon. A 3D copy made by Napoleon's painters. Taken from [1100], A., Volume IV, pl.19.

Fig. 2.39. A close-up of a fragment of the bas-relief near the entrance to the Dendera Temple showing either the lunar or the solar disc with 14 glyphs inside. Most probably, the glyphs served to represent half of the lunar month – 14 days out of 28, or the period between the new moon and the full moon. The 14 figures are divided into 2 groups of 7, perhaps a pictorial representation of two seven-day weeks. Taken from [1100], A., Volume IV, pl. 19.

Fig. 2.38. A close-up of a fragment of the bas-relief near the entrance to the Dendera Temple showing either the lunar or the solar disc inscribed within a crescent. Taken from [1100], A., Volume IV, pl. 19.

Fig. 2.40. The "ancient" Egyptian Osiris as either the Moon or the Sun, with his symbol – the disc with the head of an alectryon. Taken from [1062], page 22.

Fig. 2.41. The "ancient" Egyptian Osiris as either the Moon or the Sun, with his symbol – the alectryon disc. Taken from [1062], page 69.

Fig. 2.42. An old picture showing the two-faced "ancient" Roman god Janus. Taken from [966], Volume 2, page 339.

Fig. 2.43. "Janus, the Roman god watching doors and gates from both the inside and the outside" ([1425], page 3). Taken from [1425], page 3.

Fig. 2.44. An ancient picture of the planet Mercury with a caduceus, from Tesnierio's book of astronomy dating from 1562 ([1440]). Taken from [543], page 71, ill. 33.

Fig. 2.45. A sculpture of Mercury with his caduceus resembling the Greek letter ψ *(psi)*. A sculpture by Giambologna allegedly dated 1564. The museum of Bologna, bronze. The sculpture was most probably made in the XVII-XVIII centuries at the latest. The finish is beautiful; the running or flying figure looks practically modern. Taken from [533], Volume 2, page 140.

Fig. 2.46. "Ancient" Egyptian wooden sarcophagus found by G. Brugsch in Thebe in 1857. Allegedly dating from 90 A.D. Taken from a book by Henri Brugsch titled *Recueil de Monuments égyptiens, dessinés sur lieux.* 1862. Also see [543], page 297, ill. 148.

abovementioned planets are localized on the Zodiac with a possible deviation rate of 20 degrees to one side or another.

Figure 1 between Pisces and Aquarius   0 ± 20 degrees, or (340 - 360 - 20)

Figure 2 between Cancer and Gemini   120 ± 20 degrees, or (100 - 140)

Figure 3 between Virgo and Leo   180 ± 20 degrees, or (160 - 200)

Figure 4 between Libra and Virgo   220 ± 20 degrees, or (200 - 240)

Figure 5 between Capricorn and Aquarius
                                             320 ± 20 degrees, or (300 - 340)

The authors report that none of these possible combinations were realized in 568 A.D. (supporting this by computer calculations) and add that "this conclusion is of course valid for any deciphering of the figures of the Round Zodiac." ([179]) They proceed to offer 53 A.D. as a solution.

So, one may get the impression that the astronomers have finally refuted "the fantastic inventions of Morozov" and confirmed the Scaligerian chronology once again.

However, nothing here is quite as simple as it is presented to be. This is a reflection of the typical illusion of the average lay observer that it suffices to "load" some mathematical data into a computer so that "mathematical science" can provide us with an immediate answer. Let us return to the very beginning and observe just what Goloubtsova and Zavenyagin, the authors of [179], load into their computers. They

The "ancient" Egyptian pharaohs from *The Universal Chronicle* by Hartmann Schedel allegedly dating from 1493. They are portrayed as Christian kings of the XIV-XVI centuries wearing imperial trefoil crowns. The "ancient" pharaoh Amenope is of particular interest to us since he's wearing a crown and holding an orb and a sceptre in his hands. The pharaoh below him is wearing heavy gold-plated mediaeval armour (painted yellow on the engraving). Taken from [1396:1], sheet XXVII.

The "ancient" Biblical rulers Zemaraim, Amariah, Achab, Jezebel, Ahaziah and Jehoram. An engraving from *The Universal Chronicle* by Hartmann Schedel allegedly dating from 1493. They are portrayed as Christian kings. We see the imperial trefoil crowns on the heads of Zemaraim, Amariah, Achab, Jezebel and Joram (see CHRON7 for more details on the crown). Ahaziah has a Christian cross on his orb, but there are no crosses on the orbs of Zemaraim and Jehoram. Amariah, Achab and Jezebel have no orbs whatsoever. We can see that the authors of *The Universal Chronicle* portrayed different rulers with different royal regalia. This obviously indicates the possibility that these were referring to certain differences between them that have no meaning to us anymore. Taken from [1396:1], sheet XLIX, reverse.

The "ancient" Biblical rulers Jehu, Jehoahaz, Jehoas and Jeroboam. The engraving is from *The Universal Chronicle* by Hartmann Schedel allegedly dating from 1493. They are portrayed as Christian kings with orbs and sceptres. Jehu and Jehoahaz have sceptres with crosses; Jehoahaz and Jeroboam have orbs with crosses. The sceptres of Jehoas and Jeroboam have no crosses, and there are none on the orbs of Jehu and Jehoas. Taken from [1396:1], sheet LII, reverse.

write that the five planets of the Round Zodiac are al-legedly localized near the following constellations: Pisces, Aquarius, Cancer, Gemini, Virgo and Capricorn, giving presumed intervals (in degrees) that contain the planets: 340-360-20 degrees, 100-140 degrees, 160-200 degrees, 200-240 degrees and 300-340 degrees.

The problem here is that the data used by the authors of [179] as a basis for their calculations fails to concur with the actual depiction of the planets on the dome of the temple. Where did their strange table come from, the one they processed mathematically afterwards? It would have sufficed to carefully study the photographs of the Round Zodiac contained in

the scientific literature, in order to reconstruct the correct horoscope. It differs considerably from the one described by Goloubtsova and Zavenyagin, since the Round Zodiac explicitly depicts Venus in either Aries or Pisces.

In our opinion, the fact that the authors of [179] "omitted" the constellation of Aries in their table speaks for itself. It is little wonder that the computer "failed to find a solution" in the Middle Ages. As we can see, Goloubtsova and Zavenyagin have *falsified the initial data* and *have de facto prohibited the computer from studying the interval between 25 and 50 degrees* – the actual location of the constellation of Aries.

E. S. Goloubtsova and Y. A. Zavenyagin appear to have wanted to find confirmation of Scaligerian chronology without being overly accountable for the means they used for this end. This means that avid Scaligerites should think twice before referring to this "research."

6.
ASTRONOMY IN THE NEW TESTAMENT

EXAMPLE 1. The terms and images used in mediaeval astronomical literature for the designation of planets and constellations can be compiled in a "dictionary" of sorts, which can later be used to decipher and to date similar terms and images in old chronicles.

E. Renan was apparently the first scientist to point out that the biblical book of the Apocalypse contains the verbal description of a horoscope ([725]). Not being an astronomer himself, Renan did not date the horoscope, in spite of the fact that the dating of the Apocalypse was of the greatest interest. ([765], page 135). But the precise astronomical solution for the Apocalypse horoscope does exist, and it is both unique and unequivocal. This horoscope dates from the 1 October 1486 A.D. (See details below.)

EXAMPLE 2. The dating of the eclipse, which, according to the early Christian authors, accompanied the crucifixion of Jesus Christ. Such authors as Sinkellos, Flegon, Africanus, and Eusebius wrote about this eclipse. However, the Evangelical descriptions aren't very explicit on whether the description refers to a solar eclipse, or a lunar one. The Scaligerian chronology presumes the eclipse to be lunar, although this is highly debatable. The ecclesial tradition has preserved evidence of the eclipse being solar. The Gospel according to Luke, for instance, states specifically: "For the sun stopped shining." (Luke 23:45)

The gospel of Nicodemius, declared apocryphal by historians, says: "And it was about the sixth hour, and there was darkness over the land until the ninth hour, for the sun was darkened… And Pilate sent for the Jews and said unto them: Did ye see that which came to pass? But they said: There was an eclipse of the sun after the accustomed sort." (Nicodemius XI – [29], page 83).

The last phrase in this passage shows that in the epoch when the gospel of Nicodemius was written,

the fact that the eclipses of the sun occur according to a specific astronomical law was well understood. There is a direct reference made to the fact that the eclipse happened "after the accustomed sort". This most probably reflects that such astronomical notions already existed in the mediaeval period.

The Scaligerian "astronomical solution" giving the lunar eclipse of the 3 April 33 A.D. as the moment of the crucifixion of Christ ([1154]) does not hold water whatsoever. This fact is well known, although de-emphasized, and this problem is deliberately presented as nonexistent. (See the discussion in [544], Volume 1.)

In spite of the totally questionable characteristics of the "evangelical eclipse" extracted from early Christian texts, and repeatedly discussed in chronological literature, an attempt can be made to date this eclipse precisely. To do so, both the solar and lunar versions of the eclipse should be examined. A suitable astronomical solution exists in the years ranging from 200 A.D. to 800 A.D. The lunar eclipse solution of 368 A.D. was found by Morozov ([544], Volume 1). However, Morozov did not extend his calculations to later centuries for the reasons cited above — the primary one being his unswerving confidence in the Scaligerian chronology from the VI century A.D. and on. The calculations of the authors of the present book covered the entire historical period up to 1600 A.D. and revealed an additional precise astronomical solution, quite unexpectedly. This was the lunar eclipse of the 3 April 1075 A.D. Our solution differs from the Scaligerian by over 1.000 years, and by 700 from Morozov's. (See more details below.)

We recall that the Scaligerian astronomical dates and modern calculations only come to concurrence from the XI century A.D. and on, and are only fully reliable from as recently as the XIII century A.D.

But if we consider the eclipse described in the Gospels to be solar, we cannot fail to notice that a total solar eclipse whose shadow track traversed Italy and Byzantium occurred in the XI century, on 16 February 1086. This solution was found by G. V. Nosovskiy. A detailed description of this solar eclipse and its concurrence with the data provided by the ecclesial tradition in what concerns the crucifixion of Jesus Christ can be found in CHRON6. In CHRON2 we shall return to a detailed analysis of the "evangelical eclipse."

Annexes

Grammatical analysis of an eclipse description in History by Thucydides

by *Y. V. Alexeyeva* (Moscow State University, 1976)

In the present Annex, references are made to the list of books and notes in the end of the Annex.

Curcius [d1], Schwyzer [d2] and Cherny [d3] noted the similarity between systems [d4] of perfective and imperfective aspects of the verb in the ancient Greek and Slavonic languages. Thus, the imperfective aspect of a verb (praesens) indicates that the action in question is rather a process that goes through various stages over the course of time. Cf.: *I am dying* (imperfective aspect), *I have died* (perfective aspect), *I am dead* (conveys effective aspect). While perfective aspect of a verb (aoristus) (cf.: similarly) indicates either a momentary action (cf.: *gave a cry, drew breath*), or the moment when a given action begins (cf.: *she started singing*), or ends (cf.: *she stopped singing*). One should note, however, that the ancient Greek language has, besides perfective and imperfective aspects, effective aspect (perfectum) (cf.: *gave a cry, drew breath*), which does not exist in contemporary Slavonic languages but still can be seen as traces (in the Russian language, for instance ([d5])). This aspect is used to either refer to an achieved result of action usually continuing at the moment of speech, or a state caused by such completed action which is still a reality.

Let us look at a phrase by Thucydides:

> … ὁ ἥλιος ἐξέλιπε … καὶ πάλιν ἀνεπληρώθη, γενόμενος μηνοειδής καὶ ἀστέρων τινῶν ἐκφανέντων.

Let us research it grammatically in order to establish the correct order of events. In doing so, we shall present other possible interpretations of this phrase which, albeit constructed correctly from the grammatical point of view, can prove void of meaning, such as the phrase "he had died, but continues to breathe".

The beginning of the phrase goes as follows:

> … ὁ ἥλιος ἐξέλιπε … καὶ πάλιν ἀνεπληρώθη …

That is, "The sun darkened (disappeared)… and again (anew) replenished". The form [d4] ἐξέλιπε (darkened) is used to refer to the 3rd person, singular, active voice of the verb ἐκλείπω, indicative mood, perfective aspect (3 Sin. aoristi indicative activi). The form [d4] ἀνεπληρώθη (replenished) is used to refer to the 3rd person, singular, passive voice of the verb ἀναπληρόω, indicative mood, perfective aspect (3 Sin. aoristi indicativi passivi). Further: ἐξέλιπε and ἀνεπληρώθη are similar predicates related to the subject ὁ ἥλιος (the sun). Actions expressed by these verbs in perfective aspect are not simultaneous. This difference, a certain gap between ἐξέλιπε (darkened) and ἀνεπληρώθη (replenished), is indicated by πάλιν (again, rursus, wieder, вновь).

NOTE 1. In the Greek language, in order to indicate the simultaneity of actions performed by the same person (in present, past, and future tense), personal form of one verb and the imperfective aspect of another one's participle [d6]. E.g.: "The sun, darkening, replenished", "The sun, having darkened, replenished".

NOTE 2. A number of verbs in imperfective aspect, being predicates with one subject, can denote actions which at a certain moment of development occur simultaneously (i.e. imperfective aspect neither indicate the beginning nor the end of an action).

The next part of the phrase:

γενόμενος μηνοειδής καὶ
ἀστὲρων τινῶν ἐκφανέντων

– explains circumstances that provide us with additional information. In adverse case, these actions would likewise be expressed by personal forms of verbs:

ὁ ἥλιος ἐξέλιπε … καὶ πὰλιν ἀνεπληρώθη
καὶ ἐγένετο μηνοειδής καὶ ἀστέρες τινες
ἐξεφάνησαν ἐξεφάνθησαν,

"The sun darkened… and again replenished, and became similar to the crescent, and some stars appeared in sight". Further: γενόμενος – the perfective aspect participle from the verb γὶγνομαι, the coordinated in masculine gender, singular, nominative with the subject ὁ ἥλιος. The participle is used instead of adverbial modifier subordinate clause, when the subject of a subordinate clause is a part of the principal clause (in this case, the subject of the principal clause) [d7]. Perfective aspect participle (adverbial modifier and the predicative participles) always expresses precedence [d8] to the action of the principal verb, as opposed to the imperfective aspect participle that refers to the simultaneity of its action and that of the principal verb. See Par. III, Note 1. In our phrase γενόμενος (having become, having turned) means precedence only to the action ἀνεπληρώθη (replenished). First, if the author should need to indicate that this action (γενόμενος – having become) equally precedes action ἐξέλιπε (darkened) and action ἀνεπληρώθη, then the phrase would be constructed differently, along the lines of:

… γενόμενος μὲν μηνοειδής ὁ ἥλιος ἐξέλιπε
καὶ πὰλιν ἀνεπληρώθη ἐκφανέντωνδέ …,

or "having become similar to the crescent, the sun darkened and again replenished».

Second, καὶ πὰλιν means a strict sequence of actions ἐξέλιπε and ἀνεπληρώθη, clearly dividing one from the other [d9]. Therefore, one should not believe the circumstances accompanying one action (ἀνεπληρώθη) to equally relate to the other (ἐξέλιπε). Thus, the sun had acquired the shape of the crescent before it replenished, and after (or simultaneously with) having darkened. Translators to German, English, and French can only convey this sequence by description: these languages have no participle which would possess the meaning of precedence. Adverbial modifier subordinate clause, the subject of which does not occur in the principal clause, neither in nominative nor in any other indirect case, can be replaced by a special adverbial modifier construction Genitivus Absolutus, where the subject of a subordinate clause is in the genitive case, and the predicate is replaced [d10] by the genitive case of the participle of the same verb.

If the construction Genitivus Absolutus contains an imperfective aspect participle, then the action of the construction occurs simultaneously with that of the principal clause [d10]. E.g.,

ὁ ἥλιος ἀνεπληρώθη ἀστέρωντινῶν
ἐκφαινομένων,

"The sun replenished, at the same time some stars were coming in sight".

If the construction Genitivus Absolutus contains a perfective aspect participle, then the action of the construction precedes that of the principal verb [d10]. E.g.,

ὁ ἥλιος … ἀνεπληρώθη …
ἀστὲρων τινῶν ἐκφανεντων,

"The sun replenished, before that some stars came in sight".

In our phrase, the action of the construction Genitivus Absolutus only precedes the action ἀνεπληρώθη (replenished). Indeed, the phrase:

… ὁ ἥλιος ἐξέλιπε … καὶ πὰλιν
ἀνεπληρώθη γενόμενος μηνοειδής
καὶ ἀστὲρων τινῶν ἐκφανέντων,

the conjunction καὶ πὰλιν joins the predicate ἐξέλιπε (darkened) and the predicate ἀνεπληρώθη (replenished), while the conjunction [d11] καὶ joins the circumstance actions which, for the purposes explained above, are constructed differently from the grammatical viewpoint. However, Thucydides might have expressed both circumstance actions through similar adverbial modifier phrases, such as:

… ὁ ἥλιος ἐξέλιπε … καὶ πὰλιν
ἀνεπληρώθη, ἐπεί ἐγένετο μηνοειδής καὶ
ἐπεί ἀστέρες τινες ἐξεφάνησαν,

"The sun darkened and again replenished after it had become similar to the crescent, and after some stars have come in sight".

Thus, he actions γενόμενος and ἀστέρων τινῶν ἐκφανέντων are joined by the conjunction καὶ and compose a united adverbial modifier group related to ἀνεπληρώθη; however, it is impossible to establish, judging merely by the grammatical analysis, the correlation between the actions γενόμενος μηνοειδής and ἀστέρων τινῶν ἐκφανέντων (the appearance of the crescent sun and the stars) – namely, the precedence of one over the other, or the determination of a dependence existing between the two events.

Note 3. If we consider καὶ to unite the construction Genitivus Absolutus with the whole of the phrase

… ὁ ἥλιος ἐξέλιπε … καὶ πάλιν ἀνεπληρώθη
… καὶ ἀστέρων τινῶν ἐκφανέντων,

– then the appearance of stars in the sky turns out to have preceded both the darkening and the replenishing of the sun. In this case, the contraposition (of the appearance of stars against the darkening and the replenishing of the sun) is obvious and not expressed by particles μέν and δέ grammatically:

… ὁ ἥλιος ἐξέλιπε … καὶ πάλιν ἀνεπληρώθη
… καὶ ἀστέρων δέ τινῶν ἐκφανέντων.

Therefore, such a stance is erroneous. On the other hand, acknowledging that καὶ simply unites the construction Genitivus Absolutus with the whole of the phrase, without any contrapositions of any kind attests to the fact that the action of the "appearance of stars" is of equal value with, and similar to, the action of "darkening-replenishing", which is impossible. Firstly, Genitivus Absolutus is by nature an adverbial modifier and of equal value with a subordinate clause, therefore cannot have equal rights with the principal clause, but should be subordinate thereto. Secondly, ἐξέλιπε, ἀνεπληρώθη and ἀστέρων τινῶν ἐκφανέντων, [d13], possess no similarity, and so it would be an error to ascribe the actions "darkened", "replenished", "stars appeared", etc. to the same class of events.

Conclusion. *Sequence of events is as follows: the sun darkened – assumed the shape of a crescent – the stars came into sight – the sun replenished again.*

As a rule, contemporary languages convey the constructions of the ancient Greek by proxy of description, where the forms available are clarified by means of adverbs or other form words [d13]. Thus, the construction of Genitivus Absolutus is replaced by a subordinate clause, and the adverb γενόμενος – by a personal form of verb. To show the precedence of the action "assumed the shape of a crescent" to the action "replenished", a relevant word order is used.

Literature and notes to Annex 2.1.

[d1] Curtius, *Erläuterungen zu meiner griechischen Schulgrammatik*, pp. 181-182.

[d2] Schwyzer, *Griechische Grammatik*, t. 1, Bd. 2, 1950, p. 248 and on.

[d3] Cherny, *On Relation of Aspects of Russian Verb to Greek Tenses*. SPb., 1887, pp. 4-8.

[d4] The issue of terms needs to be discussed: verbal forms are a complex fusion of meanings – aspect, mood, tense, etc. Disagreement may arise on whether a verb is in an indicative mood of the perfective aspect, or whether the verb of perfective aspect is in the indicative mood; whether an aspect has the participles of verb "x", or whether the verb "x" of a certain aspect has participles. Issues like that are beyond the scope of the current work and believed to be terminological issues. In this case, we are concerned with the fact that two forms can be contraposed by the same feature – aspect of verb, e.g.: ἐξέλειπε, ἐξέλιπε – 3rd person, singular, active voice, indicative mood, but ἐξέλειπε is a verb of the imperfective aspect, while ἐξέλιπε is a verb of the perfective aspect.

[d5] Such as gender contraposition in the past tense. The existing form originates from a perfect adverb.

[d6] Cherny, *Grammar of the Greek Language*, part 2, 103 a, paragraph 45.

[d7] *Ibid.*, paragraphs 45 and 138—143.

[d8] *Ibid.*, paragraph 103 b, Cherny, *On the Relation of Aspects…*, pp. 21—28.

[d9] Künner, *Ausführliche Grammatik der Griechischen Sprache*, t. 2, Bd. 2, 524 (1).

[d10] Cherny, *Grammar of the Greek Language*, part 2, paragraphs 45 and 144.

[d11] Künner, *Ausführliche Grammatik der Griechischen Sprache*, 521(1-2).

[d12] *Ibid.*, paragraph 522. On simultaneity and the precedence of actions, see also Cherny, *On the Relation of Aspects…*, especially the pages 21-28.

[d13] For instance, in the English translation by Bloomfield «having been» is clarified by «after», in the French translation – «avoir eu», «ayant brillé» – by «après» and «dans l'intervalle».

The new dating
of the astronomical horoscope
as described in the Apocalypse

A. T. Fomenko and G. V. Nosovskiy

1.
THE PROPOSED RESEARCH METHOD

Let us attempt to date ancient artefacts containing astronomical or astrological symbolism in the following natural manner: we shall study astronomical references contained in a number of ancient documents with the aid of the *mediaeval* system of astrological symbols. Many mediaeval books on astrology, for instance, identify planets with *chariots or with horses drawing these chariots* across the celestial sphere. Planetary trajectories were probably perceived as equine leaps.

Our method revolves around the comparison of the studied text with similar mediaeval texts containing both astrological symbols and their *interpretations* in terms that are comprehensible to us. In other words, we propose to read old astrological records with the aid of a mediaeval astrological "dictionary" of sorts, one that identified chariots or horses with planets. Of course, the applicability of the method will be substantiated in this way only if the use of such a dictionary should help us with obtaining intelligible results that can be confirmed by other independent procedures of dating of old documents.

N. A. Morozov had been the first one to apply this procedure to several Biblical books that contained apparent astronomical or astrological symbolism. The dates enumerated in this introduction were obtained by Morozov. After the appearance of his works on this topic ([542] and [543]) many specialists persistently but unsuccessfully attempted to find errors in his calculations – however, the correctness of his interpretation of Biblical texts with the aid of a mediaeval "astrological dictionary" defied doubts as a rule. Morozov's reading of astrological texts was at first perceived by historians as completely natural and containing no aberrations.

N. A. Morozov had also been a pioneer in his assumption that the author of the Biblical Apocalypse coded nothing intentionally, but only described what he actually saw on the celestial sphere using the astronomical language of his time ([542] and [544], Volume 1, pages 3-70).

We can leap ahead for a short instance in order to tell the reader that Morozov's dating of the Apocalypse to the fourth century A.D. does not in fact concur with the explicit data contained in the text of the Apocalypse one hundred per cent. Being erroneously convinced of the correctness of the Scaligerian chronology after the sixth century A.D., Morozov stopped at the first, not entirely successful, early mediaeval solution, having deliberately rejected the much better astronomical solution from the end of the fifteenth century A.D. – one fitting *perfectly*, as unprejudiced analysis shows.

2.
GENERAL INFORMATION
ABOUT THE APOCALYPSE AND THE TIME
OF ITS CREATION

The authors cite the Apocalypse from the 1898, 1912, and 1968 Russian editions of the Bible ([67]). The translation uses the New International Version.

The Apocalypse, also called the Book of Revelation, is the twenty-seventh and last book of the New Testament. It is also the last book of the contemporary canon of the Bible. The Apocalypse is considered an integral part of the New Testament. However, in mediaeval Russia the Apocalypse was not included in the New Testament manuscripts as a rule. As we shall demonstrate in the chapters related to the Slavic Bible manuscripts in CHRON6, Slavic manuscripts of the Apocalypse are exceptionally rare – for instance, there is only one known manuscript of the Apocalypse dating from the IX-XIII centuries, whereas there are 158 known manuscripts of the remaining books of the New Testament dating from the same period. Furthermore, even as recently as the XVII century, references to the Apocalypse and the Revelation of St. John the Divine apparently could indicate entirely different books. (See Appendix 2 to CHRON6.)

This means that many uncertainties are closely related to the history of the Apocalypse, and primarily with its dating. Proposed dates are very diverse, pointing at the disagreement amidst the historians. For example, Vandenberg van Eysing dated the Apocalypse to 140 A.D., A. Y. Lentsman to 68–69 A.D., A. Robertson to 93–95 A.D., Garnak and E. Fisher to not earlier then 136 A.D., and so forth. (See the survey in [765].)

I. T. Senderlend wrote that "dating the Book of Revelation to this epoch [the end of first century A.D. – A. F.] or indeed any other epoch at all [sic! – A. F.] is a task of tremendous complexity" ([765], page 135).

Furthermore, in the opinion of V. P. Rozhitsyn and M. P. Zhakov ([732]), the creation of the Apocalypse was completed in the II-IV centuries A.D., most likely in the IV century! This opinion is in no way congruous with the Scaliger-Petavius chronology.

The Apocalypse itself doesn't contain a single explicit chronological indication of the epoch when it was written. No actual historical figures have been identified as definitely living in the epoch of the cre-

ation of the Apocalypse. No absolute dates whatsoever have been given in the work itself. The Apocalypse is commonly considered to be *the last* written book of New Testament; however, F. H. Baur, for one, has categorically asserted that the Apocalypse is not the last, but the "*earliest* writing of the New Testament" ([489], page 127). A. P. Kazhdan and P. I. Kovalev had also been of the opinion that the Apocalypse was the *first* book of the New Testament, and not the *last* one ([765], page 119).

Furthermore, some researchers categorically reject to credit the Apocalypse to John, who had allegedly written a Gospel and three Epistles. Generally, it is assumed that no exact information about the author of the Apocalypse remains in existence ([448], page 117).

G. M. Lifshitz noted that the author of the Apocalypse is quite familiar with astronomy: the images of the dragon, beasts, horses, and so forth that he describes resemble the figures of the constellations in the celestial sphere, which are similarly designated on the mediaeval star charts ([489], pages 235-236).

However, all these considerations had already been expressed by N. A. Morozov in the beginning of the XX century. Apparently his line of reasoning produced a strong impression on at least some of the abovementioned authors, and they actually reiterated his assertions without referring to him, which is very typical for such researchers.

M. M. Kublanov sums up: "The reasons for this abundance of contradictory hypotheses on questions of chronology are explained primarily by the scarcity of reliable evidence. The ancients did not leave us any reliable data in this respect. Under the prevailing circumstances, *the only means for the datings of these writings are the writings themselves*… The establishment of a reliable chronology of the New Testament still remains an open issue" ([448], page 120).

So, let us finally turn to the Apocalypse itself. *Its astronomical nature becomes immediately evident, especially when comparing it with the ancient celestial charts.* (See the mediaeval maps allegedly dating from the XVI century, for instance – figs 3.1, 3.2, 3.3, and 3.4.)

Apparently, some time after the Apocalypse was written, its explicit astronomical meaning was forgotten. Even if some professional astronomer noted

Fig. 3.1. Star chart of the Northern Hemisphere done by A. Dürer (1471-1528), allegedly in 1527. Taken from [90], page 8.

the similarity of figures on the ancient maps with the descriptions of the Apocalypse, he perceived this as coincidental, because he wasn't able to free himself from the indoctrination of Scaligerian notions. Today's Bible historians cannot conceive of any astronomical connotations in the Biblical texts. There may be a unique possibility, as we shall now demon-

strate, of *dating* some fragments of the Bible *astronomically*. If this be the case, though, we shall come up with dates that *do not correspond* with the ones the "tradition" insists upon *at all*.

The Apocalypse contains the famous prophecy about the Doomsday, or the Judgement Day. This prophecy is in immediate relation to the symbolic

Fig. 3.2. Star chart of the Southern Hemisphere done by A. Dürer (1471-1528), allegedly in 1527. Taken from [90], page 9.

description of what the author observed on the celestial sphere. This was still remembered by the authors of the illustrations to the Apocalypse who had lived around the XVI century. We give one such example on fig. 3.5. As we have already noted, the inability of the latter day commentators to comprehend the astronomical symbolism of the Apocalypse is directly connected with the loss of knowledge about the correct chronology and with the distortions introduced by the subsequent historians in the XVI-XVIII century. It could also be there was an unspoken general taboo on what concerned such a dangerous subject, which resulted in the misdating of the Apocalypse. One way or another, the understanding

Fig. 3.3. Northern Hemisphere constellations on a star chart from Ptolemy's *Almagest,* allegedly published in 1551. Pay attention to the fact that some figures are wearing *mediaeval* attire. Taken from ***Claudii Ptolemaei Pelusiensis Alexandrini omnia quac extant opera,*** 1551 ([1073]). The book archive of the Pulkovo Observatory (St. Petersburg). Also see [543], the inset between pages 216-217.

of the astronomical descriptions that the Apocalypse contains got lost at some point. The Apocalypse had lost its distinctive astronomical hue in the eyes of the readers. However, its "astronomical component" is not simply exceptionally important – it alone suffices for the dating of the book itself.

Let us turn to the astronomical fragments of the Apocalypse. *The main idea of our study consists in the comparison of the Apocalypse with the mediaeval astronomical maps. Such a comparison reveals many parallels and even direct coincidences between the two.* This allows for the confident determination of the astronomical horoscope as penned out by the author of the Apocalypse.

Fig. 3.4. Southern Hemisphere constellations on a star chart from Ptolemy's *Almagest,* allegedly published in 1551. Taken from *Claudii Ptolemaei Pelusiensis Alexandrini omnia quac extant opera,* 1551 ([1073]). The book archive of the Pulkovo Observatory (St. Petersburg). Also see [543], the inset between pages 216-217. Note that some figures are wearing mediaeval attire.

We propose that the readers divert their attention to a star chart that has the stars pointed out in some manner. Even a contemporary map of the sky should do, but a mediaeval star chart would be better – the one by Albrecht Dürer, for instance, which we have provided on figs. 3.1 and.3.2, or the map from the *Almagest* that one sees on figs. 3.4 and 3.3.

3.
URSA MAJOR AND THE THRONE

The Apocalypse says: "John, To the seven churches in the province of Asia: Grace and peace to you from him who is, and who was, and who is to come, and *from the seven spirits opposite his throne*" (AP 1:4–5).

Fig. 3.5. A drawing from a manuscript of the Apocalypse dating from the XVI century. The author of the miniature emphasizes that the events described occur against a starlit sky. The manuscript is kept in the State Library of Russia, Moscow, folio 98, number 1844, sheet 27, reverse. Taken from [745], Volume 8, page 446.

Fig. 3.6. The Throne constellation, known as Cassiopeia nowadays, and the constellation of the Seven Souls, presently Ursa Major, near the pole. Taken from [542], page 37.

In France, the constellation of Ursa Major is still called The Chariot of Souls. This is how this constellation used to be drawn, q.v. in the mediaeval book by Apianus ([1013]). This ancient figure can be seen below – see Chron1, chapter 4:3.7.)

The Throne: Ursa Major is right in front of this well-known constellation. (See the star chart fragment given on fig. 3.6. Also, the Greek text of the Apocalypse makes references to the *"Throne"* [tronos].)

4.
THE EVENTS TOOK PLACE
ON THE ISLE OF PATMOS

The Apocalypse says: "From the *throne* came flashes of lightning, rumblings and peals of thunder. Before the throne, *seven lamps* were blazing… Also *before the throne there was what looked like a sea of glass, clear as crystal*" (AP 4:5–6).

Thus, seven fiery icon-lamps are situated before the throne on which God sits in glory. The "sea of glass, similar to crystal" apparently is the sky as observed by the author of the Apocalypse.

The Apocalypse says: "I, John, … was on the island of Patmos" (AP 1:9).

The observation point is defined explicitly – the island of Patmos in the Mediterranean. It is also emphasized throughout the entire Apocalypse that the main arena of the events described is the *celestial sphere*.

5.
THE CONSTELLATIONS OF CASSIOPEIA
AND THE THRONE WERE DRAWN
AS CHRIST SITTING ON HIS THRONE
IN THE MIDDLE AGES

The Apocalypse says: "After this I looked, and there before me was a door standing open in heaven… and there before me *was a throne in heaven with someone sitting on it*. And the one who sat there had the appearance of *jasper and carnelian*" (AP 4:1–3).

The person sitting on the throne can be seen on almost every mediaeval star chart – in the *Zodiaque expliqué* ([544], Volume 1, page 81, ill. 36), for instance, or on the star charts of A. Dürer ([544], Volume 4, page 204), on the map of Al-Sufi ([544], Volume 4, page 250, ill. 49), and so forth. Figures 3.7 and 3.8 provide one such image.

Fig. 3.7. The constellation of Cassiopeia from an ancient star chart. Taken from [543], page 70, ill. 30.

Fig. 3.8. The Throne constellation with a human figure sitting on it. Taken from a XVI century tractate titled *Astrognosia*. Book archive of the Pulkovo Observatory. Also see [544], Volume 1, page 221, ill. 60.

Fig. 3.9. The constellation of Cassiopeia from a book by Th. Radinus titled *Sideralis Abyssus,* dated 1551. Book archive of the Pulkovo Observatory. Also see [543], page 267, ill. 139.

All of these maps depict Cassiopeia enthroned.

The enthroned figure can be seen on many star charts of the XVI century, usually in the centre of the Milky Way. The Apocalypse indicates that there is a rainbow that encircles the throne: "A rainbow, resembling an emerald, encircled the throne" (AP 4:3). The rainbow is a sufficiently precise image for the luminous Milky Way that spans the night sky like an arch.

A straightforward comparison of the description of the "enthroned person" with a *gemstone* (we are told that it "had the appearance of jasper and carnelian") strengthens the impression that the images of the Apocalypse are taken from the celestial sphere. Indeed, the comparison of stars with luminous gems is perfectly understandable and natural.

The identification of the constellation of Cassiopeia with Christ, which the Apocalypse actually refers to, was sometimes explicitly depicted on mediaeval maps. For example, the book of Radinus ([1361]) contains a picture of a throne with the *crucified* Cassiopeia upon it. The back of the throne serves as a cross, and the hands of the figure are *pinioned to it*. This is obviously a version of the *Christian crucifix*. (See fig. 3.9.)

The figure of a king on a throne can also be seen on the Egyptian star charts ([1162] and [1077]). On figs. 3.10 and 3.11 one sees Egyptian maps making it evident that the Egyptian symbolism of images is amazingly close to the European, meaning they both belong to the same school.

Therefore, *the Apocalypses contains references to the constellation of Cassiopeia, which was actually perceived as the "stellar image" of Christ (the King) enthroned in the Middle Ages.*

6.
THE MILKY WAY

The Apocalypse refers to the fact that "a rainbow, resembling an emerald, encircled the throne."(AP 4:3) Emerald is a bluish-green gemstone. One sees a "rainbow" encircling the constellation of the Throne on all mediaeval and contemporary star charts. The constellation of the Throne, with "a person enthroned" is always surrounded by the luminous strip of the *Milky Way* ([1162], [1077] and [1361]).

Fig. 3.10. Egyptian Star chart of the Northern Hemisphere. Taken from *Firmamentum Firmianum* by Corbinianus, dated 1731 ([1077]). Book archive of the Pulkovo Observatory. Also see [543], page 276, ill. 143.

Fig. 3.11. Egyptian Star chart of the Southern Hemisphere. Taken from *Firmamentum Firmianum* by Corbinianus, dated 1731 ([1077]). Book archive of the Pulkovo Observatory. Also see [543], page 277, ill. 144.

Fig. 3.12. Ancient astronomy. Taken from *Astra* by Z. Bornman, dating from 1596 ([1045]). Book archive of the Pulkovo Observatory. Also see [543], page 12, ill. 3.

7.
TWENTY-FOUR SIDEREAL HOURS AND THE CONSTELLATION OF THE NORTHERN CROWN

The Apocalypse says: "Surrounding the throne were *twenty-four* other thrones, and seated on them were *twenty-four* elders. They were dressed in white and had crowns of gold on their heads" (AP 4:4).

Any complete astronomy textbook points out that in the days of yore the sky was divided into twenty-four wing-shaped stripes, that is, into twenty-four meridional sectors which converge at the poles of the celestial sphere. (See [542], page 44, or 544, Volume 1, page 7, ill. 6, for instance). These sectors are also called *sidereal hours*, or *direct stellar ascension hours*. The twenty-four hours define the celestial coordinate system, which can clearly be seen in the mediaeval image of the celestial globe in Zacharias Bornman's book (fig. 3.12).

Thus, each "elder" of the Apocalypse apparently is a star hour in the equatorial system of coordinates, which is the division standard for the celestial sphere in astronomy.

The white clothing of the "elders" simply represents the white colour of the stars in the sky. The golden crowns apparently refer to the constellation of the *Northern Crown*, situated close to the *zenith*, that is, *exactly above the heads* of all twenty-four "elders", or hours, or sectors (fig. 3.13).

8.
LEO, TAURUS, SAGITTARIUS, PEGASUS

The Apocalypse says: "Also before the throne there was what looked like a sea of glass, clear as crystal. In the centre, around the throne, were four living creatures, and they were covered with eyes, in front and in back"(AP 4:6–7).

This is a description of the celestial sphere which surrounds the constellation of the Throne and is strewn with stars (or "eyes"). The initially obscure reference to a place "around the throne" becomes intelligible: the actual constellation of the Throne is being referred to, as well as the smaller stars scattered all across the background.

But what does "… were four living creatures, and they were covered with eyes…" mean? This becomes

Fig. 3.13. The Crown (or Diadem) constellation near the pole. Fragment of a chart dating from 1700. Taken from [1160], table 10.1, page 304.

clear from a casual glance at the star chart. Moreover, in the following passage of the Apocalypse it is clearly said that: "the first living creature was like a *lion*, the second was like an *ox*, the third *had a face like a man*, the fourth was *like a flying eagle*" (AP 4:7).

Lion (Leo) is a zodiacal constellation visited by the sun before the beginning of autumn. (See, for example, the mediaeval maps by Dürer and Grienberger ([1162]). See also figs. 3.4, 3.3 and 3.14)

Fig. 3.14. The Leo constellation on a star chart from a book by Grienberger ([1162]). Book archive of the Pulkovo Observatory. Also see [542], page 45, ill. 18.

Fig. 3.15. The Taurus constellation on the star chart from a book by Grienberger ([1162]). Book archive of the Pulkovo Observatory. Also see [542], page 45, ill. 19.

Fig. 3.16. The Sagittarius constellation on the star chart from a book by Grienberger ([1162]). Book archive of the Pulkovo Observatory. Also see [542], page 46, ill. 20.

Fig. 3.17 Three constellations: The Eagle, The Dolphin and Antinoas, as seen on the star chart from a book by Grienberger ([1162]). Book archive of the Pulkovo Observatory. Also see [542], page 47, ill. 22.

Fig. 3.18. The Pegasus constellation on the star chart from a book by Grienberger ([1162]). Book archive of the Pulkovo Observatory. Also see [542], page 46, ill. 21.

Ox (Taurus) is a zodiacal constellation visited by the sun before the beginning of summer. (Look at the same maps of Dürer and Grienberger, as well as fig. 3.15)

The animal with a human face (Centaur) is obviously a reference to the well-known zodiacal constellation of Sagittarius visited by the sun in the beginning of winter. (See fig. 3.16.)

The animal "like a flying eagle isn't in fact the Eagle, although such a constellation exists (see fig. 3.17.) Most likely, this is *the famous Pegasus,* the winged animal that completes the number of constellations in the Apocalypse indicated above. The sun visits the constellation of Pegasus before the beginning of spring. (See fig. 3.18.) Formally, Pegasus is not a zodiacal constellation, but an equatorial one; however, Pegasus almost touches the ecliptic between the zodiacal constellations of Pisces and Aquarius. The word even exists in the Greek text of the Apocalypse, where it refers to a mammal rather than a bird ([542]).

Thus, the Apocalypse clearly enumerates the four main constellations along the ecliptic: the zodiac constellations of Leo, Taurus, Sagittarius, and the "almost zodiacal" Pegasus.

The selection of four well-known constellations in the apexes of the square on the ecliptic is a standard mediaeval astronomical method. Apparently, the four constellations (perhaps some others) were similarly set in the angles of the quadrangular zodiac from the Thebes horoscope of Brugsch (see Chron3, part 2.) Similar *quadrangular zodiacs* were also drawn in mediaeval India ([543], page 115).

Thus, four constellations which denote the seasons form a square or a cross. But since there are exactly twenty-four star sectors (or wings) proceeding from the pole, each one of these animal constellations has exactly six sectors of direct ascension, that is, they have six "wings" around them. In other words, each animal constellation is located in the region that is covered by these six sector-wings on the celestial sphere.

It is notable that *all of this is absolutely accurately described in the Apocalypse,* in which we read that "*each of the four living creatures had six wings and was covered with eyes all around, even under its wings.*" (AP 4:8). The "eyes" here are the stars. By the way, the Greek text formulates this as "inside and around" ([542]).

These "animals covered with eyes inside and

around" are most probably constellations, and so the "eyes" in question should be of a stellar nature. Indeed, they are drawn in precisely this form on any mediaeval star chart (see Dürer's maps in figs. 3.1 and 3.2, for instance, as well as the map from the *Almagest* on figs. 3.4 and 3.3.)

9.
THE DAILY ROTATION OF THE NORTHERN CROWN

In the northern moderate zone of the terrestrial globe, the upper parts of the sectors, or the "wings", never set; however, the lower parts, or the "knees" of the "elders" (sectors) first descend below the horizon, then rise above it again. Therefore, it looks like each sidereal hour rises from its knees on the eastern part of the horizon and then goes down on its knees in the west. They were thus perceived as worshiping the centre of rotation, the north pole of the sky and the constellation of the Throne near it.

Once again, *all of this is accurately described in the Apocalypse*. Actually, the Apocalypse says: "The twenty-four elders fall down before him who sits on the throne, and worship him who lives for ever and ever"(AP 4:10).

In the process of everyday rotation in the Mediterranean latitudes, the constellation of the Northern Crown first rises into the zenith, then descends into the northern part of the horizon. What we have in mind is a local zenith for the latitude of the island of Patmos.

We shan't continue with the enumeration of other constellations and stars mentioned in the Apocalypse, because *the presence of astronomical symbolism in the Apocalypse has already become perfectly clear*. (See also [542] and [544]).

10.
EQUINE PLANETARY IMAGES IN MEDIAEVAL ASTRONOMY

We shall now relate several facts extremely important in what concerns the datings. The first thing that attracted the attention of astronomers to the planets was their rapid movement. Their displacement is very uneven to the observer's eye. The so-

Fig. 3.19. Looping trajectory of Saturn between Cancer and Leo in 1888 and 1889. Taken from [542], page 12, ill. 4.

Fig. 3.20. Looping trajectory of Jupiter in Sagittarius in 1889. Taken from [542], page 12, ill. 5.

Fig. 3.21. Looping trajectory of Mars in Virgo in 1888. Taken from [542], page 13, ill. 6.

Fig. 3.22. Ancient Gaulish coins as seen on the illustrations to John Blake's *Astronomical Myths* dating from 1887. Also see [542], page 14, ills. 8, 9.

called *outer* planets – the ones *outside the Earth's orbit* – are described as moving in regular loops. Examples of such loops for Saturn and Jupiter can be seen in figs. 3.19 and 3.20; for Mars – in figure 3.21. Planets stop, begin retrograde movement, and then *appear to rush forwards yet again*. This apparently gave birth to comparisons with *horses* galloping through the crystal firmament. It is not surprising that astronomy and astrology appealed to this vivid image.

Ancient Gaulish coins bearing images of the equine planets are depicted on fig. 3.22 (see *Astronomical Myths* by John Blake, 1887.) One of them depicts *a horse with a rider* (the letter S) leaping over the urn of the constellation of Aquarius. This constellation is frequently depicted in the form of an urn or a person bearing an urn and pouring water from it, q.v. in the mediaeval book of Albumasar, for instance ([1004]).

On the second coin we see an *equine planet* carrying the constellation of Cancer on its back. The horse leaps over the constellation of Capricorn. (See fig. 3.22.)

These old coins clearly indicate the custom of at least some of the mediaeval astronomers to identify planets with *horses.*

Further development of this symbolism naturally led to the use of the images of planets in the form of horses harnessed into chariots. The solar image in particular was widely used in the Middle Ages and used to be included in the planetary seven.

Horses carting the sun are represented in the astrological book by Ioanne Tesnierio dating from 1562 ([1440] and fig. 3.23), the astrological work by Leopoldi, allegedly published in 1489 ([1247] and fig. 3.24), and the 1515 book by Albumasar ([1004] and figs. 3.25 and 3.26).

Horses driving the planet Mars in the chariot are shown in the 1562 book of Ioanne Tesnierio ([1440] and fig. 3.23), with Mars referred to by its astrological sign, and in the 1515 book by Albumasar ([1004] and fig. 3.27).

Sometimes such books depicted actual horses on chariots, thus identifying chariots with horses. The chariot of Jupiter, for instance, with a galloping centaur drawn on its gigantic wheels, can be seen in the book by Albumasar [1004] (fig. 3.27).

The concept would evolve. Sometimes horses would draw entire constellations. In the book by Bacharach dating from 1562 ([1021]), horses draw the constellation of Auriga. A similar figure can also be seen in the *Astrology* by Radinus (fig. 3.28).

Astronomers ascribed such value to the jumps of the planets that they devised a special symbol of a halted chariot in order to refer to the moments the planets stop before beginning their movement, either forwards or in retrograde. The mediaeval book by Albumasar, for instance ([1004]) depicts the halted chariots of all the planets: Mercury, Venus, Mars, Jupiter, and Saturn (figs. 3.25 and 3.29).

Sometimes, in lieu of horses, the chariots were harnessed to fantasy animals – griffins, eagles, and the like. Similar "horses" draw the planets in the mediaeval books by Albumasar ([1004]) and Ioanne Tesnierio ([1440] and figs. 3.23 and 3.30).

It is well known that in some languages the days of the week were identified with planets in a so-called "planetary week." On the other hand, the days of the week were frequently depicted as horses. When the equine planet passed between the constellations or through them, the constellations were referred to as "saddling" it, thus transforming into the riders of this horse.

But let us return to the Apocalypse.

11.
JUPITER IS IN SAGITTARIUS

The Apocalypse says: "I looked, and there before me was a white horse. Its rider held a bow, and he was given a crown, and he rode out as a conqueror bent on conquest" (AP 6:2).

This apparently describes a bright equine planet carrying the glorious rider, or the constellation with

Celestial chariots of the ancients.

The chariots of: 1) The Sun; 1) The Moon, pulled by maidens; 3) Mercury with eagles; 4) Venus with doves and a cupid; 5) Mars; 6) Jupiter with a cup-bearer and peacocks; 7) Saturn devouring a child, with an asp and a griffin.

From the Opus Matematicum octolibrum by Ioanne Tesnierio. Coloniae Agrippinae, 1562, the Pulkovo Observatory archive.

Fig. 3.23. Mediaeval pictures of the chariots of the Sun, the Moon, Mercury, Venus, Mars, Jupiter and Saturn. Taken from the *Opus Matematicum octolibrum* by Ioanne Tesnierio ([1440]). Coloniae Agrippinae, 1562. Book archive of the Pulkovo Observatory. Also see [543], page 71, ills. 31-37.

the bow. There is only one such constellation in the zodiac – Sagittarius (fig. 3.16).

The horse is said to be white. The Greek text renders this as "dazzling-white" or "shining" ([542]). The combination of the characteristic "conqueror bent on conquest" and the fact that this is the first horse to ride out most likely refers to Jupiter.

Another dazzling-white planet is Venus; however, it cannot be here, since the text of the Apocalypse (12:1) indicates the sun to be in Virgo, in which case Venus, which never goes too far away from the sun, can in no way be in Sagittarius. We are thus given a direct reference to the fact that Jupiter was in Sagittarius.

12.
MARS IS BENEATH PERSEUS IN EITHER GEMINI OR TAURUS

The Apocalypse says: "And there went out another horse that was red [the Greek text renders this as follows: "Then another horse came out, a fiery red one (see [542] – A. F.)]. Its rider was given power to take peace from the earth and to make men slay each other. To him was given a large sword" (AP. 6:4).

What we see here is the description of a red equine planet. There is only one such planet – Mars. There is

Fig. 3.24. A mediaeval picture of the solar chariot. Taken from *Leopoldi compilation de astorum scientia,* 1489 ([1247]). Book archive of the Pulkovo Observatory. Also see [543], page 169, ill. 89.

Fig. 3.25. Mediaeval pictures of the chariots of the Sun, Mercury, Venus and the Moon. Taken from Albumasar's *De Astru Sciencia,* 1515. Book archive of the Pulkovo Observatory. Also see [543], page 240, ills. 117-120.

Chariot of the Sun

Chariot of the Moon

Chariot of Mercury

Chariot of Venus

Fig. 3.26. Mediaeval pictures of the chariots of the Sun, the Moon, Mercury and Venus. Taken from Albumasar's *De Astru Sciencia,* 1515. Book archive of the Pulkovo Observatory. Also see [543], page 156, ills. 78-81.

Chariot of Mars

Chariot of Jupiter

Chariot of Saturn

Fig. 3.27. Mediaeval pictures of the chariots of Mars, Jupiter and Saturn. Taken from Albumasar's *De Astru Sciencia,* 1515. Book archive of the Pulkovo Observatory. Also see [543], page 157, ills. 82-85.

Fig. 3.28. Horses dragging the Auriga constellation. From a book by Radinus dated 1511. Taken from [1361]. Also see [543], page 243, ill. 125.

also only one constellation with a sword – Perseus. Thus, Perseus is described in the Apocalypse as the rider of Mars. Consequently, Mars is located in the zodiac in either Gemini or Taurus, with Perseus above (see the fragment of a mediaeval star chart on fig. 3.31.) This is the map from Ptolemy's *Almagest*. N. A. Morozov proposes to consider this to be an indication that the zodiacal constellation of Aries was located beneath Perseus ([542]). However, it is only in such a case that the word "beneath" could be understood in relation to the ecliptic, that is, the constellation of Perseus were projected onto the ecliptic from its pole. But in such a case Perseus shall be suspended over Mars in an unnatural position – on his back. This can be observed on the same mediaeval map, fig. 3.31.

This description most probably refers to the zodiacal constellations located under the feet of Perseus. These can either be Taurus or Gemini. Perseus seems to be standing on them. But in case with Aries he lies on his back, with his feet directed upwards. Furthermore, it is important to consider the position of the local horizon of the observer. Indeed, when the observer writes that Mars is located beneath Perseus – that is, Perseus was visible above Mars – this most likely means that their position is given in relation to the local horizon. It is natural that one should search for such an astronomical solution, in which the observer would be able to see Perseus above Mars considering the relation to the local horizon – for instance, some location in the Mediterranean region.

This was well understood by N. A. Morozov.

Fig. 3.29. Mediaeval pictures of the chariots of Mars, Jupiter and Saturn. Taken from Albumasar's *De Astru Sciencia,* 1515. Book archive of the Pulkovo Observatory. Also see [543], page 241, ills. 121-123.

Fig. 3.30. A mediaeval picture of Saturn's chariot. Taken from the book titled *Leopoldi compilatio de astrorum scientia,* 1489 ([1247]). Book archive of the Pulkovo Observatory. Also see [543], page 181, ill. 92.

During his consideration of one of the solutions, namely, the solution of 1486 A.D., he did not note any aberrations concerning Mars. But on the date he indicated, 1 October 1486, Mars was located in Gemini and not Aries. We should thus understand that Mars must be searched in either Gemini or Taurus.

13.
MERCURY IS IN LIBRA

The Apocalypse says: "I looked, and there before me was a black horse. Its rider was holding a pair of scales in his hand. Then I heard what sounded like a voice among the four living creatures, saying, 'A quart of wheat for a day's wages, and three quarts of barley for a day's wages, and do not damage the oil and the wine!'" (AP 6:5-6).

Apparently this is Mercury, the faintest of all of the primary planets. Only Mercury, Venus, Mars, Jupiter, and Saturn were considered primary in antiquity.

Fig. 3.31. Constellations of Perseus, Gemini and Taurus on a star chart from Ptolemy's *Almagest.* A close-up of a fragment of a map. We have removed all other constellations so as not to make the illustration look too cumbersome. Taken from the *Pelusiensis Alexandrini omnia quac extant opera* by Claudius Ptolemy. Published in 1551 ([1073]). Book archive of the Pulkovo Observatory. Also see [543], the inset between pages 216-217.

Fig. 3.32. Planet disposition for 1 October 1486. It is distinctly visible that all the planets are located in *exactly the same* constellations as indicated by the Apocalypse.

Mercury is truly the "invisible" planet. Furthermore, due to its location close to the sun, Mercury is only rarely visible due to the intensity of sunshine. Therefore, errors were frequently made determining the position of Mercury in the Middle Ages.

The synodal translation says "a quart on the scale in thy hand". According to the Greek translation, the rider holds a scale in his hand ([542]). The entire verse 6 distinctly speaks about trade. Even the prices of wheat and the barley are given. Mercury was considered the patron of trade.

Thus, Mercury is indicated in Libra.

14.
SATURN IS IN SCORPIO

The Apocalypse says: "I looked, and there before me was a pale horse. Its rider was named Death, and Hades was following close behind him. They were given power over a fourth of the earth to kill by sword, famine and plague, and by the wild beasts of the earth" (AP 6:8).

The Greek text provides the rendering "deathly pale, greenish" ([542]). Most probably, this refers to the ominous planet Saturn. The rider on it, named Death is, apparently, Scorpio. In the Middle Ages Saturn entering Scorpio was considered an omen of great afflictions to come.

The Greek text renders another part of the passage as "They were given power," which corresponds with this pair of death symbols even better ([544], Volume 1, pages 46–47, ill. 27).

N. A. Morozov was not the first one to identify four of the famous horses of the Apocalypse with planets. E. Renan put this hypothesis forth a long before Morozov ([725], page 353). Renan considered that:

red horse = Mars (this is correct),
black = Mercury (this is also correct),
white = Moon (this is incorrect)
pale = Jupiter (also incorrect).

Renan did not provide any proof for the last two identifications, and, as we can see, they actually do not correspond to the description given in the Apocalypse. However, Renan did not even attempt to date the Apocalypse on the basis of this astronomical information.

15.
THE SUN IS IN VIRGO WITH THE MOON UNDERNEATH THE FEET OF THE LATTER

The Apocalypse says: "A great and wondrous sign appeared in heaven: a woman clothed with the sun, with the moon under her feet and a crown of twelve stars on her head" (AP 12:1).

This apparently is the picture of the celestial sphere in its usual mediaeval imagery. The sun is named as being in Virgo. Let us point out that Virgo is the only female constellation on the ecliptic. The moon is lo-

cated at the feet of Virgo. Directly above the head of Virgo, towards the zenith, we see the constellation of Coma Berenices or the Twelve Stars. On any celestial chart one can see the well-known globular cluster, the Diadem, or the Crown. It is referred to as 5024/M5e by the contemporary numeration.

The Apocalypse refers to a crown of twelve stars. It is interesting that the standard designation for globular clusters on star charts is specifically a crown of precisely twelve stars in a circle. (See the maps in [293], for instance).

Thus, the sun is in Virgo and the moon at the feet of Virgo.

16.
VENUS IS IN LEO

The Apocalypse proceeds to tell us that "To him who overcomes… I will also give him the morning star" (Ap. 2:26, 2:28).

The morning star, as is well known, a mediaeval name for Venus. But in zodiacal constellations "he who overcomes" is, of course, the constellation of Leo. This follows directly from the passage "See, the Lion of the tribe of Judah, the Root of David, has triumphed. He is able to open the scroll and its seven seals" (Ap. 5:5). The text of the Apocalypse clearly indicates that "he who overcomes" is Leo.

17.
THE ASTRONOMICAL DATING
OF THE APOCALYPSE BY THE HOROSCOPE
IT CONTAINS

The Apocalypse apparently contains the descriptions of the stars in the sky. They give us the following horoscope:

1. Jupiter in Sagittarius,
2. Mars in Gemini or Taurus (N. A. Morozov included Aries here as well),
3. Saturn in Scorpio,
4. Mercury in Libra,
5. The sun in Virgo,
6. The moon under the feet of Virgo,
7. Venus in Leo.

For a rough astronomical calculation, even three of these basic planets would suffice: Jupiter, Mars,

and Saturn. The sun moves rapidly and makes a complete zodiacal revolution in a year. Therefore it is only useful in determining the month. Mercury is usually poorly visible. (See above.) Therefore, errors were frequently made in determining its position in the Middle Ages.

   • **The Assertion of N. A. Morozov** ([542] and [544], Volume 1, pages 48–50)

N. A. Morozov asserted that the three basic planets of Jupiter, Mars, and Saturn were sufficient for dating the Apocalypse to not earlier than the fourth century A.D., because the indicated horoscope, that is, the arrangement of planets, was only true for 395, 632, 1249, and 1486 A.D.

N. A. Morozov thought that 395 A.D. was the best solution, but in this solution Mars is located above Aries, which, as we have noted, is not very fitting. Morozov was satisfied with this answer, because he thought the Apocalypse could not have been written after the fourth century A.D. But his result was cautiously formulated in this manner: "If the Apocalypse was written during the first four centuries of the Christian era, this happened in 395 A.D." ([542]).

However, nowadays, after the new research into the chronology of antiquity, we understand that Morozov had no real point in limiting himself to the first four centuries of the new era.

After freeing ourselves from these limitations, we can see two additional solutions: a 1249 solution and 1 October, 1486. The solution of 1249 is worse because Mercury, which in this case is in Virgo, is nearer to Leo in that year.

   • **Main Assertion** (A. T. Fomenko and G. V. Nosovskiy)

The solution of 1 October 1486 ideally satisfies all conditions, as indicated in the Apocalypse:

   Jupiter is in Sagittarius,
   Saturn is in Scorpio,
   Mars is in Gemini, close to the boundary with Aries, and directly at the feet of Perseus,
   Mercury is in Libra,
   The sun is in Virgo,
   The moon is under the feet of Virgo, and
   Venus is in Leo.

The arrangement of the planets on 1 October 1486 (shown in figure 3.32) provides clear evidence that all planets are found exactly in the constellations indi-

Fig. 3.33. On 1 October 1486 Jupiter was actually in Sagittarius.

Fig. 3.34. On 1 October 1486 Saturn was actually in Scorpio.

cated in the Apocalypse. We verified this astronomical result, using the Turbo-Sky software, which is modern, simple, and convenient for those approximated calculations. The result is shown in figures 3.33 to 3.39. We can see the application give us the year 1486 as the astronomical solution. See also fig. 3.40.

The visibility conditions of the planets on the night of 1–2 October 1486 was verified for the Mediterranean by using an observation point in the vicinity of the Bosporus as an example.

It turns out that on 1 October 1486 the sun set at 17:30 local time, that is, at 15:30 GMT.

The crescent of the new moon was visible after sunset until 19:00 local time, after which the Moon set at the local horizon.

Saturn was visible until 20:00 local time.

Jupiter was visible until 21:45 local time.

Mars did not become visible immediately, because it was located below the horizon. It ascended at 21:05 local time and was visible the entire night.

At this time Mercury was located at almost the maximum distance from the sun for the terrestrial observer, almost in the maximum elongation, and had a brightness of M = +0.7. Consequently, it was located in almost the best visibility conditions from the Earth.

Fig. 3.35. On 1 October 1486 Mars was actually in Gemini, close to the Taurus border, right under Perseus.

Fig. 3.37. On 1 October 1486 Mercury was actually in Libra.

Fig. 3.38. On 1 October 1486 the Sun was actually in Virgo.

Fig. 3.36. The location of Mars in Gemini, close to Taurus, right under the feet of Perseus, on 1 October 1486.

Fig. 3.39. On 1 October 1486 Venus was actually in Leo.

Fig. 3.40. Planet disposition for 1 October 1486. Calculations performed with Turbo-Sky software.

Mercury was actually visible until 20:15 local time, after which it went under the local horizon.

Venus ascended at 3:00 local time that night, and was perfectly visible up until sunrise.

All of this data was received from the calculations performed with the aid of the Turbo-Sky software, which is convenient for approximate computing.

We re-emphasize that the solution of 1 October 1486 is ideal from all points of view. The arrangement of the planets for 1 October 1486 A.D. is reflected in the Apocalypse with surprising accuracy, as a matter of fact.

It is evident, as one can see on fig. 3.35, that the mediaeval observer was quite correct about Perseus riding Mars: "Its rider was given power to take peace from the earth and to make men slay each other. To him was given a large sword" (AP 6:4). At this time Mars was actually located directly underneath the feet of Perseus. This can clearly be seen on fig. 3.36, which shows a fragment of a mediaeval map from Ptolemy's *Almagest* with the position of Mars for the 1 October 1486 pointed out. Mars was in Gemini, right under the feet of Perseus. And compared to the line of the local horizon in the environs of Bosporus, for 23:00 local time, Mars was exactly under Perseus. Finally, the brightly luminous strip of the Milky Way passes precisely through the constellations of Perseus and Gemini in the nocturnal sky. That is where Mars had been located on that date, and the Milky Way seemingly bound together the constellations of Gemini and Perseus, as well as the planet Mars (fig. 3.36). The mediaeval observer pointed out this remarkable event.

But why did the observer indicate Mars in combination with the constellation of Perseus rather than Gemini? Indeed, Perseus is not a zodiacal constellation, whereas Gemini is. The reason the observer did this apparently owes to the fact that the author of the Apocalypse described the forthcoming Doomsday, that is, a very dramatic event. Therefore, he selected the symbols maximally pertinent to the spirit of the great catastrophe.

The first primary planet (Jupiter) proved to be in Sagittarius, that is, in the "martial constellation," depicted with bow and arrows.

The second primary planet (Saturn) proved to be in Scorpio, that is, in a terrifying, mortally dangerous constellation.

The third primary planet (Mars) proved to be in Gemini, that is, in the "peaceful constellation." But directly above it at this moment was Perseus, the martial constellation with the sword, held in his hands and used for beheading the Gorgon Medusa with her serpent hair and stare that turned all living things to stone (fig. 3.36). Furthermore, Mars himself, as it is commonly known, was considered the God of War. It is therefore quite clear that the author of the Apocalypse selected Perseus with the Sword due to its perfect correspondence with the eschatological scenario.

One begins to understand why Mars is referred to in the Greek text of the Apocalypse as interpreted by N. A. Morozov as having "*gone beyond, to the other side*", qv above and in [542]. Fig. 3.32 demonstrates clearly that on the 1 October 1486 Mars had really been in visible opposition to the other planets which were all grouped in Scorpio. A terrestrial observer would see Jupiter, Saturn, the moon, Mercury and the sun near one side of the celestial dome, and Mars *drawn to its other side,* qv on fig. 3.32.

Why did Morozov reject the solutions of 1249 and 1486 A.D.? Morozov's answer is simple and sincere. He frankly explained: "Hardly anyone would dare to say in this respect that the Apocalypse could have been written on 14 September 1249" ([544], Volume 1, page 53]. He did not even consider 1486 as a possible solution.

However, nowadays, more than seventy years after N. A. Morozov, and relying on new results obtained from our books on the new chronology, among other things, one can confidently claim the Apocalypse to have been written precisely in 1486, that is, during epoch of the Ottoman=Ataman conquest. See CHRON6 for more details.

Why is 1486 the most congruous dating for the writing of the Apocalypse in our reconstruction? As it is well known, the Apocalypse is primarily concerned with all matters related to Doomsday. "The Apocalypse and its visions (apart from the first three chapters)… is an image of the final hour of the World… or the Eschaton, and it must serve as a manual for the Revelations" ([845], Book 3, Volume 11, page 511). But that year, when the entire mediaeval Christian world anticipated Doomsday in terror, is well known to history. This is 1492 A.D., which was year 7000 from Adam of the Byzantine era. According

to the tradition of the epoch, Doomsday was supposed to fall on this year precisely.

The Apocalypse is thus concerned with the advent of the Judgement Day, expected in 1492 A.D. The first lines of the Apocalypse state explicitly: "Because the time is near" (AP 1:3). That should mean the proximity of the year 1492 A.D., or the year 7000 since Adam. Note that it was in 1492, that Columbus set out to sea, in the age of Doomsday expectations.

Therefore, our independent astronomical dating of the Apocalypse to 1486 A.D. – that is, 6994 years from Adam – corresponds ideally with the content of the book. The Apocalypse was written only six years before the expected End of the World in the fifteenth century.

Dating the Apocalypse to the end of the fifteenth century also corresponds ideally with our formal mathematical result as discussed in CHRON1, Chapter 5:9.3. The result lies in the fact that chronologically the Apocalypse must not be considered the last book of the Bible canon, but, rather, one of the first books of the Old Testament. That is, the Apocalypse chronologically occurs simultaneously with the Pentateuch of Moses and not with the Gospels. Let us recall that the contemporary Bible begins precisely with the Pentateuch of Moses.

In other words, the Apocalypse is chronologically incorrectly placed in the Bible next to the Gospels. Is was written much later than the Gospels. The Gospels, according to our reconstruction, describe the events of XI century. See more details below.

18.
OUR RECONSTRUCTION OF THE INITIAL CONTENT OF THE APOCALYPSE

The Apocalypse predicts Judgement Day masking the prediction with astronomical symbolism. However, it is possible that this symbolism was obscured in the subsequent editions of the XVI-XVII centuries. An astronomical horoscope is encrypted in the Apocalypse, and provides for the possibility of dating it. The date of the horoscope is 1 October 1486, which ideally corresponds to the expected mediaeval date of the Judgement Day in 1492, which is explained well by our reconstruction.

The Apocalypse was most likely written at the end of the fifteenth century A.D., several years before what the entire mediaeval Christian world perceived as the impending Judgement Day in the year 7.000 since Adam, or 1492 A.D. Deep fear of this event is vividly reflected in the Apocalypse.

The consensual opinion that the Apocalypse was written by the Apostle John, the author of the fourth Gospel, is apparently incorrect, because the Gospels were most likely written in the XI-XII century, that is, earlier than the XV century. On the contrary, the assertion of many old church writers that the Apostle John, and Johann, the author of the Apocalypse, are different persons, is confirmed by our independent astronomical dating of the Book of Revelation. Thus, the Gospels and the Apocalypse were written in significantly different epochs.

We have already pointed out that the epoch of the Apocalypse apparently coincides with the epoch of the Pentateuch. As we demonstrate in CHRON6, this is the time of the Ottoman=Ataman conquest of the XV century A.D., that is, the "Biblical Exodus" under the leadership of Moses and Aaron – Leo-Lion. The Apocalypse is correct in referring to him as "he who overcomes". The constellation of Leo, "is adorned with the morning star," or Venus. The identification of "he who overcomes" mentioned in the Apocalypse with Leo – Aaron or Moses – is also proved by the following verse: "To him who overcomes, I will give some of the hidden manna. I will also give him a white stone with a new name written on it, known only to him who receives it" (Ap.2:17). Let us recall that manna is described in the Biblical book of Exodus, which, as we will show in CHRON6, tells of the Ottoman = Ataman conquest of the XV century. But in the white stone – with the "new name" traced on it – we can easily recognize the stone tablets of Moses on which the new law, or Deuteronomy, was written.

After having astronomically dated the Apocalypse to the end of the XV century, it is interesting to evaluate the mediaeval illustrations to this Biblical text from an entirely new point of view. A mediaeval XVI century picture of the Apocalypse can be seen on fig. 3.41 ([745], Volume 8, page 442). We see a rider who is shooting a musket (figure 3.42). The lock of the musket is quite visible. The rider pulls the trigger, and the barrel disgorges fire. The powder horn can be seen attached to the barrel. The word "Death"

Fig. 3.41. A mediaeval illustration from the Biblical Apocalypse. XVI century. The Lenin State Library, folio 98, no. 1844, sheet 24. One sees a rider firing a musket and the fire of a shot coming from the barrel. Taken from [745], Volume 8, page 442.

Fig. 3.42. Fragment of an illustration from the Biblical Apocalypse. Death is riding a horse and firing a musket. Taken from [745], Volume 8, page 442.

is written above the rider. We see that mediaeval artists reflected the realities of the epoch when the Apocalypse was written in their illustrations. It is well known that firearms, muskets, and guns were already widely used on the XV century battlefields. For example, in the Constantinople siege of 1453, the Ottomans used heavy artillery ([240]).

Another XVI century illustration from the Apocalypse ([745], Volume 8, page 451 and fig. 3.43) shows the destruction made by an angel "blowing into the pipe" from which a fountain of flame escapes. This very probably depicts a mediaeval gun, shooting with either cannonballs or case-shot. The mediaeval artist depicted the flame of a large explosion where the ball landed. Apparently, in the Middle Ages guns were sometimes referred to and depicted as pipes belching fire and smoke. This tradition of depicting guns on the illustrations to the Apocalypse survived until as re-

cently as the XVIII century. Figure 3.44 provides an illustration from the *Commented Apocalypse* of 1799 ([745], Volume 9, page 485). On the whole, the subject is the same as that of the XVI century illustration – an angel "blowing into a pipe" disgorging fire. We also see the flames rising from the explosion of the missile at a distance. A gunshot is even better visible in the mediaeval illustration to the Apocalypse which one sees on fig. 3.45 (see [745], Volume 9, page 486). Above we can see the "pipe," into which the angel blows. The flame escapes the pipe, and we see a faraway explosion of the projectile hitting the ground.

From the XV century and on, guns invoked terror in Europe. The appearance of such terrifying images on the illustrations to the recently written Apocalypse was therefore completely natural. All of this, albeit indirectly, confirms our astronomical dating of the Apocalypse to the end of the fifteenth century.

Fig. 3.43. A mediaeval illustration from the Biblical Apocalypse. XVI century. The Lenin State Library, folio 98, no. 1844, sheet 33. The angel is "blowing a horn" which disgorges a bright fiery flare. Probably a representation of a mediaeval cannon in action. Taken from [745], Volume 8, page 451.

Fig. 3.44. A mediaeval illustration from the Biblical *Commented Apocalypse,* 1799. The State Library of Russia, folio 247, no. 802, sheet 61, reverse. We see the subject that we're already familiar with: a horn-shaped cannon firing a shot. One also sees the explosion of the cannonball. Taken from [745], Volume 9, page 485.

Fig. 3.45. A mediaeval illustration from the Biblical *Commented Apocalypse,* 1799. The State Library of Russia, folio 247, no. 802, sheet 61, reverse. The same subject. Gunfire, the "grenade" falling and exploding. Taken from [745], Volume 9, page 486.

Astronomy
in the Old Testament

1.
MEDIAEVAL ASTRONOMY
IN THE OLD TESTAMENT BOOK OF EZEKIEL

1.1. The title of the book

Charles Brigg, Professor of Theology, wrote that "most of the books in the Old Testament were compiled by authors whose names and exact relation to the writings were lost in deep antiquity" ([543], pages 119-120).

Let us regard the actual name of the book of Ezekiel. As N. A. Morozov pointed out, the Hebrew IEZK-AL translates as "The Lord Shall Overcome" ([543], page 226). Scaligerian history considers Ezekiel to have been an author who allegedly lived between 595 and 574 B.C. However, the word "Ezekiel" is only used to refer to a person just once (Ezekiel 24:24), in a rather vague context that becomes clear only after we translate "Ezekiel" as "The Lord Shall Overcome." God addresses the author of the prophecy dozens of times, always saying "thou" and never calling him by name. One can come to the logical conclusion that "Ezekiel" is merely the name of the actual book, which concurs with its content perfectly well – predicting the victory of some currently disavowed deity. This rational explanation of the name of the book is in no way related to the analysis of its astronomical content, as we can understand perfectly well; however, it is useful for pointing out just how useful it is to think

about the possibility that ancient words and names may be translated, which clarifies a great many things.

N. A. Morozov's analysis performed in [543] shows that the entire prophecy is based on two main topics:

1) Visible borrowings from the New Testament Apocalypse

Modern commentators interpret this in reverse, since the books of the Old Covenant are considered to have been written a lot earlier than those of the New Covenant. However, this is most probably erroneous, and the Gospels either *predate* the Heptateuch, or were created around the same time (see Chron6).

2) The astronomical "visions" of the author of the prophecy

N. A. Morozov was of the opinion that the book of Ezekiel contained a planetary horoscope. He even tried to date it astronomically, coming up with the date 453 A.D. as the first solution which he had found moving forwards in time from deep antiquity towards contemporaneity. There may have been other solutions dating to a much later epoch which Morozov couldn't find due to his certainty that the Bible couldn't have been written later than the V-VI century A.D. This was a grave error of his. The Bible was most probably created in the XI-XVII centuries A.D. See Chron6 for more details.

Our opinion is as follows: unlike the Apocalypse, the horoscope of Ezekiel is described *extremely vaguely*, and this ambiguous and Delphic description is *hardly applicable to astronomical dating*. We shall re-

Fig. 4.1. A mediaeval star chart from a book by S. De Lubienietski titled *Historia universalis omnium Cometarum,* Lugduni Batavorum, 1681 ([1257]). Book archive of the Pulkovo Observatory (Saint-Petersburg). Also see [543], pages 26-27.

frain from wasting time on it; should the readers get really interested, Morozov's oeuvre [543] gives an exhaustive account of the issue.

What N. A. Morozov is definitely correct about is the fact that the testamentary book of Ezekiel is really filled with all kinds of *astronomical* information that allows us to consider this book a mediaeval – possibly late mediaeval – astrological text, and be quite confident about it. This particular fact is important enough for us to illustrate it by a couple of examples following ([543]).

1.2. The description of the Milky Way and the Ophiuchus constellation

The Bible says: "The heavens were opened, and I saw visions of God" (Ezekiel, 1:1). We are given the same direct indication as we got from the book of Revelation – namely, that we should observe the sky.

N. A. Morozov periodically queried the synodal translation of the Bible using the Hebraic text without vocalizations. Apparently, the authors of the synodal "translation" often failed to understand the old text. These circumstantiations of Morozov often fa-

cilitate the translation greatly and elucidate the actual meaning, so we shall be making references to his comments ([543]).

The Bible says: "And I looked, and, behold, a whirl-wind came out of the north, a great cloud, and a fire infolding itself, and a brightness was about it [a more exact translation would be "an irradiance like a river of light," q.v. [543] – A. F.]" (Ezekiel 1:4).

The irradiance goes to the south from the north. Since the events take place in the starlit sky, as we have mentioned above, this reference most probably means the Milky Way, which may really be perceived as a luminous river of light going to the south from the north.

The Biblical observer looks towards the luminosity and sees that "out of the midst thereof came the likeness of four living creatures [the Hebraic text uses the term "living entities," whereas the synodal translation refers to them as "beasts," q.v. [543] – A. F.]… they had the likeness of a man" (Ezekiel 1:5). N. A. Morozov makes the correction referring to the Hebraic text, and suggests that the Bible really says that "the image of man could be seen right there." What could be the possible meaning of this?

Nearly every astronomical map from the Middle Ages – see fig. 4.1, for instance – has a constellation in the south, right in the middle of the Milky Way, that has the shape of a man – the Ophiuchus (see fig. 4.2).

1.3. The Biblical description of the astronomical sectors, or "wings," on the celestial sphere

As we have already mentioned, the mediaeval celestial sphere was divided into 12 pairs of star hours that were pictured as meridians that converged at the poles of the sphere and divided it into 24 sectors, or "wings," q.v. fig. 3.12. Ophiuchus is holding the Serpent, and both of them occupy two pairs of wings – two on the left, and two on the right. In our case, four "living entities" are mentioned in the constellation of Ophiuchus – possibly planets. The Bible, for instance, tells us that "every one had four wings" (Ezekiel 1:6). See the mediaeval book of Borman dating from 1596, for example ([1045]), which gives the position of Ophiuchus as well as that of his wings.

The synodal translation tells us that the "living creatures" also had four faces each. N. A. Morozov points out the missing words "one obscured" and gives his own translation: "he was the one with four faces, and it was he in his mystery who had possessed four wings" (Ezekiel 1:6).

The synodal translation tells us that "they four had their faces and their wings. *Their wings were joined one to another*, and they turned not when they went; they went every one straight forward" (Ezekiel 1:9). It is obvious that the reference is to the sectors, or the wings on the celestial sphere. It is natural that they should be *joined together*.

N. A. Morozov's translation proceeds to tell us that "the procession of these creatures was immutable, and the concavity of their pass was like the concavity of a circumference, and all four faces shone like polished brass."

1.4. The constellations of Leo, Taurus and Aquila

Let us now regard a mediaeval map – [1256] or [1257] by S. Lubienietski, for instance (see fig. 4.1), and study the constellations in the south of the sky,

Fig. 4.2. The constellation of the Ophiuchus against the background of the Milky Way. A mediaeval book titled *Astrognosia*, XV century. Book archive of the Pulkovo Observatory (St. Petersburg). Also see [544], Volume 1, page 218, ill. 57.

next to Sagittarius. On the right we see Ophiuchus with the Serpent, with Leo on his right and Taurus on his left. On top, near the peak of the trajectory of the sphere's rotation, we can see Aquila in the centre, above all of the constellations. The human hands of Sagittarius and Hercules can be seen rising from beyond the equinoctial, as described in the prophecy: "and they had the hands of a man under their wings" (Ezekiel 1:8).

This astronomical picture is explicitly described in Ezekiel's prophecy. The Bible says the following (in N. A. Morozov's translation):

"The outline of Leo was to the right of all four, with the outline of Taurus to the right of all four, and Aquila above the four" (Ezekiel 1:10).

Since Morozov's translation differs from the synodal at times, we shall demonstrate the difference by the following example. The synodal text of this quotation is as follows: "they four had… the face of the lion, on the right side: and they four had the face of the ox on the left side; they four also had the face of an eagle" (Ezekiel 1:10). The similarity is apparent; however, N. A. Morozov's translation makes a lot more sense.

According to the Bible, "as for the likeness of the living creatures, their appearance was like burning coals of fire, and like the appearance of lamps" (Ezekiel 1:13). What we see here is an astronomical comparison of the planets with lamps and coals. "And

Fig. 4.3. A mediaeval picture of the ten celestial spheres as concentric wheels. Taken from the Latin book by J. Ch. Steeb titled *Coelum Sephiroticum Hebraeorum (The Sephirotic Skies of the Jews),* Maguntiae, 1679 ([1412]). Book archive of the Pulkovo Observatory (St. Petersburg). Also see [543], page 15, ill. 5.

the living creatures ran and returned as the appearance of a flash of lightning [in zigzags – A. F.]." This must refer to the forthright and retrograde movement of planets on the celestial sphere (see figs. 3.19, 3.20 and 3.21).

1.5. The Biblical description of the mediaeval "wheels," or planetary orbits

We shall now return to the mediaeval charts. They often depict planet orbits as concentric wheels, with the Earth in the centre. They reflect the initial concepts of the mediaeval astronomers who used to view Earth as the centre of the universe. Such imagery is clearly pre-Copernican. One should, however, bear in mind that the planetary orbits would occasionally be drawn in that manner as recently as the XVII-XVIII century.

The concentric planetary orbits can be observed in the mediaeval book by J. Steeb ([1412], see fig. 4.3). The wheels bear the planetary names and insignia.

The first wheel, which is also the greatest, is the empyrean.

The second wheel is the sphere of immobile stars.

The third wheel is the celestial ocean.

The wheels to follow are those of Saturn, Jupiter, Mars, the sun, Venus, Mercury, and the moon.

Fig. 4.4. According to the mediaeval cosmological concept, the planetary orbits had the shape of concentric wheels. Taken from the book titled *Canonum Astronomicum*, 1553 ([1319]). Book archive of the Pulkovo Observatory (St. Petersburg). Also see [543], page 54, ill. 22.

Planetary orbits are also drawn as concentric wheels in the book by Orontius Finaeus Delphinatis allegedly dating from 1553 ([1320], fig. 4.4). The orbital wheels can rotate independently. Concentric wheels, or several concentric planetary orbits, can be seen in Sacro Bosco's (or Sacrobusto's) book allegedly dating from 1516 ([1384], fig. 4.5). One should emphasize that the felloes of the wheels are *covered in stars*, or eyes, which is quite natural, since the orbits are celestial objects and exist amidst myriads of stars.

Wheel-like orbits are drawn in another book by Sacro Bosco (or Sacrobusto) allegedly dating from the XVI century ([1385]). The felloes of the concen-

tric orbital wheels bear the images of the Zodiacal constellations filled with *stars*, q.v. fig. 4.6.

Wheel-like orbits with felloes covered in stars can also be seen in the book by Corbinianus allegedly dating from 1731 ([1077] and fig. 4.7). The orbital wheels roll over the zodiacal belt. In general, one has to remark that mediaeval science had developed an extremely complex articulation system for the *orbital wheels* in order to explain planetary movements. This science was cast into oblivion by Copernicus, who placed the sun in the centre of the system instead of the Earth. However, this sophisticated geocentric system used to flourish before Copernicus.

Fig. 4.5. Planetary orbits as concentric wheels. Taken from a mediaeval book by J. de Sacro Bosco (or Sacrobusto) titled *Sphera Materialis*, 1516 ([1384]). Book archive of the Pulkovo Observatory (St. Petersburg). Also see [543], page 118, ill. 65.

Let us return to the Biblical prophecy of Ezekiel. The Bible says:

"Behold *one wheel* upon the earth *by the living creatures* [planets? – A. F.], with his four faces. The appearance of the wheels and their work was like unto the colour of a beryl: and they four had *one likeness* [or identical construction – A. F.]: and their appearance and their work was as it were a wheel in the middle of a wheel… As for their *rings*, they were so *high* [above the ground – A. F.] that they were dreadful; and their rings were full of eyes [full of stars! – A. F.] round about them four. And when the living creatures *went*, the wheels *went by them*: and when the living creatures were *lifted up* from the earth, the wheels were *lifted up in line with them* [the rotation of the planetary orbital wheel – A. F.]. Whithersoever the spirit was to go, they went… and the wheels were *lifted up over against them*: for *the spirit of the living creature was in the wheels*. When those went, these went; and when those stood, these stood; and when those were *lifted up* from the earth, *the wheels were lifted up in line with them*." (Ezekiel, 1:15-16, 1:18-21)

The Biblical observer quite explicitly describes planets and their quotidian movement over the orbital wheels. The description is so clear that identifying the "living creatures" with planets appears quite natural.

By the way, many late mediaeval painters who il-

Fig. 4.6. Mediaeval wheel-like orbits. The terrestrial globe is in the centre, and the planetary orbits surround it. Taken from a book by Sacro Bosco (or Sacrobusto) titled *Opusculu de Sphaera… clarissimi philosophi Ioannis de Sacro busto*, Viennae Pannoniae, 1518 ([1385]). Book archive of the Pulkovo Observatory (St. Petersburg). Also see [543], page 131, ill. 72.

Fig. 4.7. Mediaeval Egyptian cosmology. The wheel-like orbits roll across the zodiac. Taken from *Firmamentum Firmianum* by Corbinianus dating from 1731 ([1077]). Book archive of the Pulkovo Observatory (St. Petersburg). Also see [543], page 254, ill. 136.

lustrated the Bible without understanding the correct astronomical meaning of the "eyes round about them four" would interpret this literally and draw a multitude of eyes covering the entire body of the animal. The result was of dubious aesthetic value, and could serve as yet another illustration of the distortions one gets when later commentators fail to understand the original meaning of the ancient text.

1.6. Parallels with the astronomical symbolism of the Apocalypse

What we encounter later in the prophecy of Ezekiel resembles direct quotations from the Apocalypse, a New Covenant book: starlit sky, semblance of a crystal, etc.

According to the Bible, "the likeness of the firmament upon the heads of the living creature was as the colour of the terrible crystal, stretched forth over their heads above. And under the firmament were their wings straight, the one toward the other… and every one had two, which covered on that side, their bodies. And when they went, I heard the noise of their wings… when they stood, they let down their wings" (Ezekiel 1:22-24).

Also: "And above the firmament that was over their heads was *the likeness of a throne* [the constellation of the Throne, q.v. above – A. F], as the appearance of a sapphire stone: and upon the *likeness of the throne* was the likeness as the appearance of a sapphire stone: and upon the likeness of the throne was the likeness as the *appearance of a man above upon it*" (Ezekiel 1:26).

This is practically identical to the Revelation of St. John, where we encounter the following: "and behold, a *throne* was set in heaven, and one sat on the throne… and there was a rainbow [the Milky Way – A. F.] round about the throne, in sight like unto an emerald" (Revelation 4:2-3). See the previous paragraph.

1.7. Biblical cherubim, chariots, and mediaeval planetary orbital wheels

Let us remind the reader that *planets* were often represented as *chariots* in the Middle Ages. More on this can be seen in the paragraph above that deals with the Apocalypse. Chariots would be drawn by horses, and occasionally fantasy animals. A planet would ride a chariot, and the gigantic *orbital wheels* would bear the planetary insignia, or zodiacal constellations where the wheels were rolling. Let us point out that planets move over the zodiac, and the symbolism used here was typical for the Middle Ages.

It is amazing that the book of Ezekiel describes *virtually identical symbols*. This fact alone would give sufficient cause to inquire whether this Old Covenant book could have been written in the Middle Ages, around the XIII-XVI centuries A.D.

The Bible tells us that: "behold, in the *firmament* [in the sky yet again – A. F.] that was above the head of the cherubim there appeared over them as it were a sapphire stone, as the appearance of the likeness of a *throne* [the Throne constellation – A. F.]" (Ezekiel 10:1).

The word "cherubim" (KHRBIM or RKHBIM) can also be used to refer to a chariot ([543], page 72). The 10th chapter of Ezekiel's prophecy that we quote tells us about several new celestial observations of the Biblical author that are unlike those mentioned in the first chapter (see above). He refers to planetary chariots, or the Cherubim moving across the firmament, or celestial dome, somewhere near the Throne constellation.

The Bible says:

"And when I looked, behold the four wheels by the cherubim, one wheel by one cherub [chariot – A. F.], and another wheel by another cherub: and the appearance of the wheels was as the colour of a beryl stone [a reference is probably made to each planet possessing an orbit of its own – A. F.]. And as for their appearances, they four had *one likeness*, as if *a wheel had been in the midst of a wheel*… they turned not as they went… and their whole body, and their backs, and their hands, and their wings, and the

Fig. 4.8. This picture shows us that the Chariot constellation (on the left) was *replaced* by Ursa Major (on the right). Taken from *Cosmographicus Liber Petri Apiani mathematici studiose collectus*, Landshutae, impensis P. Apiani, 1524 ([1013]). Book archive of the Pulkovo Observatory (St. Petersburg). Also see [543], page 91, ill. 53.

Fig. 4.9. A mediaeval picture of the Ophiuchus holding the equinoctial in his hands. There are grading points on the equinoctial, making it look like a measuring-rope. Taken from the **Firmamentum Firmianum** by Corbinianus, 1731 ([1077]). Book archive of the Pulkovo Observatory (St. Petersburg). Also see [543], page 105, ill. 57.

wheels, *were full of eyes round about*, even the wheels that they four had." (Ezekiel 10:9-12)

We shall quote the next fragment in the translation of N. A. Morozov: "The names of these wheels… the one in the rear bore semblance to a Chariot." It is possible that what we see here is a reference to Ursa Major, which used to be represented as a chariot. Such a rare mediaeval depiction can be seen on the chart from the 1524 Apianus book, for instance ([1013], fig. 4.8).

Let us carry on with quoting Morozov's translation: "the second had the likeness of a man and the third, that of a lion; the fourth had the likeness of an eagle. The chariots went upwards. They were *the same living creatures as I have seen*" (Ezekiel 10:14-15). The Biblical observer points out that the chariots and the living creatures that he describes in the first chapter are one and the same. Could they be planets?

We witness mediaeval astronomy on the pages of

the Biblical prophecy yet again: planets on their orbital wheels moving across the celestial sphere.

The Bible says that "when the cherubim [the chariots – A. F.] went, *the wheels went by them*: and when the cherubim lifted up their wings to mount up from the earth, the same wheels also turned not from beside them. When they stood, these stood; and when they were lifted up, these lifted up themselves also: for the spirit of the living creature was in them" (Ezekiel, 10:16-17).

1.8. The Biblical description of mediaeval cosmology as a celestial temple

One should definitely point out another remarkable astronomical fragment in the book of Ezekiel. Morozov's translation is as follows: "there was a likeness of a Man together with the likeness of a Serpent.

He had a *land-chain and measuring cane* in his hands and stood at the gates" (Ezekiel 40:3).

An entire page is to follow, one that is dedicated entirely to the descriptions of various measurements and numeric coefficients of the *celestial temple.* Some surveyor is conveying the measurements. Who could he be, and what exactly is the temple that the Bible describes in such great detail, giving the locations of rooms, partitions, entrances and exits, pillars, their size, and so on? The answer is amazingly simple. It suffices to turn to mediaeval star charts yet again.

The 1731 book by Corbinianus, for instance ([1077]) contains a picture of Ophiuchus as a man who holds the equinoctial in his hands in the shape of a chain, or rope, or lasher, q.v. fig. 4.9. The semblance between the equinoctial and a measuring rope or land-chain is obvious, since the equinoctial had degree marks upon it. This is how most ancient star charts depict it. We can also see a vertical cane on this picture – the lower solstice meridian, which the Ophiuchus holds in his hand vertically. This means ancient maps portray him as a measurer. We see that this mediaeval map of constellations is represented in the Old Covenant book quite faithfully.

The celestial temple is depicted as a large hall on dozens of late mediaeval charts as a well-known astronomical object, exactly the way the Biblical prophecy refers to it. A temple, or a hall in the sky can be seen in the book by P. Apianus, for instance ([1013], fig. 4.10). Similar celestial palaces can be seen in the book by Bacharach dating from 1545 ([1021]) – on the so-called Egyptian Zodiac. See also [543], pages 81-82, ills. 39-50 and 51. The celestial hall merely reflects the cosmological concepts of the mediaeval astronomers. We can see planets, their orbits, the zodiac, constellations, their movement, etc. This is the pre-Copernican mediaeval cosmology.

The plan of the celestial temple as a building that has the planetary orbital wheels and the zodiacal wheel revolving inside it can be seen in the XVI century book by Sacro Bosco (or Sacrobusto) – see [1385] and fig. 4.11. Another similar representation from a different book by Sacro Bosco ([1383]) is shown in fig. 4.12. This picture reflects the entire mediaeval cosmology. Angels move within the hall, revolving the eaves, the pales, and the heavy zodiacal belt that has planetary orbital wheels sliding across it.

We may be told that the mediaeval astronomers merely drew the "extremely ancient" Biblical images on their charts, which came to them from the pages of the Bible "out of deep antiquity." This interpretation is highly dubious, in our opinion. Most probably, the astronomical objects were primary, and not their literary descriptions – in the Old Testament, for instance. All the astronomical images listed above are far from being "illustrations to the Bible." They are filled with concrete scientific meaning: orbital wheels, equinoctials, meridians, star hours, etc. These concepts were introduced by mediaeval astronomers who pursued pragmatic and scientific ends which were far away from the literary paradigm. It was only *afterwards* that the poets and the writers began to create their literary images after having studied the star charts. Mediaeval cosmology – the celestial temple with its orbital wheels – wasn't created by poets, but rather by astronomy scholars. The poets merely followed them in order to chant praises to science.

The conclusion is rather clear. All the astronomical fragments from the Biblical book of Ezekiel are manifestations of the mediaeval, or possibly late mediaeval, scientific culture. Late mediaeval star charts, as well as Biblical texts, were apparently created in the XI-XVI centuries A.D. within the same paradigm of scientific ideology. The Scaligerian chronology that came into existence somewhat later is nevertheless persistent in separating them by a temporal gap of 1500-2000 years.

2.
THE BIBLICAL PROPHECY OF ZECHARIAH AND THE DATE OF ITS CREATION

Scaligerian chronology tries to convince us that the prophecy of Zechariah was written between 520 and 518 B.C. – about seventy years after the book of Ezekiel, that is. N. A. Morozov suggests to translate the word Zechariah as "The Thunderer Remembers" ([544], Volume 1, page 252). The entire book, as well as the prophecy of Ezekiel, or "The Lord Shall Overcome," is concerned with the same topic, namely, that some God-to-come didn't forget his promise of advent. He merely postpones it in order to punish people for their lack of faith.

The combination YHVH was pronounced as

Fig. 4.10. A mediaeval model of the celestial temple. We can see celestial mechanisms of all kinds, pillars, corbeils, etc. Taken from *Petri Apiani Cosmographia,* 1540, or *Cosmographicus Liber Petri Apiani mathematici studiose collectus*, Landshutae, impensis P. Apiani, 1524 ([1013]). Book archive of the Pulkovo Observatory (St. Petersburg). Also see [543], page 129, ill. 71.

Fig. 4.11. A picture of the celestial temple from the *Opusculu de Sphaera… clarissimi philosophi Ioannis de Sacro busto*. Book archive of the Pulkovo Observatory (St. Petersburg). Also see [543], page 111, ill. 61.

Fig. 4.12. Mediaeval concept of cosmology, or the construction of the celestial temple. The angels rotate the axes, the wheels, and the zodiacal belt. Taken from the *Opusculum Johannis de Sacro busto spericum, cu figures optimus ei novis textu in se, sine ambiguitate declarantibus* by J. de Sacro Bosco (Leipzig, 1494). See [1383]. Book archive of the Pulkovo Observatory (St. Petersburg). Also see [543], page 118, ill. 64.

Jehovah by the translators of the Bible; it is often translated as The Lord God. "YHVH" can also be the future tense of the verb "to be" – "God-to-be," or "God-to-come." Latins transformed this word into Jovis, or Jupiter – an abbreviation of Jovis-Pater, or Jovis-Father. The Greeks transformed this name into Zeus. The historian Eunapius who had allegedly lived in 347-414 A.D. writes that "the Italians call Zeus *Iovius*" ([132], page 86).

N. A. Morozov suggests translating the name YHVH, or Jehovah, as "Thunderer," since it is a widely used synonym for J-Pater (Jupiter). One has to remember that believers haven't always had the right to pronounce God's full name aloud, and called him Adonai, or Lord, instead. This is probably the reason for the existence of the abovementioned abbreviation – the full form YHVH transformed into YAH or IAH, or even single letters I or J, which gave birth to the name Jupiter, or J-Pater – God the Father.

This is how this word is written in the Biblical title of the book of Zechariah. ZECHAR-IAH is written here instead as the more complete ZECHAR-YHVH, or "The Thunderer Remembers."

All of this, together with the distinct astrological hue of certain Biblical texts referring to Jehovah ([544]) leads one to the thought that the Thunderer, whom the prophets of the Old Testament await with such eagerness, isn't some unknown pre-Christian

deity, but, rather, the very same God that says "I am the Alpha and Omega, the beginning and the end" to John in the first chapter of the Apocalypse (Revelation 1:8). None other than Jesus Christ, in other words. The Apocalypse proclaims the Second Coming and Doomsday. The prophets of the Old Testament of the XIV-XVI centuries A.D. are expecting his advent.

The book of Zechariah (ZECHAR-YHVH) is filled with descriptions of the same events that we find in the Gospels. The actual prophecy mentions "Joshua the great priest" often enough (Zechariah 3:1). It is significant that the Scaligerian chronology is forced to acquiesce that the prophecies contained in the books of the Old Covenant "predict" the advent of Jesus Christ, as well as certain evangelical events. Let us but give one example.

The book of Zechariah tells us the following:

"And I said unto them, if ye think good, give me my price; and if not, forbear. So they weighed for my price *thirty pieces of silver*. And the Lord said unto me, Cast it unto the potter: a goodly price that I was prised at of them. And I took the thirty pieces of silver and *cast them to the potter* in the house of the Lord… Woe to the idol shepherd that leaveth the flock!. His arm shall be clean dried up, and his right eye shall be utterly darkened." (Zechariah 11:12-13, 11:17)

It is assumed nowadays that all of this had been written centuries before Jesus and the legend of the apostle Judas who betrayed him for *thirty pieces of silver*. Compare the passage from Zechariah to the following from the Gospels:

"and said unto them, What will ye give me, and I will deliver him unto you? And they covenanted with him for *thirty pieces of silver*… And he cast down the pieces of silver in the temple, and departed, and went and hanged himself. The chief priests took the silver pieces and said, It is not lawful for to put them into the treasury… and they… bought with them the *potter's field*, to bury strangers in."(St. Matthew 26:15; 27:5-7)

This alone should tell us that the testamentary book "The Thunderer Remembers," or "Zechariah" was written after the Crucifixion – which occurred in the XI century A.D. by our reconstruction.

The fact that the versions of the Gospels that have survived until our day make frequent and extensive references to the books of the prophets most probably means that either they all were written around the

same time, or the editing of the Gospels had lasted for a long enough time, after their creation in the XI-XII centuries A.D., to incorporate such references.

The analysis of the astronomical fragments of the book "The Thunderer Remembers" is based on the same principle as the analysis of Revelation and the book "The Lord Shall Overcome," or Ezekiel. We shall thus cut the details short, and give a brief summary. Details can be found in [543].

In the book of Zechariah we encounter the same four planetary chariots as described in Ezekiel. This time the reference to the "four chariots" remained in the synodal translation as well (Zechariah 6:1). One marks the uniformity of the symbolism found in Zechariah and Ezekiel. Actually, according to the Scaligerian point of view, Biblical prophecies were written in the same epoch and belong to the same literary tradition. We see no reason to argue with this, and share the opinion of the historians concerning this issue.

N. A. Morozov was of the opinion that Chapter 6 describes a horoscope that he dated to 453 A.D. the earliest. However, despite the fact that this description is clearly astronomical, it is rather hard to use it for obtaining a reliable horoscope.

3.
THE BIBLICAL PROPHECY OF JEREMIAH AND THE DATE OF ITS CREATION

According to N. A. Morozov, the word "Jerem-Iah," or IERMNE-IAH translates as "The Thunderer Shall Cast a Bolt" ([544], Volume 1, page 267). This is apparently a title as opposed to the author's name yet again. Scaligerian chronology dates the book to the alleged years 629-588 B.C. – the same epoch as Ezekiel, that is. Their ideological proximity is duly noted, even concerning the use of the same literary style and form. Since these considerations only refer to relative chronology, we find no reason to argue with the historians.

The book contains another reference to the god who declares his intent to keep the promise that he had once given, that he will soon come to earth at the time of great afflictions in order to judge the people. This looks like yet another variation of the Apocalypse.

The impending advent of God is symbolized by a poised mace hanging in the sky. The synodal trans-

Fig. 4.13. A mace-shaped comet. Taken from the mediaeval *Astronomia* by Bacharach, dated 1545. Book archive of the Pulkovo Observatory (St. Petersburg). Also see [543], page 185, ill. 94.

Fig. 4.14. A mace-shaped comet. Taken from the mediaeval *Astronomia* by Bacharach, dated 1545. Book archive of the Pulkovo Observatory (St. Petersburg). Also see [543], page 188, ill. 96.

lation offers "a rod of an almond tree" as an alternative (Jeremiah 1:11). However, the Hebraic text says MKL-SHKD, which stands for "a poised stick, a mace ready to strike, or a club ([543], page 184). This is why the translation should run as follows: "I said, I see a poised mace [almond rod]. Then said the Lord unto me, Thou hast well seen" (Jeremiah, 1:11-12).

As with the other prophetic books treated here, Jeremiah contains a large number of astronomical fragments. We shall refrain from analysing them here, since an in-depth analysis is given in [543]. According to N. A. Morozov, this refers to a *comet* that appeared in the sky.

The depictions of comets are contained in a large number of mediaeval books on astronomy. Comets were oftentimes represented as fantasy images whose purpose was to intimidate. A club or a poised mace is a mediaeval image that was frequently used to denote a comet.

Bacharach's book allegedly dating from 1545, for instance, depicts a comet as a *mace* (see fig. 4.13). The same book contains another picture of a comet as a mace *surrounded by stars* (see fig. 4.14). The book

Fig. 4.15. A mace-shaped comet. Taken from the ***Theatrum Cometicum, etc.*** by Lubienietski, Amstelodami, 1666-1668 ([1256]). Book archive of the Pulkovo Observatory (St. Petersburg). Also see [544], page 195, ill. 101.

of Stanislaw Lubienietski dating from 1666-1668 depicts a comet similarly ([1256], fig. 4.15).

A particularly vivid description of a comet is given in the following fragment of "The Thunderer's Bolt," or "Jerem-Iah": "What seest thou? And I said, I see a seething pot; and the face thereof is toward the north. Then the Lord said unto me, Out of the north an evil

Fig. 4.16. A comet shaped as a boiling cauldron face. Taken from the mediaeval ***Astronomia*** by Bacharach, dated 1545. Book archive of the Pulkovo Observatory. Also see [543], page 185, ill. 93.

shall break forth upon all the inhabitants of the land" (Jeremiah, 1:13-14).

Bacharach's astronomy allegedly dating from 1545 has a most remarkable illustration where one sees a comet that looks like a gigantic round *face seething with flames and heat*, surrounded by the stars incinerated by the flames (see fig. 4.16). The illustration is done in such a manner that the spectator has the illusion of seeing the top of a *boiling cauldron*.

Thus, the book of Jeremiah doubtlessly contains a mediaeval description of some comet. The actual fact that the description refers to a comet was noted a long time ago. D. O. Svyatsky wrote about it in his ***Halley Comet in the Bible and the Talmud.*** He tried to date this comet, but without any success. It is also possible that the very title of the book, "The Thunderer's Bolt," is related to the appearance of a comet in the sky.

There is no reliable horoscope in the prophecy of Jeremiah, despite the fact that we have seen some fragments that were clearly astronomical in nature. Dating the book astronomically is far from simple. Using the description of the comet for a dating is also an impossibility. Comets in general are poor assistants in matters of astronomical datings of texts since

their descriptions are usually rather vague and fanciful. Furthermore, there is no reliable historical proof for numerous reappearances of periodical comets which could provide some basis for "comet datings." We shall consider comets in more detail in CHRON5.

4.
THE BIBLICAL PROPHECY OF ISAIAH AND THE DATE OF ITS CREATION

The prophecy of Isaiah is one of the longest in the Bible. It is allegedly dated to 740 B.C. According to N. A. Morozov, the word "Isaiah" means "Forthcoming Freedom." This prophecy is also among the most famous. N. A. Morozov was of the opinion that it contained the description of a comet, which he attempted to date – unsuccessfully, in our opinion, since, as we shall demonstrate below, comets are hardly suitable for independent dating.

The book is full of memories of Christ. It isn't without reason that this particular prophecy is often referred to as the Fifth Gospel ([765]). Let us cite several "Jesus fragments" from the book of Isaiah as examples:

"Behold my servant, whom I uphold; mine elect, in whom my soul delighteth; I have put my spirit upon him: *he shall bring forth judgement to the Gentiles*" (Isaiah 42:1). The reference is most probably to John – a follower of Jesus and the author of the Revelation that predicted Doomsday.

"As many were astonied at thee; his visage was so marred more than any man" (Isaiah 52:14).

"He is despised and rejected of men; a man of sorrows, and acquainted with grief: and we hid as it were our faces from him; *he was despised, and we esteemed him not*. Surely he hath borne our griefs, and carried our sorrows: yet we did esteem him stricken, smitten of God, and afflicted. But *he was wounded for our transgressions*… the chastisement of our peace was upon him; and with his stripes we are healed. All we like sheep have gone astray… and the Lord hath laid on him the iniquity of us all. He was oppressed, and he was afflicted, yet he opened not his mouth: he is brought as a *lamb* [sic! – A. F.] to a slaughter, and as a sheep before her shearers is dumb, so he openeth not his mouth. He was taken from prison and from judgement… *for the transgression of my people was*

he stricken. And he made his grave with the wicked [compare with the Gospels – "there they crucified him, and the malefactors, one on the right hand, and the other on the left" (Luke 23:33) – A. F.], and *with the rich in his death* [another reference to the Gospel – buried by Joseph – A. F.]… by his knowledge shall my righteous servant justify many; for *he shall bear their iniquities*." (Isaiah 53:3-9, 53:11)

And so on, and so forth.

Scaligerian history attempts to prove to us yet again that all of this was written many centuries before Jesus Christ was crucified. We deem this to be highly dubious. This text was most probably created after the XI century A.D., long after the "Passion of Christ." We should also point out that if one translates the words "salvation" and "saviour" which are scattered all across the text of Isaiah in great abundance, we shall get the word "Jesus." See details in [543].

5.
THE BIBLICAL PROPHECY OF DANIEL AND THE DATE OF ITS CREATION

Historians used to date this book to 534-607 B.C. ([765]). However, this point of view was subsequently revised. Nowadays the book is considered to have been written around 195 B.C., so the date was moved about four centuries forward. This fact alone should tell us that there is no reliable way of determining the independent dating of the book in the Scaligerian chronology. The book of Daniel is considered to be the last prophecy ([765]). If the Scaligerite historians can keep ignoring the relation of other prophecies from the Old Testament to the Revelation, the prophecy of Daniel is in a privileged position. The parallel with the Apocalypse here is so *obvious* that historians were forced to admit its existence.

Apparently, this is exactly why the dating of the book of Daniel started travelling forwards in time – it was necessary on order to get closer to the Scaligerian dating of the Apocalypse as created in the first centuries of the new era. The historians say the following in this regard: "its nature [that of the book of Daniel – A. F.] demands calling it apocalyptic rather that prophetic" ([765], pages 93-94).

According to N. A. Morozov, the name Daniel translates as "The Truth of God" ([544], Volume 1,

Fig. 4.17. Picture of a comet next to a human hand writing something in the sky. Taken from a mediaeval book by S. Lubienietski titled *Historia universalis omnium Cometarum,* 1681 ([1257]). Book archive of the Pulkovo Observatory (St. Petersburg). Also see [543], page 208, ill. 106.

page 274). Once again we are confronted with the possibility that it is the title of the book and not the name of the author. The Biblical critics have established that it is the *most recent* prophecy from the Bible – it makes references to previous prophets, for one thing. Considering our new results concerning the dating of Biblical books, this prophecy is most probably late mediaeval in its origin.

Apparently, this book contains no precise astronomical horoscope. However, it contains a wonderful description of a comet. Although "comet datings" are not to be trusted the slightest bit, and can only serve as secondary proof for some other independent astronomical research, we shall give a brief account of the comet description contained in the book of Daniel.

This book is widely known for its legend about the

prophet Daniel who had explained the inscription, "MENE, MENE, TEKEL, PERES," written by a fiery hand on the wall of a palace, to king Belshazzar.

The Bible says: "In the same hour came forth fingers of a man's hand, and wrote over against the candlestick [lamp – A. F] upon the plaster of the wall of the king's palace: and the king saw the part of the hand that wrote" (Daniel 5:5).

"And this is the writing that was written, MENE, MENE, TEKEL, UPHARSIN." (Daniel, 5:25).

Let us also quote Morozov's translation of the Hebraic text, which differs from the synodal translation somewhat.

"This very hour a finger appeared [ATSBEN in Hebraic, whereas the plural would be "ATSBEUT" – A. F.] in the hand of a stately man [the Hebraic text says DI-ID-ANSH, or "the hand of a mighty person," while ID indicates possession, and not an actual part of the hand, so there is a human hand that holds some finger – A. F.], and he began to write towards the lamp of night on the plasterwork of the princely hall" (see [543], page 213).

What could a "finger in the hand of a stately man" possibly refer to, and one that wrote on the walls of a "princely hall" – most probably the sky – at that? We have already witnessed that astronomical topics are abundant and obvious in the Bible. It suffices to take a look at the mediaeval illustration to S. Lubienietski's *Cometography* dating from 1681 ([1257], see fig. 4.17).

We can observe a cloud of dust on the starlit sky, and a hand that grasps a branch protruding from the cloud. The branch ends with a twig that resembles a finger, which the hand uses for tracing out some illegible inscription. We see a *comet* directly above the hand, depicted as a gigantic fiery star with a tail.

It is very likely that the prophecy of Daniel really contains the description of a comet, since it says that the hand wrote towards the Lamp of Night, or, most probably, the moon. N. A. Morozov was of the opinion that "stately man" referred to the constellation of Ophiuchus. We have discussed this identification above.

The terrified king proceeds to turn to KSHDIA, or "astrologers" ([543]). This is normal, since the profession of the mediaeval astrologers implied interpreting events observed on the celestial sphere (Daniel 5:7). Finally, Daniel explains the inscription to the king:

"And this is the writing that was written, MENE, MENE, TEKEL, UPHARSIN. This is the interpretation of the thing: MENE; God hath numbered thy kingdom… TEKEL; Thou art weighed in the balances… PERES; Thy kingdom is divided, and given to the Medes and the Persians" (Daniel 5:25-28).

The Hebraic text has MNA-MNA, TKL, U PRSIN, which can be translated as "the measurer has measured, Libra and towards Perseus." We have already pointed out that Ophiuchus was identified with the measurer of the celestial sphere on many mediaeval maps – see fig. 4.9 from the book by Corbinianus dating from 1731 ([1077]). Therefore, "Daniel" as applied to the Measurer is most possibly a second reference to Ophiuchus – in other words, a stately man as depicted on mediaeval star charts. This gives one the idea that some comet may have moved towards Perseus from Libra, having passed through Ophiuchus.

Having analyzed the information about comets that had reached our age, Morozov made the assumption that this could have been the comet of the alleged year 568 A.D. or 837 A.D. However, comet dating can by no means be seen as dependable. We shall elaborate on this point in CHRON5.

We shall conclude with the observation that the "ancient" Hebraic has no future tense, and so inferences of future time have to be determined according to the context. Therefore some text written in the present tense and referring to the events of the present and the past could be transformed into text written in the future tense, according to the perception of later readers ([543]). Could this be the reason why Hebraic literature contains so many prophecies?

OUR RECONSTRUCTION

Biblical prophecies contain astronomical fragments whose analysis allows for the formulation of a hypothesis about these books being mediaeval or even late mediaeval in origin. This conclusion concurs well with the results of using new empirico-statistical methods in relation to the Bible, transferring the time of its creation into the epoch of the XI-XVI centuries A.D. See more about this below. Let us remind the reader that the astronomical dating of Revelation gives the date 1486 A.D. This is why the proximity of the Old Testament prophecies to the New Testament Revelation might indicate that all of them were created in the XV-XVI centuries A.D. We shall point out certain fragments from the book of Daniel that refer to XVI century events in CHRON6.

The methods of dating the ancient events offered by mathematical statistics

In our opinion, the main task of chronology analysis is to create independent statistical methods for the dating of ancient events. Only after that can one proceed to recreate chronology as a whole on the basis of results obtained. A single method – even as efficient as the astronomical one described above – is not enough for a profound study of the problem, because dating is an extremely sophisticated task that requires different methods of cross-verification. Advanced modern methodology of mathematical statistics makes it possible to offer a new approach to the dating of events described in ancient chronicles. This chapter describes new empirico-statistical methods developed by the author and his colleagues, as well as certain ways to apply them in chronological analysis.

This program was implemented in the following way.

1) New empirico-statistical methods of dating ancient events were developed, based on several statistical principles (models) proposed by the author in [884]-[886], [888]-[891], [895]-[905], [1129]-[1132], and [1135]. For a detailed account, see [MET1] and [MET2]. The primary principles, and models based thereupon, were laid out by the author in his report at the 3rd International Conference on Probability Theory and Mathematical Statistics, Vilnius, 1981 ([885]).

We proposed:
• The maxima correlation principle;
• The small distortions principle (for ruler dynasties);
• The frequency damping principle, the frequency duplication principle, and the geographic maps "improvement" principles.

The development of these methods was then related in a report made at the 4th International Conference on Probability Theory and Mathematical Statistics, Vilnius, 1985 ([901]) and the 1st International Congress of the Bernoulli Society for Mathematical Statistics and Probability Theory, 1986 ([1130]). Later on, new empirico-statistical models were proposed and verified by experiments in a series of works by V. V. Fedorov, A. T. Fomenko, V. V. Kalashnikov, G. V. Nosovskiy, and S. T. Rachev ([357], [590]-[613], [723], [1140] and [868]).

2) Those principles and models, as well as their efficiency, were verified by a sufficient amount of authentic material from medieval and contemporary history of the XVI-XX century, proving accuracy of the results obtained by these methods.

3) The same methods were applied to chronological material of ancient history normally dated to periods preceding the X-XIV century A.D. See [884], [886]-[888], [891], [895], [897], [898], [900], [903]

and [905]. Strange "repetitions" and "recurrences" were discovered in the Scaligerian version of the ancient and medieval history, the ones that we shall be referring to as "phantom duplicates".

4) All of these phantom duplicates were ordered into a system on the global chronological map outlined by the author in his articles [886], [888], [894], [896] and [905]. We do not absolutely consider the suggested methods to be universal ones, their applicability limits being clearly defined (see below). The only criterion for the correctness of results obtained is the conformity we discovered between the dates calculated by different methods, including the astronomical dating method described earlier.

5) On the basis of the global chronological map representing "the Scaligerian textbook of ancient history", we managed to restore a tentative origin of the Scaligerian version of the ancient and mediaeval chronology. We shall encapsulate some of those methods below.

1.
THE LOCAL MAXIMA METHOD

1.1. The historical text volume function

The maxima correlation principle, and a method based thereupon, were proposed and developed by the author in [884], [885], [888] and [1129].

Let un assume that we discovered a historical text X, e.g., a previously unknown chronicle relating previously unknown events within a significant time interval, from year A to year B. Moreover, we may know nothing of the chronology in which these years were recorded. We shall hereinafter mark this time interval as (A, B). A typical situation: dates of events described in a chronicle are counted down from some event of local importance, such as the foundation of a town, accession of a ruler, etc. In such cases we would say that the chronicle dates the events in a *relative* chronology, which would allow us to distinguish these from the *absolute* dates in terms of b.c. or a.d. A natural question arises, namely: "How does one restore the *absolute* dates of events described in an antique document?" – for instance, the Julian date for the foundation of a town used to calculate the dates of the events?

Certainly, if we already know some of the events described from a dated chronicle, then we can "link" these events to the contemporary time scale. However, if such identification is impossible, the task of dating becomes more complicated. Moreover, the events described in the chronicle discovered may turn out to have already been known to us, though the appearance of their description is still beyond recognition because the chronicle is written in a different language, the chronicler uses completely different names, nicknames, geographic names, etc. Therefore, one might as well use a method of empirico-statistical nature, which makes it possible to sometimes date events on the basis of formal quantitative characteristics of the text under study.

Let us assume that a historical text X is broken up into fragments X(t), each describing a comparatively short time interval, for example, a year (or a decade) number t. There exist numerous examples of such texts – e.g., the *per annum* chronicles, or those describing events *year after year*, "per annum": diaries, many historical literary works, history textbooks and monographs. We shall be referring to the fragments X(t) as "chapters". They line up naturally in a chronological sequence according to the internal relative chronology of the chronicle in question. Many historical texts explicitly feature such "fragmentation into chapters", each describing a single year. Such are, for instance, many Russian chronicles ([671], [672]), as well as the famous **Radzivillovskaya Letopis' (Povest vremenny'kh let)** / *The Radzivil Chronicle* (*Story of Years of Time*) [715]. The famous Roman book **Liber Pontificalis**, (T. Mommsen, **Gestorum Pontificum Romanorum**, 1898) is of a similar nature.

Various characteristics of the information volume reported by chronicle X about year t can be measured as:

1) *vol* X(t) = number of pages in "chapter" X(t). Call this number the *volume* of "chapter" X(t). The volume can be zero if year t is not described in chronicle X, or missing. Instead of pages, one can count the number of lines, symbols, and so on. That neither affects the idea, nor the application of the method.

2) The total number of times year **t** is mentioned in chronicle X.

3) The number of names of all historical characters mentioned in "chapter" X(t).

4) The number of times a certain specific name (character) is mentioned in "chapter" $X(t)$.

5) The number of references to some other text in "chapter" $X(t)$.

The fund of quantitative characteristics like this is fairly large and important – each one, as we see, assigns a specific number to each year t described in the chronicle. In general, different numbers will correspond to different years; therefore, volumes of "chapter" $X(t)$ will largely be changing as the number (year) t changes. We shall call the succession of volumes $X(A), …, X(B)$ *the volume function* of the per annum text X.

1.2. The maxima correlation principle

Thus, we assume a certain historical period from year A to year B in the history of one state S is described in a per annum chronicle X exhaustively enough, that is, chronicle X has already been, or can be, broken up into pieces – "chapters" $X(t)$, each describing one year t. We shall calculate the volume of each such piece – e. g., the number of words or symbols, pages, and so on – and then present the obtained numbers as a graph, with years t on the horizontal axis, and volumes of "chapters", or *vol* $X(t)$, on the vertical axis (fig. 5.1). The result shall be a graphic presentation of the volume function for this chronicle X.

A respective volume function graph for another per annum chronicle Y, describing the year-after-year "flow of events" of the same epoch (A, B), will, as a matter of fact, look different (fig. 5.1). The point is that the personal interests of chroniclers X and Y play a major part in distribution of volumes – e.g., the information focus and per annum distribution in chronicle X on

the history of art, and military chronicle Y will differ substantially. For example, chronicler X of a "defeated party" would describe the defeat of his army in a sparing and reserved manner – a few lines only. On the contrary, chronicler Y of a "victorious party" would render the story of the same battle in a great detail, enthusiastically, and eloquently, on several pages.

How vital are those differences? Or, are there characteristics of volume graphs that can only be defined by the time interval (A, B), the history of a state S, and unambiguously characterize all, or almost all, chronicles describing this time interval and this state?

Years t in which the graph *peaks*, or reaches its *local maxima*, turn out to be a crucial characteristic of volume graph *vol* $X(t)$. The fact that the graph peaks at a given point t means that this year is described in the chronicle *in greater detail* – e.g., on more pages than the adjacent ones. Hence, the peaks of the graph, or its local maxima, indicate years a chronicler described in detail on the time interval (A, B). In different chronicles X and Y, absolutely different years can be "described in detail".

What is the reason for such an uneven description of different years? A possible explanation: a chronicler described an "ancient year" in greater detail because more information on that "ancient year" was available – such as a bulk of old documents larger than that for adjacent years.

The course of our further argumentations is as follows.

1) We shall formulate a *theoretical model*, or *statistical hypothesis*, that will allow us to predict what years from the time interval (A, B) will be reported in detail by a later chronicler, not a contemporary of the ancient events he describes.

Fig. 5.1. The volume graphs for the two chronicles, X and Y, relating the events of the same historical epoch.

Fig. 5.2. The graph of the "primary information fund" $C(t)$, and the graph of the "remaining information fund" (the texts that survived until the epoch M) peak almost simultaneously.

2) Then, we shall mathematically formulate that statistical model, hypothesis.

3) We shall test its correctness on the fairly extensive reliable historical material of the XVI-XX century.

4) Upon discovering experimental proof for the theoretical model, we shall offer a method for dating of ancient events.

Let $C(t)$ be the volume of all texts written about the year t by its contemporaries (fig. 5.2). As done above, we shall construct a numerical volume graph of the time interval (A, B). We certainly are *not aware* today of the precise appearance of this graph $C(t)$. The fact is, the original texts written by contemporaries of the events of the year t became gradually lost over the course of time, and only a certain part has survived. The graph $C(t)$ can be called *the primary information fund graph*. Let us assume that contemporaries described certain years of the epoch (A, B) in greater detail, i.e., recorded an especially large amount of information about these years. We are not discussing reasons for this "original unevenness" as being fairly irrelevant to us now. In the sense of the volume graph $C(t)$ such years – "described by contemporaries in detail" – will be noted for peaks of the graph on these precise years.

A question: 'How does the loss and oblivion of information occur, which in the course of time can distort the graph $C(t)$ and decrease its altitude?' Let us relate *the information loss model*.

Although the altitude of the graph $C(t)$ decreases over the course of time, nonetheless, *from the years in which especially many texts were created by contemporaries, more will survive.*

To restate the model, it is useful to fix a certain moment in time M to the right of point B on fig. 5.2, and construct a graph $C_M(t)$ showing the volume of texts that "survived" until the moment M and describe the events of the year t in the epoch (A, B).

In other words, the number $C_M(t)$ shows the volume of the original ancient texts from the year t that survived until the "fund observation moment" in the year M. The graph $C_M(t)$ can be referred to as the graph of the "residual information fund" that survived from the epoch (A, B) until the year M. Now our model may be restated in the following way.

Peaks on both the residual fund volume graph $C_M(t)$ and the original primary information fund graph $C(t)$

must occur approximately in the same years of the time interval (A, B).

The model is obviously quite difficult to test as it is, because the primary information fund graph $C(t)$ is unknown today. But it is still possible to verify one of the consequences of the theoretical model (hypothesis).

Since later chroniclers X and Y describing the same historical period (A, B) and the "flow of events" are no longer contemporaries of those ancient events, they have to rely on more or less the same set of texts available in their time. Thus, they would describe in greater detail "on the average" the years from which more texts survived, and in less detail the years of which little information was available. In other words, the chroniclers should increase the detail level of their rendition for the years that yielded more old texts.

In the language of volume graphs, the model looks as follows. If chronicler X lives in epoch M, then he will rely on the residual fund $C_M(t)$. If the other chronicler Y lives in epoch N that is generally different from epoch M, then he relies on the available information fund $C_N(t)$. See fig. 5.3.

It is quite natural to expect the chroniclers X and Y to work "on the average" in good faith, therefore describing in greater detail those years of the ancient (for them) epoch (A, B) from which more information and old texts are available.

In other words, peaks on the volume graph *vol*

Fig. 5.3. The graphs of the remaining information funds peak around the same period of time as the graph of the primary graph, $C(t)$. The chronicle volume functions X and Y peak in roughly the same points as the volume graphs of the information that survived until their epoch.

$X(t)$ and the graph $C_M(t)$ will occur in the same years. In their turn, peaks on the graph $vol\ Y(t)$ and the graph $C_N(t)$ will occur approximately over the same years, fig. 5.3.

But the peaks of the residual fund graph $C_M(t)$ *are close* to those of the original, primary graph $C(t)$. Likewise, the splash points of the residual fund graph $C_N(t)$ are close to the splash points of the primary graph $C(t)$. Hence, splashes on the volume graphs for chronicles X and Y, or the graphs $vol\ X(t)$ and $vol\ Y(t)$, must occur *approximately at the same time*, in "the same" points of the time axis. In other words, their local maxima points must distinctly correlate, fig. 5.1.

In doing so, the *amplitudes* of graphs $vol\ X(t)$ and $vol\ Y(t)$ can certainly differ substantially, fig. 5.4, which does not appear to affect the arguments stated.

The final formula for *the maxima correlation principle* is as follows, preceding the reasoning regarded as the primary consideration.

The maxima correlation principle

a) If two chronicles (texts) X and Y are *a priori dependent*, i.e., describe the same "flow of events" of historical period (A, B) of the same state **S**, then *local maxima (splashes)* on volume graphs of the chronicles X and Y *must occur simultaneously* on the time interval (A, B). In other words, the years "described in detail in chronicle X" and the years "described in detail in chronicle Y" must be close or coincident, fig. 5.4.

b) On the contrary, if chronicles X and Y are *a priori independent*, i.e., describe either different historical periods (A, B) and (C, D), or different "flows of events" in different states, then the volume graphs for chronicles X and Y reach their local maxima *in different points*. In other words, the peaks of the graphs $vol\ X(t)$ and $vol\ Y(t)$ should not correlate, q.v. in fig. 5.5. In doing so, we are supposed to have provisionally combined (identified) segments (A, B) and (C, D) of the same length before comparing the two graphs.

We shall conditionally call all other pairs of texts, i.e., neither *a priori* dependent nor *a priori* independent, *neutral*, and make no assertions regarding them.

This principle is confirmed if, for the majority of pairs of actual and large enough *dependent* chronicles X and Y, i. e., those describing the same "flow of events", the peaks on volume graphs for X and Y do actually occur approximately at the same time, in the same years, while *the magnitude of these peaks can be substantially different.*

On the contrary, for actual *independent* chronicles, the peaks should not correlate in any way. For specific dependent chronicles, the synchronism of volume graph splashes can only be approximate.

1.3. Statistical model

The rough idea is as follows. For quantitative evaluation of peak proximity we shall calculate the number $f(X, Y)$ – the sum of numbers $f[k]$ squared, where $f[k]$ is the distance in years between the peak "k" of volume graph X and the peak "k" of volume graph Y. If the peaks on both graphs should occur simultaneously, then the peaking moments with identical numbers will coincide, and all numbers $f[k]$ equal zero. Upon reviewing a fairly large fund of authentic

Fig. 5.4. Volume graphs of the dependent chronicles X and Y which relate the events of roughly the same epoch, peak almost simultaneously. However, the peaks may significantly differ from each other in size.

Fig. 5.5. Volume graphs of independent chronicles X and Y relating to completely different epochs, peak in different points (after the superposition of time intervals (A, B) and (C, D)).

texts H and calculating the number $f(X, H)$ for each of them, we then choose only those texts H for which this number does not exceed the number $f(X, Y)$. Upon calculating the portion of such texts in the whole fund of texts H, we obtain a coefficient that, according to the hypothesis of random vector H distribution, can be interpreted as probability $p(X, Y)$ ([904], [908], [1137] and [884]). If the coefficient $p(X, Y)$ is small, then the chronicles X and Y are dependent, or describe approximately the same "flow of events". If the coefficient is large, then the chronicles X and Y are independent, that is, they report of different "flows of events".

Now we pass on to a more detailed description of the statistical model. Doubtlessly, the peaks on real volume graphs can be only simultaneous approximately. To estimate just how simultaneous the peaks on both graphs are, the mathematical methods of statistics allow us to define a certain number $p(X, Y)$ that measures the mismatch of the years described in detail in the chronicle X, and the years described in detail in the chronicle Y. It turns out that if the proximity of peaks on both graphs is regarded as random, the number $p(X, Y)$ can be seen as the probability coefficient of this event (which, however, is not at all that key for the efficiency of the method). The smaller this number is, the greater the coincidence of the years described in detail in X with those described in detail in Y. We shall formulate a mathematical definition of the coefficient $p(X, Y)$.

Let us examine the time interval (A, B) and the volume graph $vol\ X(t)$ that reaches local maxima in certain points $m_1, \ldots, m_{n-1}$. For the purpose of simplicity, we consider each local maximum (peak) to culminate exactly in one point. In general, these points, or years, m_i break up the time interval (A, B) into a number of segments of different length, q.v. in fig. 5.6. Measuring the length of these segments in years, that is, measuring the distance between the points of adjoining local maxima m_i and m_{i+1}, we obtain a sequence of integers $a(X)=(x_1, \ldots, x_n)$. This means that the number x_1 is the distance from the point A to the first local maximum, the number x_2 is the distance from the first local maximum to the second one, and so on, the number x_n being the distance from the last local maximum m_{n-1} to the point B.

This sequence can be represented by the vector $a(X)$ in Euclidean space R^n of dimension n. For instance, in case of two local maxima, i.e., if $n = 3$, we have an integer-valued vector $a(X) = (x_1, x_2, x_3)$ in three-dimensional space. Let the vector $a(X) = (x_1, \ldots, x_n)$ be called *the local maxima vector* for the chronicle X.

For the other chronicle Y we have, generally speaking, a different vector $a(Y)=(y_1, \ldots, y_m)$. We assume that chronicle Y describes events of the time interval (C, D), the length of which is equal to that of the time interval (A, B), i. e., $B - A = D - C$. To compare volume graphs of the chronicles X and Y, we shall combine the two previous time segments (A, B) and (C, D) of the same length, and superpose them over each other. Naturally, the number of local maxima of the graphs $vol\ X(t)$ and $vol\ Y(t)$ can be different. However, without rigidly restricting commonness, it is possible

$$vol\ X(t)$$

Fig. 5.6. Chronicle volume graph peaks divide the time interval (A, B) into smaller intervals.

Fig. 5.7. Local maxima vectors for $a(X)$ and $a(Y)$ of the two chronicles compared (X and Y) can be conventionalized as two vectors in Euclidean space.

to say that the number of maxima is identical, and thus the vectors $a(X)$ and $a(Y)$ of two comparable chronicles X and Y have the same number of coordinates. Indeed, if the maxima number of two comparable graphs is different, then it is possible to proceed as follows. We shall consider certain maxima *multiple*, i.e., believe several local maxima to have merged at this point. In doing so, lengths of relevant segments corresponding to these multiple maxima can be considered to equal zero. Stipulating this, we can apparently equalize the number of local maxima on the volume graphs of the chronicles X and Y. Of course, such an operation – the introduction of multiple maxima – is not unique. We shall settle on a certain variant for the introduction of multiple maxima so far. Later on, we shall get rid of this ambiguity by minimizing all necessary proximity coefficients along all possible variations of multiple maxima introduction. We shall note that the multiple maxima introduction means the appearance of void components, i.e., segments of zero length, in certain places of vector $a(X)$.

Thus, comparing chronicles X and Y, we can assume that both vectors $a(X)=(x_1, \ldots ,x_n)$ and $a(Y) =$

$(y_1, \ldots ,y_n)$ have the same number of coordinates and thus are situated in the same Euclidean space R^n. We shall note that the sum of the coordinates of each vector is the same, equalling $B - A = D - C$, or the length of the time interval (A, B). Thus,

$$x_1 + \ldots + x_n = y_1 + \ldots + y_n = B - A.$$

Now we shall consider the set of all integer-valued vectors $c = (c_1, \ldots ,c_n)$, the coordinates of which are non-negative with the sum $c_1 + \ldots + c_n$ equalling the same value, namely, $B - A$, or the length of the time interval (A, B). We shall denote the set of all those vectors with the letter S. Geometrically, those vectors can be presented as originating from the beginning of coordinates, or from the point 0 in R^n. Let us consider the ends of all such vectors $c = (c_1, \ldots , c_n)$, all of them situated on a "multi-dimensional simplex" L defined in the space R^n by one equation

$$c_1 + \ldots + c_n = B - A$$

where all coordinates $c_1, \ldots , c_n$ are real non-negative numbers. Set S is presented geometrically as a set of "integer points" on simplex L, or a set of all points with integer-valued coordinates, from L.

It is clear that the ends of the local maxima vectors $a(X)$ and $a(Y)$ for chronicles X and Y belong to the set S, fig.5.7.

Now we shall fix the vector $a(X)=(x_1, \ldots , x_n)$ and examine all vectors $c = (c_1, \ldots , c_n)$ with real coordinates belonging to the simplex L and such as to comply with an additional correlation,

$$(c_1 - x_1)^2 + \ldots + (c_n - x_n)^2 \le (y_1 - x_1)^2 + \ldots + (y_n - x_n)^2.$$

We shall denote the set of all such vectors $c = (c_1, \ldots , c_n)$ as K. These vectors are mathematically described as being remote from the fixed vector $a(X)$ on a distance not exceeding the distance $r(X, Y)$ from vector $a(X)$ to vector $a(Y)$. Speaking of the distance between the vectors, we mean the distance between their ends. We shall recall that the value

$$(y_1 - x_1)^2 + \ldots + (y_n - x_n)^2$$

is equal to the squared distance $r(X, Y)$ between the vectors $a(X)$ and $a(Y)$. Therefore, set K is a part of simplex L, fitting the "n-dimensional" ball with the radius of $r(X, Y)$ and the centre in the point $a(X)$.

Let us now calculate how many "integer-valued

vectors" set K and set L have each. We shall denote the values obtained as $m(K)$ and $m(L)$, respectively. As a "preliminary coefficient" $p'(X, Y)$ we shall use a ratio of these two values, i. e.,

$$p'(X, Y) = m(K) / m(L),$$

that is,

$$p'(X, Y) = \frac{number\ of\ \text{``integer points''}\ in\ set\ K}{number\ of\ \text{``integer points''}\ in\ set\ L}.$$

Since set K is only a part of set L, the number $p'(X, Y)$ is enclosed in the segment $[0, 1]$.

If vectors $a(X)$ and $a(Y)$ coincide, then $p'(X,Y) = 0$. If, on the contrary, the vectors are far away from each other, then the value $p'(X, Y)$ is close to, and can even equal one.

We shall note a useful, though not mandatory hereinafter, interpretation of the number $p'(X, Y)$. Let us assume that the vector $c = (c_1, \dots c_n)$ randomly runs across all vectors from the set S, and in doing so, it can appear in any point of this set, with an equal probability. In such cases, the random vector $c = (c_1, \dots ,c_n)$ is said to be *uniformly* distributed over the set S, i.e., among the set of the "integer points" $(n-1)$-dimensional simplex L. Then, the value $p'(X, Y)$ we defined allows for a probability interpretation, as being simply equal to the probability of a random event, when the distance between random vector $c = (c_1, \dots, c_n)$ and the fixed vector $a(X)$ does not exceed the distance between vectors $a(X)$ and $a(Y)$. The smaller this probability, the less accidental is the proximity of vectors $a(X)$ and $a(Y)$. In other words, their proximity in this case indicates a certain *dependence* between them. And the smaller the value $p'(X, Y)$, the stronger this dependence.

The uniformity of distribution of the random vector $c = (c_1, \dots, c_n)$ on simplex L, or rather on set S of its "integer points", may be justified by the fact that this vector depicts the distance between adjacent local maxima of the volume function of "chapters" of historical chronicles or other similar texts describing the given time interval (A, B). In considering various chronicles relating the history of different states in different historical epochs, it is quite natural to assume that a local multiple maxima may appear "with equal probability" in any point of the time interval (A, B).

The described construction was completed in assumption that we fixed a certain variant of multiple maxima introduction for volume graphs of chronicles. Variants like that exist in a great number, no doubt. We shall consider all such variants and for each of them, calculate a separate value $p'(X, Y)$, upon which we shall take the least of all obtained values and denote it as $p''(X, Y)$, i.e., minimize the coefficient $p'(X, Y)$ through all possible methods of local multiple maxima introduction of graphs *vol* $X(t)$ and *vol* $Y(t)$.

We shall eventually recall that, upon calculating the coefficient $p''(X, Y)$, the chronicle X and Y appeared to be in unequal positions. The fact is that we were considering an "n-dimensional ball" of radius $r(X, Y)$ with its centre in point $a(X)$. In order to eliminate the apparent discrepancy between chronicles X and Y, we shall simply swap them and repeat the construction described above, now taking the point $a(Y)$ as the centre of the "n-dimensional ball". As a result, a certain value will be obtained, which we denote as $p''(Y, X)$. In the capacity of "symmetrical coefficient" $p(X, Y)$, we shall take a simple average of the values $p''(X, Y)$ and $p''(Y, X)$, i. e.,

$$p(X, Y) = \frac{p''(X, Y) + p''(Y, X)}{2}.$$

For the sake of clarity, we shall explain the meaning of the preliminary coefficient $p'(X, Y)$ on an example of a volume graph with only two local maxima. In this case, both vectors,

$$a(X) = (x_1, x_2, x_3) \text{ and } a(Y) = (y_1, y_2, y_3),$$

are vectors in 3-dimensional Euclidean space, their ends lying on a two-dimensional equilateral triangle L that truncates the same number $B - A$ from the coordinate axes in the space R^3. See fig. 5.8. If we mark the distance between points $a(X)$ and $a(Y)$ as $|a(X) - a(Y)|$, then set K is the intersection of the triangle L with the three-dimensional ball, the centre of which is in the point $a(X)$ and the radius equal to $|a(X) - a(Y)|$. After that, we need to calculate the number of "integer points", i. e., points with integer-valued coordinates, in set K and triangle L. Taking the ratio of the numbers obtained, we arrive at the coefficient $p'(X, Y)$.

For specific calculations, it is quite convenient to

Fig. 5.8. Vectors $a(X)$ and $a(Y)$ define the "ball", part of which becomes included in simplex L.

use an approximate method of calculating the coefficient $p(X, Y)$. The fact is that computation of the number of integer points in set K is quite difficult, but appears to be possible to simplify by proceeding from "discrete model" to the "continuous model". It is well known that if $(n–1)$-dimensional set K in $(n–1)$-dimensional simplex L is rather large, then the number of integer points in K is approximately equal to $(n–1)$-dimensional volume of set K. Therefore, from the very beginning it is possible to use the ratio of $(n–1)$-dimensional volume K to $(n–1)$-dimensional volume L as the preliminary coefficient $p'(X, Y)$, i. e.,

$$p'(X, Y) = \frac{(n\text{-}1)\text{-}dimensional\ volume\ K}{(n\text{-}1)\text{-}dimensional\ volume\ L} \ .$$

For instance, in case of two local maxima, ratio

$$\frac{area\ of\ set\ K}{area\ of\ traingle\ L}$$

should be taken as the coefficient $p'(X, Y)$.

When the value of $B – A$ is small, the "discrete coefficient" and the "continuous coefficient" are certainly different. But we in our researches deal with sev-

eral decades' and even several hundred years' time intervals $B – A$, therefore for our purposes we can, without making a great mistake, use the "continuous model" $p'(X, Y)$ in all confidence. Precise mathematical formulae for the calculation of the "continuous coefficient" $p'(X, Y)$ and for its lower and upper boundaries are presented in the work [884], page 107.

Let us present one more specification of the statistical model described above. When working with specific volume graphs of historical texts, one should "smoothen" those graphs in order to eliminate minute random peaks. We have made our graph even by "proximity averaging", that is, by replacing the value of the volume function at each point t by a simple average of three values of the function, namely, at the points $t–1, t, t+1$. In the capacity of the "final coefficient" $p(X, Y)$, its value as calculated for such "smoothed graphs" should be taken.

The maxima correlation principle stated above will be confirmed if, for the majority of pairs of *a priori* dependent texts X and Y, the coefficient $p(X, Y)$ turns out to be small, and for the majority of the *a priori* independent texts it turns out to be, on the contrary, large.

1.4. Experimental test of the maxima correlation principle. Examples of dependent and independent historical texts

In 1978-1985 we conducted the first extensive experiment in the computation of numbers $p(X, Y)$ for several dozen pairs of specific historical texts: chronicles, annals, and so on. See details in [904], [908], [1137] and [884].

The coefficient $p(X, Y)$ turned out to distinguish between *a priori dependent* and *a priori independent* pairs of historical texts well enough. It was discovered that for all examined pairs of actual chronicles X, Y describing *obviously different* events (different historical epochs or different states), i.e., for all *independent* texts, the number $p(X, Y)$ fluctuates from *1* to *1/100*, where the number of local maxima ranges from *10* to *15*. On the contrary, when historical chronicles X and Y were *a priori dependent*, that is, described the same events, the number $p(X, Y)$ for the same number of maxima doesn't exceed 10^{-8}.

Thus, the spread between the coefficient values for

dependent and independent texts is approximately 5-6 orders of magnitude. We shall emphasize the fact that it is not the absolute value of the obtained coefficients that is of importance here, but the fact that the "zone of coefficients for *a priori* dependent texts" is separated by *several orders of magnitude* from the "zone of coefficients for *a priori* independent texts". Let us present several examples. Exact values of volume functions for especially interesting chronicles are presented in the Appendix at the end of the book, in order to avoid the overload of current narration.

EXAMPLE 1.

Volume graphs for two *a priori* dependent historical texts are presented in fig. 5.9, fig. 5.10 and fig. 5.11.

Namely, in the capacity of text *X* we took a historical monograph *Essays on the History of Ancient Rome* by V. S. Sergeyev, a contemporary author. – Vol.1-2, OGIZ, Moscow, 1938.

In the capacity of text *Y* we took the "antique" source, *The History of Rome* by Titus Livy. – Vol.1-6, Moscow, 1897-1899.

According to the Scaligerian chronology, these texts describe events in the time interval allegedly of 757-287 B.C. Thus, here $A = 757$ B.C., $B = 287$ B.C. Both texts describe the same historical epoch, approximately the same events. *Primary* peaks of the volume graphs obviously occur at virtually the same time. For quantitative comparison of functions, it is necessary to smoothen "ripples", i. e., secondary peaks that can be superposed over the main, initial oscillations on the

Fig. 5.9. Volume functions of the chronicle of the "ancient" Titus Livy and a modern textbook by Sergeyev. One sees a very explicit correlation. Part one.

Fig. 5.10. Volume functions of the chronicle of the "ancient" Titus Livy and a modern textbook by Sergeyev. Part two.

Fig. 5.11. Volume functions of the chronicle of the "ancient" Titus Livy and a modern textbook by Sergeyev. Part three.

graph. When computing the coefficient $p(X, Y)$ we have smoothed these graphs to emphasize only their *main* local maxima, not exceeding 15 in number. It turned out that $p(X, Y) = 2 \times 10^{-12}$. The small value of the coefficient indicates *dependence* between the texts compared, which comes as no surprise in this particular case. As we have already noted, both texts describe the same historical time interval of the "ancient" Rome. The small value of the coefficient $p(X, Y)$ proves the fact that if we consider the observed proximity of the splash points on both graphs as an random event, then its probability is extremely small. As we can see, the contemporary author V. S. Sergeyev reproduced the "ancient" original in his book quite accurately. He certainly supplemented it with his own considerations and commentaries, which, however, turn out to have no influence on the character of dependence between those texts.

Now, we shall use the book by V. S. Sergeyev as the "chronicle" X' once again, and as the "chronicle" Y', the same book, but with the order of the years in the text replaced by the opposite one – in other words, as if we have read the book by Sergeyev "back to front". In this case, $p(X',Y')$ turns out to equal 1/3, a value substantially closer to 1 than the previous one and demonstrating the independence of compared texts – hardly surprising, since the operation of "inverting the chronicle" yields two *a priori* independent texts.

EXAMPLE 2.

We shall regard the following *a priori* dependent historical texts as examples – the two Russian chronicles:

X – **Nikiforovskaya letopis'** (The Nikiforov Chronicle) [672],

Y – **Suprasl'skaya letopis'** (The Suprasl' Chronicle) [672].

Both chronicles cover the time interval of allegedly 850-1256 A.D.

Their volume graphs are presented at fig.5.12. Both volume graphs of "chapters" allegedly of 850-1255 A.D. have 31 peaks occurring virtually simultaneously, in the same years. The calculation yields $p(X, Y) = 10^{-24}$, a fairly small value; therefore, dependence between those texts is confirmed. In CHRON1, Appendix 5.1, we present precise numerical data for the volume functions of these chronicles.

EXAMPLE 3.

We now shall consider two other Russian chronicles:

X – **Kholmogorskaya letopis'** (The Kholmogory Chronicle) [672],

Y – **Povest' vremennykh let** (Story of Years of Time).

Both chronicles cover the time interval of allegedly 850-1000 A.D. Volume graphs of the chronicles reach their local maxima *virtually simultaneously* as well, which is again not by accident but in the order of things – otherwise, the sole chance out of 10^{15} would

Fig. 5.12. Volume graphs for dependent chronicles: the Suprasl'skaya and the Nikiforskaya. The graph peaks are almost simultaneous.

Fig. 5.13. The graphs of three dependent chronicles: the *Suprasl'skaya letopis'*, the *Nikiforovskaya letopis'*, and the "richer" *Povest' vremennykh let*. Calculations show a distinct dependence of the respective peak points.

have been realized. Here, $p(X, Y) = 10^{-15}$. These two chronicles are dependent in the stated time interval. Fig. 5.13 simultaneously presents three volume graphs – for *Suprasl'skaya letopis'*, *Nikiforovskaya letopis'*, and *Povest' vremennykh let*, the latter chronicle being "richer", therefore its graph has more local maxima,

and its dependence is not so obvious. Nevertheless, an explicit dependence between those three graphs is as well revealed after smoothing. We shall describe comparison between "rich" and "poor" chronicles in the next chapters. The distribution of volumes of the mentioned chronicles is given in CHRON1, Appendix 5.1.

EXAMPLE 4.

An example from the mediaeval Roman history.

X – **The History of the City of Rome in the Middle Ages**, a fundamental monograph by F. Gregorovius, a German historian, Vols. 1-5 ([196]). This book was written in the XIX century on the basis of a great number of mediaeval secular and ecclesiastic documents.

Y – **Liber Pontificalis** (T. Mommsen, **Gestorum Pontificum Romanorum**, 1898). This "Book of Pontiffs", the list and biography of the mediaeval Roman Popes, was restored by Theodor Mommsen, a German historian of the XIX century, from mediaeval Roman texts. Here, $p(X,Y) = 10^{-10}$, which demonstrates an obvious dependence between these two texts. To assume such proximity is accidental, the sole chance out of 10 billion would have been realized.

And so on. The several dozen examples of historical texts we processed, – *a priori dependent* as well as *a priori independent*, – confirmed our theoretical model. Thus, we managed to reveal regularities that allow us to statistically characterize *dependent* historical texts, or those covering the same time interval and the same "flow of events" in the history of the same region or the same state. In the meantime, experiments have demonstrated the following: if two historical texts *X* and *Y* are, on the contrary, *independent*, that is, describe obviously different historical epochs, or different regions, or essentially different "flows of events", then the peaks on volume graphs *vol X(t)* and *vol Y(t)* occur in substantially different years. In the latter case, a typical value of coefficient *p(X, Y)*, the local maxima varying from 10 to 15, fluctuates from 1 to 1/100. Here is a typical example.

EXAMPLE 5.

We now return to the "ancient" history of Rome. In the capacity of compared texts *X* and *Y*, we have taken two other fragments from the book **Essays on the History of Ancient Rome** by V. S. Sergeyev ([767]). The first fragment covers the alleged years 520-380 B.C., the second one – the alleged years 380-240 B.C. These periods are considered independent. The computation of the coefficient *p(X, Y)* yields 1/5, a striking value, different from typical values – $10^{-12} – 10^{-6}$ – for *a priori* dependent texts with a similar value of local maxima by several orders of magnitude. Thus, these two texts, "two halves" of the book by V. S. Sergeyev, are truly independent.

Above, we have used a numerical characteristic of volume for the "chapter". However, as our research has demonstrated, a similar statistical regularity becomes apparent for fairly large historical texts when other numerical characteristics are used – for instance, the number of names in each "chapter", the number of references to other chronicles, etc.

In our computational experiment we compared:

a) ancient texts with ancient texts;

b) ancient texts with contemporary texts;

c) contemporary texts with contemporary texts.

As we have already mentioned, other numerical characteristics of texts were analyzed along with volume graphs of "chapters". For instance, graphs for number of names mentioned, numbers of a specific year's mentions in the text, the frequency of references to some other fixed text, and so on ([904], [908], [1137] and [884]). The same *maxima correlation principle* turns out to be true for all of these characteristics – namely, the peaks on graphs for dependent texts occur virtually simultaneously, and as for independent texts, their peaks do not correlate at all.

We shall formulate one more consequence of our basic model, the statistical hypothesis.

If two historical texts are *a priori dependent*, that is, if they describe the same "flow of events" on the same time interval in the history of the same state, then the peaks on corresponding graphs for any pair of numerical characteristics stated above occur approximately in the same years. In other words, if a year is recorded by both chronicles in more detail than the adjoining ones, then the number of mentions of this year, as well as the number of names of characters mentioned in that year, and so on, will increase (locally) in both chronicles. The situation for *a priori independent* texts is directly opposite – no correlation between the stated numerical characteristics is due.

The "secondary maxima correlation principle" proved to be correct when tested on specific, *a priori* dependent, historical texts ([884], pp.110-111).

1.5. Method of dating the historical events

Since our theoretical model is supported by the results of experiments, we can now propose a new method of dating the ancient events, – not a universal one, though, – and describe the main idea thereof.

Fig. 5.14. Volume graphs for dependent chronicles: that of the **Dvina Book of Chronicles**, and its shorter edition. Both graphs peak practically simultaneously.

Let *Y* be a historical text covering an unknown "flow of events", its absolute dates being lost. Let years *t* be counted in the text from some event of a local importance, for instance, the foundation of a town, the coronation of a king, whose absolute dates remain unknown to us. We shall calculate the volume graph of "chapters" for text *Y* and compare it with the volume graphs of other texts, for which we know the absolute dating of events described. If text *X* is revealed among those texts, and its number $p(X, Y)$ is small – i. e., has the same order of magnitude as pairs of dependent texts (for instance, does not exceed 10^{-8} for the corresponding number of local maxima) – then a conclusion can be made, with a sufficient probability, of coincidence or the proximity of the "flows of events" described in those texts. Moreover, the smaller the number $p(X, Y)$, the bigger this chance.

Furthermore, both compared texts may appear completely different – for instance, two versions of the same chronicle written in different countries, by different chroniclers, in different languages.

This method of dating was experimentally tested on mediaeval texts with *a priori* known dates, and the newly acquired dating coincided with those. Now, let us give a few typical examples.

EXAMPLE 6.

In the capacity of the text *Y,* we have chosen a Russian chronicle, the so-called short edition of the **Dvinskoy Letopisets** (The Dvina Book of Chronicles), describing the events in the time interval of 320 years ([672]). We shall try and date the events recorded in this chronicle using said method. Looking through all chronicles published in **The Complete Russian Chronicles**, we shall soon discover text *X*, for which the peaks on volume graph *vol X(t)* occur virtually in the same years that those on graph *vol Y(t)* of the chronicle *Y*, fig. 5.14.

While comparing the graphs, we made sure to have preliminarily superposed time intervals (*A, B*) and (*C, D*) one over another. The result of calculation is $p(X, Y) = 2 \times 10^{-25}$. Therefore, these two chronicles most probably describe approximately the same "flows of events". Thus, we manage to date the events recorded in text *Y* in a fairly formal way, on the basis of the sole comparison of statistical characteristics of texts. The chronicle *X* turns out to be a lengthy edition of the **Dvinskoy Letopisets** ([672]). This chronicle is considered to describe the "flow of events" of 1390-1707 A.D.

As a result, the dating of the text *Y* we obtained co-

Fig. 5.15. Graphs of dependent chronicles – the *Suprasl'skaya* and the *Akademicheskaya* on the interval of 1336-1374 A.D. The peaks of the volume graphs occur identically all the time, with just one exception. The locations of local maxima of the graph are marked with thick black dots underneath the graphs – in case of the ***Supraslskaya Chronicle***, these two chains of dots are nearby each other. One sees that the peak points only fail to coincide once. The two chronicles are thus clearly of a dependent nature.

incides with its standard dating, which proves the efficiency of our method.

EXAMPLE 7.

We shall take the Russian *Akademicheskaya letopis'* (Academic Chronicle) ([672]) as "text *Y* with unknown dating". Following the example described above, we soon discover text *X*, namely, a part of the *Suprasl'skaya letopis'* ([672]) thought to have described years 1336-1374 A.D. The peaks on the volume graph *vol X(t)* turns out to occur virtually in the same years as those on the volume graph *vol Y(t)*, fig. 5.15.

Calculation yields the result $p(X, Y) = 10^{-14}$. Such a small value of the coefficient clearly indicates the dependence of these two texts. Since chronicle *X* is dated, we can date the chronicle *Y*, too. The obtained dating of text *Y* coincides with its dating as known before.

Our research was based on several dozens of similar texts of the XVI-XIX century, and in all cases the acquired dating of the "unknown text *Y*" coincided with its usual dating.

In fact, we have learnt nothing new from the examples stated above, because the dating of the short edition of the ***Dvinskoy Letopisets***, for instance, has

been known in advance, and we had no reasons to doubt its correctness, since it belongs to the XIV-XVIII century, that is, the epoch when the chronology is more or less dependable. Nevertheless, soon we shall see our method to yield very interesting results regarding chronicles attributed to earlier epochs, that is, those preceding the XIV century A.D.

The maxima correlation principle has been stated above in its rough form, without an attempt to go deep into statistical detail, because we were only after being understood by our readers as fast as possible. Meanwhile, a strict mathematical presentation of the method and its clarifications demand a substantially more detailed study. We would refer our readers wishing to delve into the described method to scientific publications [884] and [892].

The coefficient $p(X, Y)$ can conditionally be called PACY – the Probability of Accidental Coincidence of Years described in detail by chronicles *X* and *Y*.

A further development and adjustment of the idea is presented in the works by V. V. Fedorov and A. T. Fomenko ([868]), as well as A. T. Fomenko, V. V. Kalashnikov and S. T. Rachev ([357]). It was further re-

vealed that the maxima correlation principle manifests itself most explicitly when comparing historical texts of approximately the same volume and "density of description". Moreover, in some cases not only the local maxima points for *a priori* dependent texts, but also their volume functions, or amplitudes, turned out to correlate! The correlation of volume function amplitudes is especially visible when comparing "fairly poor" texts, or the chronicles with large lacunae – considerable time intervals not reflected in the chronicle. The process of writing "fairly poor" chronicles turns out to be subject to a fairly interesting principle – "respect for information", or "preservation of rarities", a regularity discovered by A. T. Fomenko and S. T. Rachev ([723] and [1140]). For preliminary research in this direction and the formulation of the principle of respect for information, see works [723] and [1140], as well as below in the paragraph written by A. T. Fomenko and S. T. Rachev.

The maxima correlation principle was successfully applied to the analysis of certain Russian chronicles of the period of "strife" at the end of the XVI century – beginning of the XVII century A.D. See related works by A. T. Fomenko and L. E. Morozova ([902] and [548]). N. S. Kellin took a major part in this research as well. See below the part written by A. T. Fomenko, N. S. Kellin, and L. E. Morozova.

2.
VOLUME FUNCTIONS OF HISTORICAL TEXTS AND THE AMPLITUDE CORRELATION PRINCIPLE

By A. T. Fomenko and S. T. Rachev

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2.1. Dependent and independent chronicles. Volume function maxima correlation

We shall describe the results published by the authors in [723] and [1140]. As above, we shall call two historical chronicles *X* and *Y dependent* if they can be traced back to a common original source and record

approximately the same events on the same time interval (*A, B*) in the history of the same region.

On the contrary, we shall consider two chronicles *independent* if they record events of substantially different time intervals (*A, B*) and (*C, D*), or describe events in obviously different geographical regions. We shall consider two time intervals *substantially different* if their intersection on the time axis (i.e., their common part) does not exceed half of their length. Hereinafter, for the sake of simplicity, we shall assume that chronicles compared describe time intervals of the same length, i. e., $B - A = D - C$.

Let chronicle *X* describe events on the time interval (*A, B*), and parameter *t* run through the years from year *A* to year *B*. As above, we shall mark the part of the chronicle that describes the events in the year *t* as $X(t)$. For the sake of brevity, we shall conventionally call fragments $X(t)$ *chapters*. Let us calculate the volume of each fragment in certain units, for instance, in quantity of lines, or in pages. In the examples below, the volume of chapters is calculated in lines. However, the choice of measurement unit is not of great importance here. During statistical processing we have normalized the volume of chapters by dividing them by the total volume of the chronicle, thus levelling a possible difference in choice of volume measurement units. So, we obtain the function $vol\ X(t)$ that we call the *volume function* of the chronicle.

The correlation principle for local maxima points of the volume graphs was formulated and experimentally tested by A. T. Fomenko in [884]. The main idea in the basis of the principle and the methods pertinent to it is as follows: dependence or independence of chronicles can in certain cases be established by comparing their volume functions. Generally speaking, *local maxima points of volume graphs of dependent chronicles should "correlate"* (in a proper precise sense, see above), *while independent chronicles should not display any "correlation"*, fig.5.1.

In their work [357], A. T. Fomenko, V. V. Kalashnikov and S. T. Rachev, applied the general idea of volume function correlation for dependent chronicles, and the absence of correlation for independent chronicles, to *volume functions themselves*, that is, considering their *amplitudes*. Since the research involved the amplitudes of graphs, this enhanced form of correlation principle should have been tested on specific

Fig. 5.16. Volume graphs of a rich chronicle and a poor one.

chronicles, which were performed in [357] with participation of N. Y. Rives. Detection methods for dependent and independent chronicles as offered in [357], turned out to be fairly efficient when comparing chronicles of approximately *the same volume*. However, the picture was becoming "smudged" when chronicles of substantially *different volumes* were compared. The current work specifies a new class of chronicles, for which the enhanced form of the local maxima amplitude correlation principle is correct.

The maxima correlation principle discovered by A. T. Fomenko relied upon the fact that different chroniclers, describing the same historical epoch, would generally use *the same volume* or fund of information that survived until their time. That is why, as our statistical experiments prove, they *would describe in greater detail only those years from which many texts survived, and in smaller detail all the rest of them.*

We shall recall the notion of primary information volume for events of epoch (*A, B*). Let $C(t)$ be the volume of all documents written by the contemporaries of year *t* about the events of that year, fig. 5.2. Now, let *X* and *Y* be chroniclers who are not contemporaries of

the epoch (*A, B*) but willing to write its history. Let *M* (respectively *N*) be the year in which chronicler *X* (respectively *Y*) creates the chronicle for the epoch (*A,B*).

We shall recall that $C_M(t)$ is the volume of documents that survived from the epoch (*A, B*) till the moment *M*, or the epoch of the chronicler *X,* – in other words, the remainder of primary texts survived till *M*. Graph $C_M(t)$ is the volume graph for the surviving information about the events of the epoch (*A, B*). $C_N(t)$ is defined similarly.

The maxima correlation principle ensues from the following principle. Each chronicler *X,* describing the epoch (*A, B*), "on the average" talks in greater detail about years in which the graph $C_M(t)$ peaks – i. e., the more documents from the epoch (*A, B*) are available to the chronicler *X*, the more detailed is his description of that time, q.v. in fig.5.3.

2.2. Rich and poor chronicles and chronicle zones

The definition of a poor chronicle or a rich one is intuitively clear from fig. 5.16. We shall call the chronicle with the "majority" of volumes *vol X*(*t*) equalling zero *poor*, where most of the years haven't been described by a chronicler. On the contrary, we shall call the chronicle with the "majority" of volumes *vol X*(*t*) other than zero and fairly large *rich*, where a chronicler reports ample information about the epoch (*A, B*).

In fact, for actual examples it is sometimes difficult to categorize a chronicle as either poor or rich, therefore, the introduction of new definitions – *poor zone* and *rich zone* of a chronicle – would be practical. Fig. 5.17 presents a relative volume graph of a chronicle with a *poor* beginning and a *rich* ending. Our research experience for specific chronicles makes it clear that *the beginning* of a long chronicle is a *poor zone*,

Fig. 5.17. The poor initial zone of a chronicle, and a richer zone following it.

Fig. 5.18. The rich and the poor zones may alternate within one and the same chronicle.

and its ending is a *rich zone*, typically, although there are chronicles with a poor zone "in the middle", q.v. in fig. 5.18.

2.3. Significant and insignificant zeroes of volume functions

In our study of a specific chronicle we shall assume the first year for which *vol X(A)* differs from zero as the leftmost point *A* on the time axis, the year is *described* by a chronicler, in other words, we shall call the zero of a volume graph *significant* if it is located *to the right* from the first non-null value, fig.5.19. If the zero is *to the left* from the first non-null value of the graph, then we shall call it *insignificant*. An insignificant zero indicates that not only does the chronicler know nothing about that particular year, but also nothing of preceding years in general. A significant zero indicates that, although the chronicler knows nothing about that particular year, he knows at least something about some of the *previous* years.

From this moment on, we shall not normalize the volume function, since we want to consider the magnitude of amplitudes of local maxima in our research.

2.4. The information respect principle

Let us consider a certain historical epoch (*A, B*) and a chronicler *X* who lives in year *M*, where *M* is much bigger than *B*, fig.5.20. Describing the events of the epoch (*A, B*), the chronicler *X* has to rely on the surviving information fund $C_M(t)$, still available in his time. Our idea is that the chronicler *X* treats poor and rich zones of the survived information fund differently.

Fig. 5.19. Significant and insignificant zeroes of the chronicle volume function.

Fig. 5.20. The scribe accurately and scrupulously copies the "poor" zone of the remaining information fund of his time, and treats its richer zones with less reverence, selecting materials the way he sees fit.

We shall briefly formulate the model, the *information respect principle,* in the following way.

A chronicler's respect for surviving information is in inverse proportion to its volume.

The intuitive justification of this principle is clear. If some information has survived against a "zero-surrounded background", that is, when to the left and the right of it are the years of which the chronicler knows nothing, then the chronicler has to *highly appreciate* those scarce shreds of information miraculously spared by time. He copies them quite painstakingly, irrespective of his personal attitude towards their contents. Moreover, a chronicler in a *poor zone* of survived information fund has little space. He is limited in his freedom of action by a fairly small volume of surviving information. Therefore, the chronicler reproduces in good faith (by and large), the *amplitudes* of the volume function $C_M(t)$ for the information surviving in its poor zones.

The situation is different in what concerns the *rich zones*. A chronicler faces the necessity to *select* important things from the abundant choice of information. But the larger the volume of surviving information, the less does the chronicler appreciate individual pieces thereof, which often leads to distortions of volume graph amplitudes of the fund surviving in rich zones. Our statistical experiments have proved its veracity. The chronicler is free to be as subjective as he pleases: he can choose one kind of data and be intentionally "indifferent" to other.

2.5. The amplitude correlation principle of volume graphs in the poor zones of chronicles

We shall draw consequences from the information respect principle.

Let two chroniclers X and Y describe the same events on the same time interval (A, B). Each of them "copies" the volume graph of *poor zones* of the surviving information fund on the events of epoch (A, B) fairly well. Therefore, *the volume graphs of chronicles* X *and* Y *will look alike within poor zones.* Now we can formulate the model – *the amplitude correlation principle in poor zones.*

a) If chronicles X and Y are *dependent*, i. e., describe approximately the same events and trace back to a common original source, then their volume graphs *vol X(t)* and *vol Y(t)* should correlate quite well within their poor zones. In the meantime, within their rich zones there may be no amplitude correlation (upon superposition of graphs) at all.

b) If chronicles X and Y are *independent*, their volume graphs within their poor zones should be also independent, that is, there should be no amplitude correlation (upon the superposition of graphs).

That is, in case of poor dependent chronicles not only do the peaks of comparable graphs correlate, but also *their amplitudes.*

2.6. Description of statistical model and formalization

We shall now consider the time period (A, B) and introduce the coordinate x varying from 0 to $B - A$ thereon, where $B - A$ is the length of the time period that we are interested in. It is clear that $x = t - A$. Let $f(x) = vol\ X(x)$ be the volume function of the chronicle X. We shall mark as $G(x)$ the function

$$G(x) = f(0) + f(1) + \ldots + f(x),$$

or, the "integral" of the function f from 0 to x. We shall call this function *the accumulated sum* of the chronicle X, and consider a normalized accumulated sum

$$F(x) = G(x)\ /\ vol\ X,$$

where *vol X* is the total volume of the chronicle X. The normalized accumulated sum is presented as a

Fig. 5.21. Function graphs $F(x)$ and $g(x) = 1 - F(x)$.

non-decreasing graph with values increasing from 0 to 1, character of this increase differing for various chronicles.

Let us consider a new function $g(x) = 1 - F(x)$. See fig. 5.21. Its graph does not increase. Omitting mathematical precision, we shall formulate the next model.

The function $g(x) = 1 - F(x)$ *should behave in the poor, early zone of the chronicle as function* $exp(-\lambda x^{\alpha})$.

In mathematical statistics, distributions of such kind are called the Weibull-Gnedenko distributions which are used in mathematical statistics for the description of similar processes.

Therefore, we have two degrees of freedom at our disposal: the parameter λ and the parameter α, swapping which, we can try to approximate the function $1 - F(x)$. If we manage to do it for specific chronicles, this will prove our theoretical model.

The statistical experiment that we performed with actual chronicles demonstrated that the decrease of

Fig. 5.22. Depiction of the two parameters – the shape and the volume of the chronicle in question – with a point on a plane.

the graph $1 - F(x)$ is indeed fairly well approximated by the function $exp(-\lambda x^{\alpha})$, given a suitable choice of values for λ and α.

As a result, we can juxtapose over each chronicle – or rather over its beginning – the poor zone thereof, of the two numbers λ and α reflecting the character of the chronicle's volume function behaviour. We shall call λ the parameter of the chronicle's *volume*, and α the parameter of the chronicle's *form*.

The parameter α turns out to be more important to us since, as statistical experiments have demonstrated, it is this parameter that has a better sense of the distribution character of individual scarce peaks of volume graphs within the poor zone of a chronicle. The parameter α will be the first to indicate whether chronicles are dependent or independent. The parameter λ is rather responsible for the chronicle's volume, it demonstrates how rich or poor the chronicle is.

So, our hypothesis, or the statistical model may now be formulated in the following way.

a) If chronicles *X* and *Y* are *dependent*, then their pairs of corresponding parameters (α_X, λ_X) and (α_Y, λ_Y) should be *similar*, stipulating that they are calculated for the poor zones of the chronicles.

b) If the chronicles *X* and *Y* are *independent*, then their pairs of corresponding parameters (α_X, λ_X) and (α_Y, λ_Y) should be at some distance from each other.

It is convenient to picture the pair of numbers (α, λ) as a point on an ordinary plane with Cartesian coordinates α and λ. See fig. 5.22.

2.7. The hypothesis about the increase of the "form" parameter of a chronicle in the course of time

We shall now consider two different historical epochs: one with a poor primary information fund, and one with a rich primary fund. In the latter case, we assume the volume of this fund to be more or less constant for each year. Then, it can be demonstrated (omitting mathematical details) that the value α in the first, poor case should be *less* than the value of α in the second, rich case ([723], [1140]). See also articles 2.13 – 2.15. In other words, *poor primary funds* are characterized by *small* values of α, and the *rich primary information funds* by *large* values of α.

But the closer historical epoch (*A, B*) is to our time, the better do the primary information funds survive. Today, for instance, written information is, by and large, on the average kept better than in the distant past. Therefore, the value of the parameter α should "on the average" *increase*, as we shift the time period (*A, B*) under study from left to right on the time axis, i.e., closer to us.

2.8. The list and characteristics of the Russian chronicles we investigated

1) *Povest' vremennykh let* (*Story of Years of Time*). See *Literary Memorials of the Ancient Rus'. The Beginning of the Russian Literature.* Moscow, 1978.

This famous chronicle covers the events in the history of Russia, allegedly between the IX and XII century A.D. The main part of the chronicle describes the epoch of the alleged years 850-1110 A.D. in the consensual chronology. The chronicle begins with a poor zone approximately one hundred years long, starting allegedly in 850 A.D. and ending in the alleged year 940 A.D. The next part of the chronicle, beyond 1050-1110 A.D., is fairly rich.

2) *Nikiforovskaya letopis'* (*The Nikiforov Chronicle*), of the Byelorussian-Lithuanian group of chronicles. See *The Complete Russian Chronicles*, Volume 35, Moscow, 1980. The period of 650 between the alleged years 850 A.D. and 1450 A.D. has been taken for our research work.

3) *Suprasl'skaya letopis'* (*The Suprasl' Chronicle*), of the Byelorussian-Lithuanian group of chronicles. See

The Complete Russian Chronicles (*CRC* for short), volume 35, Moscow, 1980. The period for which this chronicle provides the dates is allegedly 850-1450 A.D. This chronicle, as well as the Nikiforov one, can be rather ranked among *poor* texts in comparison with the richer *Povest' vremennykh let*.

4) *Akademicheskaya letopis'* (*The Academy Chronicle*). See *CRC*, volume 35, Moscow, 1980. We have researched the period of 1338-1378 A.D. This chronicle is intermediate between poor and rich texts.

5) *Kholmogorskaya letopis'* (*The Kholmogory Chronicle*). See *CRC*, volume 33, St. Petersburg, 1977. It covers the period of the alleged years 850-1560 A.D. This chronicle contains both rich and poor zones.

6) *Dvinskoy letopisets* (*The Dvina Book of Chronicles*). Short and full editions. See *CRC*, volume 33, St. Petersburg, 1977. It covers the period of 1390-1750 A.D. This chronicle contains both rich and poor zones.

All these chronicles begin with *poor zones*, which comes as no surprise. A. T. Fomenko calculated the volume functions. See CHRON1, Appendix 5.1. Among the listed chronicles, there are *a priori dependent* and *a priori independent* ones. For instance, among the *a priori dependent* are:

a) *Nikiforovskaya letopis'* and *Suprasl'skaya letopis'*;

b) *Povest' vremennykh let* and *Nikiforovskaya letopis'*, therefore *Suprasl'skaya letopis'*, too.

c) Short and full versions of *Dvinskoy letopisets*.

A priori independent, for instance, are the part of *Dvinskoy letopisets* covering the XIV century A.D., and the next one covering the XV century A.D.

The fact of dependence or independence of the listed chronicles has been confirmed in [884] and [868] on the basis of the maxima correlation principle, q.v. above.

2.9. The final table of the numeric experiment

All listed chronicles were divided into pieces covering approximately 100 years, each one examined with the method stated above. As a result, the parameters α_X and λ_X, and the correlation coefficient r indicating how well the corresponding graph $exp(-\lambda x^{\alpha})$ approximates the decreasing graph $1 - F(x)$, were calculated (see table 5.1).

TABLE 5.1

Symbol	Chronicle	Epoch (A.D.)	α	λ	r
P1	*Povest' vremennykh let*	854-950	1.847	3.9×10	0.953
P2	*Povest' vremennykh let*	918-1018	3.003	1.6×10	0.955
P3	*Povest' vremennykh let*	960-1060	2.497	4×10	0.956
P4	*Povest' vremennykh let*	998-1098	2.378	1.3×10	0.954
N1	*Nikiforovskaya letopis'*	854-960	1.511	9.3×10	0.966
N2	*Nikiforovskaya letopis'*	960-1060	2.406	5×10	0.917
N3	*Nikiforovskaya letopis'*	1110-1210	3.685	7×10	0.660
N4	*Nikiforovskaya letopis'*	1236-1340	0.341	0.488	0.768
N5	*Nikiforovskaya letopis'*	1330-1432	1.390	3.9×10	0.953
S1	*Suprasl'skaya letopis'*	854-950	1.604	8.2×0	0.969
S2	*Suprasl'skaya letopis'*	960-1060	2.584	3×10	0.943
S3	*Suprasl'skaya letopis'*	1110-1210	3.617	7.8×10	0.656
S4	*Suprasl'skaya letopis'*	1236-1340	0.405	0.384	0.808
S5	*Suprasl'skaya letopis'*	1330-1432	2.354	1.6×10	0.983
S6	*Suprasl'skaya letopis'*	1432-1450	2.089	1.3×10	0.977
A	*Akademicheskaya letopis'*	1336-1374	2.185	8×10	0.960
D1	*Dvinskoy letopisets*	1396-1498	0.648	0.119	0.844
D2	*Dvinskoy letopisets*	1500-1600	4.060	2.2×10	0.875
K	*Kholmogorskaya letopis'*	852-946	1.311	7.3×10	0.960

Fig. 5.23. Numeric parameters of shape and volume of the Russian chronicles that we have studied as points on a plane. The points marked by crosses stand for supplementary Russian chronicles which will be covered in more detail later on.

All the obtained value pairs (α, λ) were represented as points on the plane, fig. 5.23, with values of α from 0 to 6 plotted along the horizontal axis. In our experiment, we have not yet encountered values of α exceeding 5. Along the vertical axis we plotted the values of λ, but had to use a shifting, alternating scale. In particular, the first horizontal strip corresponds to the values of λ from 0 to 0.0001, the step size being 0.00001; the next horizontal strip corresponds to the values of λ from 0.0001 to 0.001 (scale factor 0.0001), and so on. Points on fig.5.23 represent pairs of numbers (α, λ) that we have calculated for the chronicles marked with respective abbreviations next to the points.

2.10. Interesting consequences of the numeric experiment. The confirmation of the statistical model

As we can see, in all cases considered, the decreasing function $1 - F(x)$ is very well approximated by the function $exp(-\lambda x^{\alpha})$, given suitable choice of parameters α and λ. See the last column of the table 5.1, where the values of the correlation coefficient r are

apparently extremely close to 1. Thus, our statistical model is confirmed by the Russian chronicles under study – in particular, it turns out that volume functions of large historical chronicles can be modelled using the Weibull-Gnedenko distribution, a fact fairly interesting and useful in itself.

2.11. Comparison of a priori dependent Russian chronicles

We must make sure that points representing *a priori dependent* chronicles, or their fragments, must lie close by on the plane (α, λ). For instance, *Nikiforovskaya letopis'* and *Suprasl'skaya letopis'* were broken up into pieces: 850-950 A.D., 960-1060 A.D., 1110-1310 A.D., 1236-1340 A.D., and 1330-1432 A.D.

Example 1. Fig. 5.23 makes it evident that the corresponding points *N1* and *S1*, or the first fragments of *Nikiforovskaya letopis'* and *Suprasl'skaya letopis'* respectively, *virtually coincide* on the plane (α, λ).

Example 2. Points *N2* and *S2* are also *very close.*

Example 3. Points *N3* and *S3 virtually coincide.*

Example 4. Points *N4* and *S4 virtually coincide.*

Example 5. Points *N5* and *S5*, on the contrary, "come apart" on the plane, indicating the absence of amplitude correlation. And indeed we find ourselves in the *rich* zone of the chronicle, for which our rule is not necessarily applicable.

Example 6. Volume graphs of *Nikiforovskaya letopis'* and *Suprasl'skaya letopis'* are presented in fig. 5.24. Amplitude correlation of these chronicles, comparably poor in volume, is quite visible and confirmed by our numerical experiment.

Example 7. The following pair of the comparable chronicles is especially interesting, because we compare a *poor* and a *rich* dependent text, – namely, *Povest' vremennykh let* and *Nikiforovskaya letopis'*, or *Suprasl'skaya letopis'*. The volume graph of *Povest' vremennykh let* is presented on fig. 5.24. There is no explicit *visual amplitude* correlation. Only at the beginning of all three chronicles, *Povest' vremennykh let, Nikiforovskaya letopis', and Suprasl'skaya letopis'* is the *amplitude* correlation present; from about 950 A.D., it gradually becomes diluted.

Example 8. *Povest' vremennykh let* was broken up into pieces: 854-950 A.D., 918-1018 A.D., 960-1060 A.D. and 998-1098 A.D. The point *P1*, that is, the one

Fig. 5.24. Volume graphs of the Suprasl' chronicle, the Nikiforov chronicle and the *Story of Years of Time* chronicle with the rich and the poor zones emphasized.

corresponding to the period 854-950 A.D., seems to be far away on the plane (α, λ) from the virtually coinciding points *N1* and *S1,* which correspond to the pieces of **Nikiforovskaya letopis' *and* Suprasl'skaya letopis'** of 854-950 A.D., q.v. in fig. 5.23. However, we shall recall that the *main* parameter for us is α, or the form parameter. Comparing values of α for points *P1* and the pair of points *N1* and *S1*, that is, simply projecting these points on the horizontal axis, we can see that all three values of α are very close to each other. Therefore, the *rich* chronicle *P1*, i.e., **Povest' vremennykh let**, is actually *dependent* in relation to the two *poor* chronicles *S1* and *N1*, i.e., **Suprasl'skaya letopis'** and **Nikiforovskaya letopis'**. Thus, our method makes it possible to discover the *dependency* between *poor* and *rich* chronicles with certainty.

EXAMPLE 9. The points *P3, N2* and *S2 virtually coincide*, q.v. in fig. 5.23.

EXAMPLE 10. Finally, let us compare points *P4* and

N2, S2 corresponding to the chronicles describing close historical epochs. We can see that all three points are *very close* to each other on the plane. We have completely exhausted **Povest' vremennykh let**.

Therefore, our *amplitude correlation* principle *for dependent texts in their poor zones* has been confirmed, – in certain cases, even for the rich zones of chronicles.

2.12. Comparison of a priori independent Russian chronicles

To avoid qualms about the obvious independence of compared chronicles, we shall restrict ourselves to the texts recording time periods after 1300 A.D. only, those close to our time.

EXAMPLE 11. Let us break up, for instance, **Dvinskoy letopisets** into two parts: 1396-1498 A.D. and 1500-1600 A.D. We have had no reason to doubt their independence. Turning to fig.5.23, we can see the corre-

sponding points *D1* and *D2* to be *far away* from each other indeed – in diametrically opposite ends of the field filled with points representing the results of our experiment.

Example 12. Let us review *Nikiforovskaya letopis'* of 1110-1210 A.D. and its segment of 1236-1340 A.D. Although, according to the consensual chronology, they refer to *different* historical epochs, one cannot assert obvious independence of the two chronicles *a priori* since they describe events preceding 1300 A.D. Nonetheless, fig. 5.23 makes it clear that their corresponding points *N3* and *N4* are *far away* from each other on the plane (α, λ), which probably indicates their independence.

The experiments we performed with other independent chronicles (tables omitted) demonstrate that *obvious independence* of chronicles manifests itself in a substantial remoteness of points representing them on the plane (α, λ).

2.13. Growth of form parameter in the course of time for the Russian chronicles after the XIII century

If we examine the Russian chronicles distributed over the interval between the alleged IX-XVII centuries A.D., we shall see that this effect is not represented in fig. 5.23 with sufficient clarity. However, the situation becomes much clearer if we reduce ourselves to the chronicles beginning approximately from 1200 A.D. and closer to our time – i.e., from the moment when the consensual chronology may be trusted (to some extent, at least). The plane in fig. 5.23 is broken down into segments in accordance with different scales for parameter λ. Let us compare the positions of points found within one strip and describing events superceding the year 1200.

Fig.5.23 distinctly demonstrates that for all of three such points found within the fourth segment, – namely, the points *N4:* 1236-1340, *S4:* 1236-1340, *D1:* 1396-1498, – parameter α does actually *grow* over the course of time.

The third segment contains only two such points: *N5:* 1330-1432, and *S6:* 1432-1450. As we see, parameter alpha *grows over the course of time* as well, since point *S6* is located *to the right* of point *N5*.

The second strip in fig. 5.23 contains only two

such points – *S5:* 1330-1432, and *A:* 1336-1374. These values α are very close to each other, virtually coinciding. This is understandable, since the epochs described in texts *A* and *S5* are close by.

The first segment has four points. Only one of them, *D2*, describes the period after 1200; therefore, it is impossible to verify our hypothesis within this segment. Nevertheless, one cannot fail to note that, if we examine all these four points formally, parameter α shall evidently increase in the course of time as well, although we certainly cannot trust the Scaliger-Miller chronology preceding the year 1200.

Let us now compare the positions of points *N4:* 1236-1340, and *N5:* 1330-1432, disregarding the values of λ. Point *N5* is evidently located *to the right* of point *N4*, i. e., parameter α *does actually grow over the course of time*.

The same is also true for points *D1* and *D2*. Point *D2:* 1500-1600 is located *to the right of* point *D1:* 1396-1498, and here parameter α *grows over the course of time* as well.

Finally, the mutual arrangement of points *S4:* 1236-1340, *S5:* 1330-1432, and *S6:* 1432-1450 also confirms our hypothesis of the *growth of parameter* α over the course of time.

The *growth* of the parameter α over the course of time that we discovered assumes a natural explanation: the more recent the chronicle, the "more uniform" its volume function.

And yet it is impossible to make an unambiguous conclusion about the growth of the parameter α over the course of time for individual chronicles on the basis of a small number of experiments. Extra research is necessary.

2.14. Growth of the average form parameter over the course of time for groups of Russian chronicles of the XIII-XVI century

In certain cases of the preceding paragraph, we possibly attempted to measure sufficiently rough values "too accurately". Therefore, it is more natural to examine not just various chronicles and their parts, but rather the *groups* of chronicles approximately related to one period of, say, 50 or 100 years. Then, the average values of the parameter for these groups of texts should be compared. Let us examine the texts

Fig. 5.25. The chronological shift of 300-400 years and its manifestation in the Russian history. One sees a "shaded group" of chronicles next to each "white group". The gap in time between them equals three or four centuries.

beginning with 1200 A.D. and those closer to us. See the result in fig. 5.25. The points, or the chronicles corresponding thereto, are united into several groups corresponding to different periods of history.

Group of years 1236-1340 – two chronicles: *N4* and *S4*.

Group of years 1330-1450 – four chronicles: *N5, S5, S6, A*.

Group of years 1500-1600 – one chronicle *D2*.

In fig. 5.25 it is distinctly evident that each next group is located *to the right of* the preceding one, which matches *the growth* of parameter α over the course of time. The only exception is chronicle *D1: 1396-1498*, found next to the group of chronicles of years 1236-1340. Thus, the "integration of the picture" causes the effect of the growth of parameter α with the flow of time to manifest itself explicitly enough.

2.15. Growth of the average parameter of form over the course of time for the groups of Russian chronicles of the alleged IX-XIII century

The Russian chronicles found in this epoch are united into several groups describing close historical periods, – namely:

Group of years 854-950 – four chronicles: *N1, K, S1, P1*.

Group of years 918-1098 – five chronicles: *N2, S2, P2, P3, P4*.

Group of years 1110-1210 – two chronicles: *S3* and *N3*.

In fig. 5.25 it is distinctly evident that each of these groups is located *to the right* of the preceding one, which again indicates the growth of parameter α over the course of time.

CONCLUSION. In the Russian chronicles believed today to date back to the alleged IX-XIII century A.D., and those currently dated back to the XIII-XVI centuries A.D., the parameter α grows evenly over the course of time on the average, which confirms our statistical hypothesis. But the even growth of the parameter α over the course of time discovered by us now makes possible the usage of this effect to establish the correctness or the inaccuracy of the chronology of various chronicles. Let us cite an example.

2.16. Chronological shift by 300 or 400 years in Russian history

Fig. 5.25 vividly demonstrates an exceptionally interesting phenomenon.

a) A group of Russian chronicles of the alleged years 918-1098 is characterized with approximately the same values of the parameter α as a group of later Russian chronicles of 1330-1430. Moreover, for both groups of chronicles the growth rate of α over the course of time is more or less the same. In fig. 5.25 these two groups of texts are positioned in such a way that their projections on the horizontal axis are close by. In this case, the Scaliger-Miller dating of these two groups of chronicles differs by approximately 300-400 years. *Thus, we reveal a chronological shift of approximately 300-400 years in the Romanov version of the Russian history*.

b) An absolutely similar effect also appears in the

comparison of a group of Russian chronicles allegedly dated to 854-950, and a group of more recent Russian chronicles of 1236-1340 and 1330-1430. The group of 854-950 is located in fig. 5.25 between the groups of 1236-1340 and 1330-1430. Consequently, the values of the parameter α for the two groups of chronicles, which are normally set apart by approximately 300-400 years, once again prove to be very close to each other. *Again a chronological shift by 300-400 years is found in the Romanov version of the Russian history.*

c) We see a perfectly similar effect while comparing the parameters α for a group of Russian chronicles allegedly dated to 1110-1210 and 1500-1600. The values of α prove to be in sufficient propinquity once again. *We see the same chronological shift by approximately 400 years again.*

An important conclusion. Comparison of the values of parameter α shows that our statistical experiment with a large group of Russian chronicles *revealed a chronological shift of 300-400 years in the Romanov version of the Russian history*. Apparently, certain Russian chronicles, and therefore the events described therein, were dated incorrectly. As a result, certain actual events of the XIV-XVI century A.D. "slipped backwards in time" by 300-400 years and gave birth to their "phantom reflections" in the epoch of the alleged IX-XIII century A.D. We shall see further on that this 300-400 year shift in the Russian history is also revealed by means of completely independent methods.

2.17. Conclusions

1) A new empirico-statistical model that allows us to statistically recognize *dependent* and *independent* chronicles, as well as the statistical principles of *information respect* and *amplitude correlation* for the poor zones of chronicles, have been formulated.

2) Our model and both of the principles, namely, the statistical hypotheses, have been tested by a numeric experiment on the material of Russian chronicles. The model and both of the principles have been confirmed by trustworthy and reliably dated material.

3) It allows us to propose a procedure for the recognition of dependent and independent chronicles.

4) We have obtained the following statistical conclusions as a result of our analysis of several Russian chronicles.

4a. A damping graph $1 - F(x)$, where $F(x)$ is a normalized accumulated sum of the volume function of the chronicle, can be approximated sufficiently well by the function $exp(-\lambda x^\alpha)$ with a suitable selection of parameters α and λ.

4b. For the *dependent* chronicles X and Y, points (α_X, λ_X) and (α_Y, λ_Y) corresponding to them on the plane (α, λ) are in propinquity.

4c. For the *independent* chronicles X and Y, points (α_X, λ_X) and (α_Y, λ_Y) corresponding to them on the plane (α, λ), on the contrary, are distant.

4d. The parameter α, and sometimes also parameter λ, usually characterizes an entire group of chronicles describing events of the specified period. In other words, the parameter α is in a certain sense an "invariant of historical epoch" and its chronicles. This effect may be considered established for the Russian chronicles of the XIV-XVII centuries, i.e. more or less reliably dated texts.

5) Our statistical experiment with a large group of Russian chronicles *revealed a chronological shift by 300-400 years in the Romanov version of the Russian history*.

3.
THE MAXIMA CORRELATION PRINCIPLE ON THE MATERIAL OF THE SOURCES PERTINENT TO THE EPOCH OF STRIFE IN THE HISTORY OF RUSSIA (1584-1619)

A. T. Fomenko, N. S. Kellin, L. E. Morozova

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We will show now how the maxima correlation principle formulated by A. T. Fomenko manifests itself in a group of dependent historical texts related to the epoch of strife in Russia (the end of the XVI – the beginning of the XVII century A.D.). We have divided each of 20 texts into per annum fragments, or pieces describing the events of separate years, and

then N. S. Kellin and L. E. Morozova calculated volumes of all those "chapters" – namely, a number of words in each "chapter". The results obtained were formalized in a united Table 5.2, where the volume of per annum fragments from 1584 to 1619 is indicated for each of the 20 texts.

Here is the list of the investigated texts:

1) *Povest' o Chestnom Zhitii,* 2) *Povest Kako Voskhiti*, 3) *Povest Kako Otmsti*, 4) *Zhitie Dmitriya (Touloupova)*, 5) *Zhitie Dmitriya (Maliutina)*, 6) *Skazanie O Grishke*, 7) *Skazanie o Fyodore*, 8) *Skazanie o Samozvantse*, 9) *Povest Shakhovskogo*, 10) *Zhitie Iova*, 11) *Skazanie Avraamiya* (1st edition), 13) *The Chronographer of 1617*, 14) *Vremennik Timofeyeva*, 15) *Povest' Katyreva* (1st edition), 16) *Povest' Katyreva* (2nd edition), 17) *Inoye Skazaniye*, 18) *Piskaryovskiy Letopisets*, 19) *Noviy Letopisets*.

Three more texts were added later: 20) *Izvet Varlaama,* 21) *Bel'skiy Letopisets* and 22) *Skazaniye O Skopine*.

Below is Table 5.2 of the per annum fragment volumes for the first 19 texts. The years are plotted along the horizontal axis, and the numbers of texts along

the vertical. Years are indicated in abbreviated form: 84, 85, 86, etc. instead of 1584, 1585, 1586, etc.

All these historical texts basically describe the same events, therefore they are dependent, based on the same fund of surviving information. Table 5.2 shows that correlation between the peaks, i.e., local maxima of volume functions of these texts, is expressed clearly. It is evident that the peaks on almost all graphs occur virtually simultaneously, in particular, in the years: 1584, 1587, 1591 and 1598.

Now let us consider the result of the second numeric experiment, in which the 19 preceding texts were followed by the three additional texts (see above), with the time limits extended as well – namely, the interval of 1584-1598 A.D. was supplemented with years 1598-1606 – and a table similar to the preceding one was plotted. In Table 5.3, the symbol (•) marks the positions of the local maxima for all 22 historical texts within the range between 1584 and 1606 A.D.

It is distinctly evident that the peaks of all volume functions occur virtually simultaneously, which is explained by the dependence of these texts. *Consequently,*

TABLE 5.2

	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98
1:	432	288		200	375	376	1112	1632							2784
2:	140	455		458				105							196
3:	230			800				157							380
4:	120							740							48
5:	180			500	400	300	306	500							400
6:	152		52	180				76							68
7:	240	200	206	240	200	208	210	2884				20	22	26	756
8:	20							93							128
9:	128							600				20	26	28	360
10:	240	200	100	102	106	450		60	56	52	51	50	50	52	
11:	44			42				108							306
12:	54			42				347							112
13:	312			172	43	42		132							324
14:	900			120				4420	26	22	20	20	26	28	3000
15:	150			120				300							500
16:	152			86				300				10	10	12	434
17:	264			675				863	92	90		90	92	94	1034
18:	325	75	50	44	32	46	122	430	86	35	140	20	20	110	1160
19:	441	99	150	152	54	54	189	1548	522	36	342	648	50	50	540

TABLE 5.3

	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04	05	06
1:	•							•							•								
2:		•		•				•							•				•		•		
3:	•			•				•							•			•					•
4:	•							•							•			•					•
5:	•			•				•							•								•
6:	•			•				•							•								•
7:	•			•				•							•			•					•
8:	•							•							•				•				•
9:	•							•							•								•
10:	•					•		•						•						•			•
11:	•			•				•							•						•		•
12:	•			•				•							•			•		•		•	
13:	•			•				•							•								
14:	•			•				•							•								•
15:	•			•				•							•			•				•	
16:	•			•				•							•					•			•
17:	•			•				•							•								•
18:	•							•		•					•	•				•		•	
19:	•			•				•			•				•	•				•			•
20:	•			•				•							•				•				•
21:	•			•				•		•						•	•				•		•
22:															•	•				•		•	

this confirms the peak correlation principle for the volume functions of dependent texts.

This dependence of texts can be expressed numerically. Let us introduce the following "distance" between volume functions *vol X(t)* and *vol Y(t)* for the two texts X and Y, each divided into clusters of separate per annum fragments X(t) and Y(t), respectively. Let us recall that the fragments X(t) and Y(t) describe the events of just one year t.

Let parameter t vary within the time interval from year A to year B. Let us designate by t(X, 1), t(X, 2), …, t(X, N) the years in which such peaks, or local maxima, occur on volume graph *vol X(t)*. Accordingly, let us designate the peaks of the volume graph *vol Y(t)* by t(Y, 1), t(Y, 2), …, t(Y, M).

For each point t(X, i), let us find *the point nearest to it* in the sequence t(Y, 1), t(Y, 2),…, t(Y, M). Let it be a certain point t(Y, k). Let p(i) designate the distance between them in years, i.e. the absolute difference value t(X, i) − t(Y, k). In other words, we shall

find out which local maximum of Y is the nearest to the selected local maximum of X.

In a perfectly similar manner, swapping the roles of X and Y, for each point t(Y, j) let us find *the nearest point to it* in the sequence t(X, 1), t(X, 2), …, t(X, N). Let it be a certain point t(X, s). Let q(j) designate the distance between them in years, or the absolute value of difference t(Y, j) − t(X, s).

Finally, we assume the following sum as "the distance between X and Y":

$$R(X, Y) = p(1) + p(2) + \ldots + p(N) + q(1) + q(2) + \ldots + q(M).$$

The meaning of the distance R(X, Y) is completely clear. For each local maximum of function *vol X(t)* we find the nearest local maximum of function *vol Y(t)*, determine the distance between them in years, and sum up the numbers obtained. Then we repeat this operation after swapping the positions of chronicles X and Y. Summing up the numbers obtained, we obtain R(X, Y). It is clear that R(X, Y) = R(Y, X).

Fig. 5.26. Histograms for dependent and independent historical texts.

Fig. 5.27. Histogram for the dependent texts 1-22.

Fig. 5.28. Histogram for independent texts.

If distance $R(X, Y)$ equals zero for a certain pair of texts X and Y, consequently, their volume function graphs peak *simultaneously*. The greater this distance, the worse the correlation between their local maxima points. It is also possible to examine the asymmetrical distance from X to Y, assuming that

$$p(X, Y) = p(1) + p(2) + \ldots + p(N).$$

Likewise, the asymmetrical distance from Y to X is determined, namely,

$$q(Y, X) = q(1) + q(2) + \ldots + q(M).$$

Let us numerically estimate a degree of dependence between the historical texts 1-22 listed above, for which we shall calculate a 22×22 square matrix of two-by-two distances $R(X, Y)$, where X and Y pass through all texts 1-22, independently from each other. Let us then calculate a frequency histogram, for which we shall consider the horizontal axis, on which we shall mark the integer points: 0, 1, 2, 3, ... and plot the following graph. Let us calculate the number of zeroes in the matrix $\{R(X, Y)\}$ obtained earlier. The number obtained will be plotted on the vertical axis at the point of which horizontal coordinate is equal to zero. Then we shall calculate the number of unities in the matrix $\{R(X, Y)\}$, plot the obtained number on the vertical axis at the point of which horizontal coordinate is equal to 1, and so on. We shall come up with a graph called frequency histogram. What can a study of the obtained histogram tell us?

If the chronicles selected for the analysis *are de-*

pendent, then the majority of two-by-two distances between the chronicles must be expressed *in small numbers*, which is to say, the chronicles must be close to each other, meaning that the majority of matrix elements {$R(X, Y)$} must be "small" or close to zero. In that case, however, the absolute maximum of the frequency histogram must be shifted *to the left*, that is, there should be a large set of small frequencies. On the contrary, if there are many *independent* texts among those under investigation, then the maximum of the frequency histogram is shifted to the right, q.v. in fig. 5.26. The share of "large" and "medium" two-by-two distances between the chronicles should therefore increase.

This observation makes it possible to evaluate the degree of dependence or independence for a group of chronicles by plotting an appropriate frequency histogram based on matrix {$R(X, Y)$}. Namely, a shift of the maximum *to the left* indicates a possible *dependence* of chronicles, while a shift of the maximum *to the right* indicates a possible *independence*.

This idea was used to evaluate the degree of dependence of historical texts 1-22 enumerated above. Fig. 5.27 shows the experimental histogram of the matrix {$R(X, Y)$} for texts 1-22. This matrix proved to possess many small numbers, therefore the maximum of the histogram is visibly shifted to the left. *This indicates the dependence of historical texts 1-22.*

For comparison, let us plot a histogram for independent texts. To present an example, we decided to compare three chronicles *A, B, C* mentioned below with the preceding texts 1-22. The three additional chronicles are:

A: *Povest' Vremennykh Let*, allegedly 850-1110 A.D.,
B: *Akademicheskaya letopis'*, allegedly 1336-1446 A.D.,
C: *Nikiforovskaya letopis'*, allegedly 850-1430 A.D.

For each of them, a volume function was calculated and all local maxima found. Let us calculate all two-by-two distances of {$R(X, Y)$}, where X passes through the three chronicles *A, B, C,* and Y passes through the historical texts 1-22. As a result, we obtain a rectangular 3×22 matrix {$R(X, Y)$}. Then a frequency histogram was calculated, with its result shown in fig. 5.28. *A totally different nature* of this histogram is distinctly visible – its maximum moved *to the right*. This indicates *independence* of two groups of texts: {*A, B, C*} and {*texts 1-22*}. Each of these groups can certainly contain dependent texts.

4.
THE METHOD FOR THE RECOGNITION AND DATING OF THE DYNASTIES OF RULERS
The small dynastic distortions principle

4.1. The formulation of the small dynastic distortions principle

The small dynastic distortions principle, and a method based thereupon, was proposed and developed by the author in [884], [885], [888], [1129], [895] and [1130].

Let us assume a historical text to be found, describing a dynasty of rulers unknown to us, indicating the duration of their rule. The question arises whether this dynasty is a new one, unknown to us, and therefore requiring dating, or is it one of the dynasties we know, but described in the terms we are not used to – for example, the names of rulers are altered, etc.? The answer is in the procedure below ([904], [908], [1137], [885] and [886]).

Let us examine the *k* value of any successive actual rulers or kings in the history of some state or region. We shall agree to name this sequence *an actual dynasty*; its members by no means have to be related, though. Frequently, the same actual dynasty is described in different documents, by different chroniclers, and from different points of view – for example, the activity of rulers, their significance, personal qualities, and so forth, evaluated in a different way. Nevertheless, there are the "invariant" facts, the description of which is less dependent on sympathies or antipathies of chroniclers. These more or less "invariant facts" include, for example, *the duration of the rule of a king*. Usually there are no special reasons for a chronicler to significantly or intentionally distort this figure. However, chroniclers would frequently encounter natural difficulties in calculating reign duration for this or that king.

These natural difficulties are as follows: incompleteness of information, distortion in documents, etc. They sometimes resulted in the fact that chronicles or tables by different chroniclers would report different numbers, which to them seemed to be the reign duration of the same king. Such divergences, sometimes significant, are characteristic, for example, for the pharaohs in the tables by H. Brugsch ([99]) and

in the **Chronological Tables** by J. Blair ([76]). For example, the tables by J. Blair, going as far as the beginning of the XIX century, collected all basic historical dynasties, with dates of rule, the information about which is available to us. The value of the tables by J. Blair for us lies in the fact that they were compiled in an epoch sufficiently close to the time of the creation of the Scaligerian chronology. Therefore, they contain clearer imprints of the "Scaligerian activity" which were subsequently shaded and plastered by the historians of the XIX-XX century.

Thus, each chronicler describing an actual dynasty M calculates the reign duration of its kings in his own way, to the best of his abilities and possibilities. As a result, he obtains a certain sequence of numbers $a = (a_1, a_2, \ldots, a_k)$, where number a_i shows, possibly with an error, the actual reign duration for a king with the value i. Let us recall that the value k represents the total number of kings in the dynasty. We agreed to call this sequence of values extracted from the chronicle, *a dynasty of annals*, convenient to be represented as vector a in Euclidean space R^k.

Another chronicler describing the same real dynasty M may assign somewhat different reign durations to the same kings. As a result, another dynasty of annals $b = (b_1, b_2, \ldots, b_k)$ will appear. Thus, the same actual dynasty M, described in different chronicles, may be depicted therein as different dynasties of annals a and b. The question is that of how great resulting distortions are? In this case, errors and objective difficulties impeding precise determination of the actual duration of rule play a significant part. We describe the basic types of errors below.

Let us formulate a statistical model, or a hypothesis, which we agree to call *the small distortions principle*.

THE SMALL DISTORTIONS PRINCIPLE FOR THE REIGN DURATIONS.

If the two dynasties of annals a and b are "slightly" different, they refer to the same actual dynasty M, i.e., these are two versions of its descriptions in different chronicles. We call such dynasties of annals *dependent*.

On the contrary, if the two dynasties of annals a and b refer to two different actual dynasties M and N, they differ "considerably". We call them *independent*.

We shall call the remaining pairs of dynasties *neutral*.

In other words, according to this hypothetical model, *different chroniclers would distort the same actual dynasty "slightly" when writing their chronicles*. In any case, the resulting differences proved to be smaller "on the average" than those existing between evidently different, or independent, actual dynasties.

The hypothesis or the model formulated above requires an experimental verification. In case of its validity, an important and by no means obvious quality is revealed, one that characterizes the activity of ancient chroniclers. Namely, *the dynasties of annals that appeared in the description of the same actual dynasty differ from one another and from their prototype less than truly different actual dynasties do*.

Is there a natural numerical coefficient, or a measure $c(a, b)$, computed for each pair of dynasties of annals a and b and possessing the quality of being "small" for dependent dynasties and, on the contrary, "large" for independent ones? In other words, this coefficient must distinguish between the dependent and independent dynasties. We have discovered such coefficient.

It turns out that, in order to evaluate the "proximity" of the two dynasties a and b, it is possible to introduce the numerical coefficient $c(a, b)$, similar to the coefficient $PACY = p(X, Y)$ as described above. This coefficient $c(a, b)$ also stands for probability. Let us first describe a rough idea of determining the coefficient $c(a, b)$. The dynasty of annals may be conveniently presented in the form of a graph, with the number of kings on the horizontal axis, and the duration of their reigns on the vertical axis. We will say that dynasty q "is similar" to the two dynasties a and b, if the graph of dynasty q differs from the graph of dynasty a no more than the graph of dynasty b differs from the graph of dynasty a. See details below in [904], [1137], [885], [886] and [884].

The part that dynasties "similar" to dynasties a and b constitute in the set of all dynasties is assumed as $c(a, b)$. In other words, we calculate the ratio:

$$\frac{\text{quantity of dynasties "similar" to } a \text{ and } b}{\text{total quantity of dynasties described in the chronicles}}$$

Chroniclers may determine the reign durations of kings with an error. We actually extract only their ap-

proximate values from the chronicles. It is possible to describe the mechanisms of probability resulting in such errors mathematically. Furthermore, we considered two additional errors that the chroniclers might have possibly made: the permutation of two successive kings and the replacement of these two successive kings by one "king" with a summary duration of rule.

The coefficient $c(a, b)$ may be called *PACD,* i.e., Probability of Accidental Coincidence of Dynasties a and b.

4.2. The statistical model

Let us now provide a formal definition of the coefficient $c(a, b)$, designating the set of all actual dynasties with the length k, i.e., consisting of k sequential kings, as D. We will actually have to denote as set D those historical dynasties the information about which is available to us from the preserved historical chronicles. We have compiled an almost complete list of all such dynasties based on a large number of different chronological tables listed below. On the basis of these tables, we composed a list of all groups of 15 successive kings, who, according to the Scaligerian chronology, had ruled within the range of 4000 B.C. – 1900 A.D. in Europe, the Mediterranean, the Middle East, Egypt, and Asia.

Each dynasty of annals may be depicted as a vector in k-dimensional Euclidean space R^k. In our specific experiment we assumed $k = 15$, q.v. above. We consider two dynasties essentially different if the number of kings, or actual rulers simultaneously listed in both dynasties does not exceed $k/2$, or a half of the members of the entire dynasty. Two randomly chosen real dynasties may intersect, have common members, since we may declare, at our own discretion, one or another king as "the progenitor of a dynasty". Along with dependent and independent dynasties, there also exist "intermediate" or "neutral" pairs of dynasties, in which the number of common kings, or actual rulers, exceeds $k/2$ "(although the dynasties aren't dependent). It is clear that if the total number of dynasties in question is large, the quantity of intermediate or neutral pairs of dynasties is relatively small. Therefore, primary attention should be paid to dependent and independent pairs of dynasties.

The small distortions principle as formulated

above means that in practice, "on the average", chroniclers made insignificant mistakes, which means that they would not distort actual numerical data greatly.

Let us now discuss the errors most frequently made by chroniclers in calculating the reign durations of ancient kings. We found these three types of errors while working on a large number of actual historical texts. These particular errors proved to most frequently result in the distortion of actual durations of rules of kings.

Error one. The permutation or confusion of two adjacent kings.

Error two. The replacement of two kings by one, whose duration of rule equals the sum of durations of both rules.

Error three. Inaccuracy in calculating the very reign duration per se. The longer the duration, the greater error the chronicler would usually make in its determination.

These three types of errors may be described and simulated mathematically. Let us begin with errors *(1)* and *(2)*. We shall examine a dynasty $p = (p_1, p_2, \dots , p_k)$ from the set D. We shall call vector $q = (q_1, q_2, \dots , q_k)$ *a virtual variation* of vector (dynasty) p, and designate it as $q=vir(p)$, if each coordinate q_i of vector q is derived from coordinates of vector p in one of the two following procedures *(1)* and *(2)*.

(1) Either $q_i = p_i$ (the coordinate does not change), or p_i coincides with p_{i-1}, or p_i coincides with p_{i+1}, i.e., with one of the "adjacent coordinates" of vector p.

Fig. 5.29. Each p dynasty spawns a certain set $vir(p)$ of virtual dynasties. They are represented geometrically as "clouds", or "globular clusters" surrounding the point p in space.

Fig. 5.30. "Globular clusters" *vir(M)* and *vir(N)* corresponding to two *a priori* independent and different dynasties *M* and *N* that are separated by a considerable distance.

(2) Either $q_i = p_i$, or q_i coincides with the number $p_i + p_{i+1}$.

It is clear that each such vector (dynasty) *q* may be considered as a dynasty of annals, resulting from an actual dynasty *p* by a "reproduction thereof" due to errors *(1)* and *(2)* made by chroniclers. In other words, we take each real dynasty $p = (p_1, p_2, \ldots, p_k)$ from the list *D* and apply "disturbances" *(1)* and *(2)* to it, which means that we either swap places of two adjacent numbers p_i and p_{i+1}, or substitute a certain number p_i by the sum $p_i + p_{i+1}$, or sum $p_{i-1} + p_i$. For each number *i*, we use the above operations just once, that is, we do not consider "long iterations" of operations at the same place *i*. As a result, we obtain a certain number of virtual dynasties $\{q = vir(p)\}$ from one dynasty *p*. The quantity of such virtual dynasties is easy to calculate.

Thus, each "point" from set *D* is "multiplied" and generates a certain set of "virtual points" surrounding it, a "surrounding cloud", or "globular cluster", fig. 5.29. We may come across some of the obtained virtual dynasties in a certain chronicle (in this case they will be dynasties of annals), while others remain just "theoretically possible", or "virtual".

By uniting all virtual dynasties obtained from all actual dynasties *p*, which compose our list of dynasties *D*, we obtain a certain set *vir(D)*, i. e., "a cloaking cloud" for the initial set of dynasties *D*.

Thus, for each actual dynasty *M* the set of dynasties of annals describing it can be pictured as a "globular cluster" *vir(M)*. Let us now consider the two actual dynasties *M* and *N*. If the small distortions principle formulated by us is accurate, then the globular clusters *vir(M)* and *vir(N)* corresponding to two *a priori* independent, different actual dynasties *M* and *N* do not intersect in space R^k, which means that they must be arranged sufficiently far from each other, q.v. in fig. 5.30.

Now let *a* and *b* stand for two certain dynasties from set *vir(D)*, for example, two dynasties of annals, q.v. in fig. 5.31. We would like to introduce a certain quantitative measure of proximity between two dynasties, or "measure the distance between them" – estimate how distant they are from each other, in other words, the easiest method would be as follows. Regarding both dynasties as vectors in space R^k, it would be possible just to take the Euclidean distance between them, or calculate the number *r(a,b)*, the square of which assumes the form of

$$(a_1 - b_1)^2 + \ldots + (a_k - b_k)^2.$$

However, numeric experiments with specific dynasties of annals show that this distance does not make it possible to confidently separate dependent and in-

Fig. 5.31. A demonstrative visual representation of the reign lengths of dynasties *a* and *b* as graphs.

Fig. 5.32. A density function demonstrating the distribution of points pertinent to the set *vir(D)*.

dependent pairs of dynasties. In other words, such distances between *a priori* dependent dynasties of annals, and those between *a priori* independent ones, prove to be comparable to each other. They appear to have "the same order of magnitude".

Moreover, it is impossible to determine the "similarity" or "dissimilarity" of two dynasties, or, to be more precise, graphs of their rule, "at a glance". Visual similarity of two graphs can indicate nothing. It is possible to give examples of *a priori* independent dynasties, the graphs of rule of which prove to be "very similar", although there will be no actual dependence. It turns out that visual proximity can easily lead to confusion in this problem. A reliable quantitative estimation is necessary, one that would eliminate unsteady subjective considerations like "similar" or "not similar".

Thus, the aim is to explain whether such a natural measure of proximity does exist in general within a set of all virtual dynasties, which would make it possible to confidently separate dependent dynasties from independent ones, or make the "distance" between *a priori* dependent dynasties "small", and the "distance" between *a priori* independent dynasties "large". Moreover, these "small" and "large" values should be essentially different from one another, for example, by one or several orders of magnitude.

Such a measure of proximity, or "distance between dynasties", appears to actually exist. We will now turn to the description of this coefficient *c(a, b)*.

Thus, we plotted a set of dynasties *D* in space R^{15}. Two most typical errors usually committed by chroniclers were simulated. Each dynasty of the set *D* was subjected to disturbances of types *(1)* and *(2)*. In this case, each point from *D* multiplied into several points, which led to the increase of the set. We designated the set obtained as *vir(D)*. The set *vir(D)* turned out to consist of approximately 15×10^{11} points.

We will consider "dynastic vector *a*" to be a random vector in R^k, passing through the set *vir(D)*. Then, on the basis of the set *vir(D)* we can create a probability density function *z*. With this aim in mind, the entire space R^{15} was divided into standard cubes of sufficiently small size, so that no point of the set *vir(D)* would fall on the boundary of any cube. If *x* is an internal point of a cube, then we may assume that

$$z(x) = \frac{\text{the number of points from the set vir(D)}}{\text{the total quantity of points in the set vir(D)}}.$$

It is clear that for a point *x*, which lies on a boundary of any cube, it is possible to consider *z(x) = 0*. Function *z(x)* reaches its maximum in the area of especially high concentration of dynasties from the set *vir(D)*, and it drops to zero where there are no points of set *(D)*, fig. 5.32. Thus, the graph of function *z(x)* clearly shows how the set of virtual dynasties *vir(D)* is distributed within space R^k, – in other words, where this set is "thick", "dense", and where it is rarefied.

Now we are given two dynasties

$$a = (a_1, \dots a_k) \text{ and } b = (b_1, \dots, b_k),$$

and we want to estimate how close or distant they are. Let us plot a *k*-dimensional parallelepiped *P'(a, b)* with its center in point *a*, which has as diagonal vector *a-b*, fig. 5.33. If we project the parallelepiped *P'(a, b)* on the *i*-coordinate axis, we will obtain a segment with the ends

$$[a_i - |a_i - b_i|, a_i + |a_i - b_i|].$$

Fig. 5.33. Parallelepipeds *P'(a, b)* and *P(a, b)*.

As a preliminary coefficient $c'(a, b)$ we will assume the number

$$c'(a, b) = \frac{\textit{the number of points of the set vir(D)} \atop \textit{falling in P'(a, b)}}{\textit{the total number of points in the set vir(D)}}.$$

It is clear that number $c'(a, b)$ is the integral of density function $z(x)$ along the parallelepiped $P'(a, b)$.

The meaning of this preliminary coefficient $c'(a,b)$ is clear. It is natural to call dynasties, or vectors of $vir(D)$, falling into parallelepiped $P'(a, b)$, "similar" to dynasties a and b. In fact, each of such dynasties is located no further from dynasty a than dynasty b is located from dynasty a. Consequently, as a measure of proximity of two dynasties a and b, we take the part of dynasties "similar" to a and b in the set of all dynasties $vir(D)$.

However, such coefficient $c'(a, b)$ is not sufficiently good yet, since it does not consider the circumstance that the chroniclers could determine certain reign durations with a certain error, – the longer the rule, the larger the error. In other words, we have to take into account the error of chroniclers (3) discussed above.

Let us switch to the simulation of error (3). Let T be duration of a reign. It is clear that the duration of rule may be considered a random variable determined for "the set of all kings". Let us designate the number of kings ruling for T years as $g(T)$. In the paper [884] the author of the present book experimentally calculated this frequency histogram $g(T)$ (density of distribution of the indicated random value) on the basis given in *Chronological Tables* by J. Blair ([76]). Let us assume $h(T) = 1/g(T)$ and call $h(T)$ a function of the chroniclers' errors. The lower the probability that a random variable, or the duration of reign, assumes the value of T, the greater the error $h(T)$ in the determi-

Fig. 5.34. A "scribe error function" calculated experimentally.

nation of duration T. In other words, chroniclers calculate small, "short" reign durations better, and in doing so, make insignificant mistakes. On the contrary, a chronicler would calculate long reign durations, those encountered rather rarely, with a significant error. The longer the reign, the greater the possible error.

The errors function $h(T)$ for indicated probability density of a random value (reign duration) was determined experimentally ([884], p. 115). Let us divide the segment [0, 100] of integer axis T into ten segments of identical length, namely:

[0, 9], [10, 19], [20, 29], [30, 39], … [90, 99].

Then it appears that:

$h(T) = 2$, if T varies from 0 to 19,

$h(T) = 3$, if T varies from 20 to 29,

$h(T) = 5$ ([$T/10$]– 1), if T varies from 30 to 100.

The integer part of number s is designated as [s], fig. 5.34.

Let us now consider the errors of chroniclers in plotting the "environment" for point a. For this end, we expand the parallelepiped $P'(a, b)$, making it a larger parallelepiped $P(a, b)$, where point a is again its centre, and segments with the ends

$$[a_i - |a_i - b_i| - h(a_i), \, a_i + |a_i - b_i| + h(a_i)]$$

are orthogonal projections thereof on the coordinate axes.

It is clear that the parallelepiped $P'(a, b)$ lies entirely within the large parallelepiped $P(a, b)$, q.v. in fig. 5.33. Vector $a - b + h(a)$ is the diagonal of this large parallelepiped, where vector $h(a)$ is

$$h(a) = (h(a_1), \dots , h(a_k)).$$

It is possible to name it *the vector of chroniclers' errors*.

Thus, we simulated all three basic errors that the chroniclers would make while calculating reign durations. As the final coefficient $c(a, b)$ measuring the proximity or distance from each other of two dynasties a and b, we assume the following number:

$$c(a, b) = \frac{\textit{the number of points from the set vir(D)} \atop \textit{falling in P(a, b)}}{\textit{the total number of points in the set vir(D)}}.$$

It is clear that the number $c(a, b)$ is the integral of density function $z(x)$ along the parallelepiped $P(a, b)$. In fig. 5.35, the number $c(a, b)$ is symbolically pre-

Fig. 5.35. Coefficient *c(a, b)* presented as the volume of a prism, or an integral of the function *z(x)* along the parallelepiped *P(a, b)*.

sented as the volume of a prism with parallelepiped *P(a, b)* as its base, and limited on top by the graph of the function *z*. Number *c(a, b)* may, if desired, be interpreted as the probability that a random "dynastic vector" distributed in space R^k with density function *z* proves to be at a distance from point *a*, keeping within the distance between points *a* and *b*, with the error *h(a)* taken into account. In other words, the random "dynastic" vector distributed with the density function *z* falls into the environment *P(a, b)* of point *a* with the "radius" *a − b + h(a)*.

It is evident from the above that the role of dynasties *a* and *b* in the calculation of the coefficient *c(a, b)* is not the same. Dynasty *a* was placed into the centre of parallelepiped *P(a, b)*, and dynasty *b* determined its diagonal. Certainly, it was possible "to grant equal rights" to dynasties *a* and *b*, likewise the preceding coefficient *p(X, Y)*. In other words, it is possible to change the positions of dynasties *a* and *b*, calculate coefficient *c(b, a)*, and then obtain the arithmetic mean value of numbers *c(a, b)* and *c(b, a)*. We refrained from this for two reasons. Firstly, as certain experiments have shown, replacement of coefficient *c(a, b)* by its "symmetric analogue" does not actually change the obtained results. Secondly, in certain cases dynasties *a* and *b* may actually have unequal rights in the sense that one of them may be the original, and the second merely its duplicate, a phantom reflection. In this case it is natural to place dynasty *a*, which claims to be the original, in the centre of the parallelepiped, and consider the "phantom reflection" *b* a "disturbance" of dynasty *a*. The resulting differences between coefficients *c(a, b)* and *c(b, a)*, albeit small, may serve as useful material for further, more complex research, which has not been performed yet.

4.3. Refinement of the model and the computation experiment

The small distortions principle as formulated above was checked on the basis of coefficient *c(a, b)*.

1) For verification purpose we used *Chronological Tables* by J. Blair ([76]) containing virtually all basic chronological data from the Scaligerian version of the history of Europe, the Mediterranean, the Middle East, Egypt, and Asia allegedly from 4000 B.C. to 1800 A.D. This data was then complemented with lists of rulers and their reign durations taken from other tables and monographs, both mediaeval and contemporary. Let us mention the following books here, for example: C. Bemont, G. Monod ([64]), E. Bickerman ([72]), H. Brugsch ([99]), A. A. Vasilyev ([120]), F. Gregorovius ([195] and [196]), J. Assad ([240]), C. Diehl ([247]), F. Kohlrausch ([415]), S. G. Lozinsky ([492]), B. Niese ([579]), V. S. Sergeyev ([766] and ([767]), *Chronologie égiptienne* ([1069]), F. K. Ginzel ([1155]), L. Ideler ([1205]), *L'art de vérifier les dates des faits historiques* ([1236]), T. Mommsen ([1275]), Isaac Newton ([1298]), D. Petavius ([1337]), J. Scaliger ([1387]).

2) As we have already noted, by dynasty we understand a sequence of actual rulers of the country, irrespectively of their titles and kinship. Subsequently, we will sometimes refer to them as kings for the sake of brevity.

3) The existence of co-rulers sometimes makes it difficult to arrange dynasties into a sequence. We accepted the simplest principle of ordering – by the average reign durations.

4) We will call the sequence of numbers showing the reign durations of all rulers over the course of the entire history of a certain state (where the length of a sequence is not limited *a priori*) a *dynastic current*. Sub-sequences obtained by neglecting some of *co-rulers* will be called *dynastic jets*. Each jet is to be *even*, which means that middles of periods of rule must increase monotonically. A dynastic jet must also be *complete*, or cover the entire historical period included in the given flow without gaps or lapses; reign period superpositions are in order here.

5) In actual situations the above requirements may be somewhat disrupted for natural reasons, – for example, one or several years of interregnum may be

missing in a chronicler's story, – therefore insignificant *gaps* have to be acceptable. We only allowed gaps with durations not exceeding one year. Furthermore, while analysing dynastic currents and jets, the possibility of authentic picture distortion as a result of abovementioned errors *(1), (2),* and *(3),* made by chroniclers – must be constantly kept in mind.

6) Another reason for the distortion of a clear formal picture lies in the fact that the beginning of a king's reign is sometimes hard to determine for certain. For example, should we start counting from the moment of actual accession, or from the moment of formal inauguration? Different tables give diverse variants of the beginning of rule of Friedrich II: 1196, 1212, 1215, and 1220 A.D. At the same time, usually there is no problem to determine the end of a rule – in most cases, the death of a king. Thus, a need arises for the "bifurcation", or even a review of the three versions of a king. Fortunately, in practice larger numbers of versions are exceptionally rare. All these versions were included in a general dynastic current. In doing so, not one single jet under research should have contained two different versions of the same reign.

7) A complete list *D* of all dynasties of annals with the length of 15 – i.e., a list of all dynasties of 15 successive kings – was made for all states of the above-indicated geographical regions on the basis of chronological data that we collected from the Scaligerian version. Moreover, every king could appear in several 15-member dynasties, i. e., dynasties may "overlap". Let us enumerate the basic dynastic currents that underwent statistical analysis. They are: the bishops and popes in Rome, patriarchs of Byzantium, Saracens, high priests in Judah, Greek-Bactrians, exarchs in Ravenne, pharaoh dynasties of Egypt, the mediaeval dynasties of Egypt, dynasties of Byzantium, the Roman empire, Spain, Russia, France, Italy, Ottoman = Ataman empire, Scotland, Lacedaemon, Germany, Sweden, Denmark, Israel, Judah, Babylon, Syria, Portugal, Parthia, the kingdom of Bosporus, Macedonia, Poland, England.

8) Having applied disturbances of types *(1)* and *(2),* see above, to list *D* of dynasties of annals, we turned out to have obtained approximately 15×10^{11} virtual dynasties, i.e., the set *vir(D)* appears to contain approximately 15×10^{11} points.

4.4. Result of the experiment: coefficient *c(a, b)* positively distinguishes between the dependent and independent dynasties of kings

Computation experiment performed in 1977-1979 that M. Zamaletdinov, P. Puchkov, and yours truly performed together confirmed the small distortions principle. Namely, the number $PACD=c(a, b)$ turned out to never exceed 10^{-8}, and usually vary from 10^{-12} to 10^{-10}, for *a priori* dependent dynasties of annals *a* and *b*. In probabilistic interpretation, it means that if we examine the observed proximity of two dependent dynasties of annals as a random event, then its probability is small, such event is exceptionally rare, since only one of hundred billion chances occurs.

It further appeared that if two dynasties of annals *a* and *b* refer to two *a priori* different real dynasties, coefficient $PACD = c(a, b)$ "is substantially larger" – namely, never less than 10^{-3}, or "large". Likewise, in the case of coefficient *p(X, Y),* we are certainly not interested absolute values of $PACD = c(a, b)$ but, rather, the difference of several orders of magnitude between the "dependent zone" and the "independent zone", q.v. in fig. 5.36.

Thus, with the aid of coefficient *PACD* it was possible to discover the essential difference between *a priori* dependent and *a priori* independent dynasties of annals.

4.5. The method of dating the royal dynasties and the method detecting the phantom dynastic duplicates

And so, the coefficient *c(a, b)* helps us to distinguish between dependent and independent pairs of dynasties of annals with reasonable certainty. The important experimental condition is that the mistakes of chroniclers are not "too grave". In any case, their errors are substantially less than the value distinguishing between independent dynasties.

This makes it possible to propose a new method of recognizing dependent dynasties of annals and a dating procedure for unknown dynasties within the framework of the experiment performed. Likewise in the paragraph above, for an unknown dynasty *d* we calculate the coefficient *c(a, d),* where *a* denotes known and already dated dynasties of annals. Let us assume

that we have discovered dynasty *a,* for which the coefficient $c(a, d)$ is small, that is to say, it does not exceed 10^{-8}. This allows us to say that dynasties *a* and *d* are dependent with the probability of $1 - c(a, d)$, – i.e., dynasties of annals *a* and *d* obviously correspond to one actual dynasty *M,* the dating of which is already known to us. Thus, we can date the dynasty of annals *d*.

This procedure was tested on mediaeval dynasties with a known dating. The efficiency of the procedure was completely confirmed ([904] and [908]).

The same method makes it possible to reveal phantom duplicates in the "Scaligerian textbook on history". Namely, if we find two dynasties of annals *a* and *b*, for which coefficient $c(a, b)$ does not exceed 10^{-8}, this allows us to assume having just seen two copies, or two versions describing *the same* actual dynasty *M* multiplied on the pages of different chronicles, and then placed into different parts of the "Scaligerian textbook".

Let us reiterate that any conclusions or hypotheses appealing to "similarities" or on the contrary, "dissimilarities" of dynasties may be considered sensible only when based on extensive numeric experiments, similar to the ones performed by us. Otherwise, vague subjective considerations hardly worthy of being discussed may surface.

5.
THE FREQUENCY DAMPING PRINCIPLE
The method of ordering of historical texts in time

The frequency damping principle, and a method based on it, was proposed and developed by the author in [884], [886], [888], [1129], [891], [895], [898], [901] and [1130].

The present method makes it possible to find a chronologically correct order of separate text fragments, reveal duplicates therein on the basis of analysing, or the sum total of proper names mentioned in the text. As in the foregoing procedures, we aim at creating a method of dating based on numeric, or *quantitative* characteristics of texts, not necessarily requiring the analysis of the semantic content of texts, which may be fairly ambiguous and vague. If a document mentions any "famous" characters previously known to us, that are described in other chronicles already dated, it allows us to date the events described

Fig. 5.36. Coefficient $c\,(a, b)$ allows to differentiate between the dependent and the independent dynastic pairs.

therein. However, if such identification does not immediately succeed, and, furthermore, if the events of several generations with a large quantity of previously unknown characters are described, then the task of establishing the identity of characters with the previously known ones becomes more complicated. For the sake of brevity, let us call a text fragment describing events of one generation "a generation chapter".

We will consider an average duration of one "generation" to be the average reign duration of actual kings reflected in the chronicles available to us. This *average reign duration*, calculated by the author of this book while working on Blair's chronological tables ([76]), proved to be equal 17.1 ([884]).

While working with actual historical texts, one may sometimes come across a problem of separating "generation chapters" contained therein. In such cases we restricted ourselves to an approximate division of a text into successive fragments. Let chronicle *X* describe the events of a sufficiently large time interval *(A, B),* during which at least several generations of characters have changed. Let chronicle *X* be divided into "generation chapters" *X(T),* where *T* is the ordinal number of a generation described in fragment *X(T)* in the numeration of "chapters" fixed in the text.

The question arises of whether those "generation chapters" are *correctly* numbered, as ordered in the chronicle. Or, if this numeration is lost or doubtful, *how does one restore it*? In other words, how does one correctly arrange the "chapters" related to each other temporally? For the overwhelming majority of actual

historical texts, the following formula appears to apply: *full name = character*. It means the following:

Let a time interval described by a chronicler be sufficiently long – for example, several decades or centuries. Then, as we have tested during the analyses of a large collection of historical documents, in the overwhelming majority of cases, *different characters* have *different full names*. A full name may consist of several words, for example, Charles the Bald. In other words, *the number of different persons with identical full names is negligibly small in comparison with the number of all characters*. This is correct for several hundred historical texts that we investigated, referring to Rome, Greece, Germany, Italy, Russia, England, etc. This is not surprising. In fact, a chronicler is interested in distinguishing between different characters in order to avoid confusion, and the easiest method to attain this is to assign different full names to different persons. This simple psychological circumstance is confirmed by calculations.

Let us now formulate *the frequency damping principle* describing a chronologically correct order of "generation chapters".

With the correct numeration of "generation chapters" in place, a chronicler *passing from descriptions of one generation to the next one changes characters as well*. Namely, describing the generations preceding the generation Q, he says nothing about the characters of this generation, since they have not been born yet. Then, in his description of generation Q, the chronicler mostly speaks about the characters of this generation, since the events described are directly connected to them. Finally, passing to the description of subsequent generations, the chronicler mentions the previous characters in decreasing frequency, since he describes new events, the characters of which replace the ones departed.

It is important to emphasize here that we do not imply any separate names, but rather a *complete reservoir of all names* used in generation Q.

Briefly, our model is formulated as follows. *Every generation gives birth to new historic characters. Upon the change of generations, these characters change, too*.

In spite of its seeming simplicity, this principle proved to be useful in the creation of *the method of dating*. The frequency damping principle has an equivalent re-definition. Since the characters are vir-

tually unambiguously determined by their full names (name = character), we will study the reservoir of all full names contained in the text. We will usually omit the term "full", while constantly implying it. Moreover, an overwhelming majority of historical names proved to be "simple", consisting of one word. Therefore, while processing large historical texts with a significant fund of names, it is possible to consider just the "elementary name units", dividing occasional full names into separate words they consist of.

Let us examine a group of *all* names appearing in the text for the first time in "generation chapter" Q. Let us agree to call these names *Q-names*, and corresponding characters *Q-characters*. We will designate the number of *all* references to *all* of these names in this "chapter", with multiplicities, by $K(Q, Q)$. Let us then calculate how often the same names are mentioned in "chapter" T. Let us designate the resulting number as $K(Q, T)$. If the same name is repeated several times, or with a multiplicity, then *all* those mentions shall be calculated. Let us plot a graph placing the number of "chapters" along the horizontal axis, and numbers $K(Q, T)$ along the vertical, where Q is a constant, and T is a variable, and obtain a separate graph for each Q. The frequency damping principle is then formulated as follows.

With the chronologically correct numeration of "generation chapters", every graph $K(Q, T)$ has to assume the following form: *to the left of point* Q, *the graph equals zero; point* Q *is the absolute maximum of the graph; then the graph incrementally decreases, fading out more or less evenly*, q.v. in fig. 5.37.

We shall call the graph in fig. 5.37 an ideal one. The formulated principle must be tested experimentally. If it is accurate, and the "chapters" in a chronicle are chronologically correctly streamlined, then all experimental graphs must be close to the ideal one. The undertaken experimental verification has completely confirmed the frequency damping principle ([904] and [908]). Let us give some typical examples.

Fig. 5.37. The theoretical "ideal" frequency damping graph.

6.
APPLICATION OF THE METHOD TO SOME CONCRETE HISTORICAL TEXTS

Example 1. *Roman History* by Titus Livy, M., 1887-1889, vv. 1-6. All graphs *K(Q, T)* for those parts of *History* which describe periods of 750-500 B.C. and 510-293 B.C., proved to be virtually identical to the ideal ones, i.e., the overwhelming majority of names appearing in the description of a generation by Titus Livy for the first time were most frequently mentioned by Titus Livy in the description of this particular generation, then gradually lost and forgotten. Consequently, the frequency damping principle is confirmed, and the relative order of "generation chapters" within the parts of *History* by Titus Livy is most likely chronologically correct. On the contrary, in the comparison of the two indicated parts of the text by Titus Livy with each other, the frequency damping principle turned out to be *false*, which may indicate that the *History* by Titus Livy contains duplicates and repetitions.

Example 2. *Liber Pontificalis*, see [196], publ. T. Mommsen, *Gestorum Pontificum Romanorum*, 1898. This is the famous "Book of (Roman) Popes (pontiffs)". Out of this set of texts, let us pick the pieces describing the periods of

    1) 300-560 A.D.,
    2) 560-900 A.D.,
    3) 900-1250 A.D.,
    4) 1250-1500 A.D.

All frequency graphs *K(Q, T)* for indicated texts 1-4 prove to virtually coincide with the ideal one, which confirms the frequency damping principle and the correctness of "chapter" alignment within each of the enumerated historical fragments.

Let us note one of the consequences of this experiment. It turns out that "*ancient names were not in fashion*" over the course of substantial time intervals, which is by no means obvious. Surely, *certain* ancient names are still used today, for example, Peter, Mary, etc. But, as we discovered, these names are either not full, or the percentage of such "survived ancient" names is *truly minute* as compared to *the bulk of names that "became extinct"*. The presence of rare "surviving" names means that over the course of movement from left to right, experimental graphs *K(Q, T)* decrease to a certain non-zero constant rather than zero.

Example 3. We used the following original sources as text *X* describing the period of 976-1341 A.D. in the history of Byzantium:

    1) Mikhail Psell, *Chronography*, Moscow, 1987, describing the period of 976-1075.
    2) Anna Comnena, *An Abridged Legend about the Deeds of Czar Alexis Comnenus (1081-1118)*, St. Petersburg, 1859.
    3) John Kinnam, *A Brief Review of the Reign of John and Manuel Comnenus (1118-1180)*, St. Petersburg, 1859.
    4) Nicetas Aconiatus, v. 1, *History Beginning from the Reign of John Comnenus (1118-1185)*, St. Petersburg, 1860.
    5) Nicetas Aconiatus, v. 2, *History from the Time of Reign of John Comnenus (1186-1206)*, St. Petersburg, 1862.
    6) George Acropolite, *Cronicle (1203-1261)*, St. Petersburg, 1863.
    7) George Pachymeres, *Story of Michael and Andronicus Palaeologi (1255-1282)*, St. Petersburg, 1862.
    8) Nicephorus Gregoras, *Roman History (1204-1341)*, St. Petersburg, 1862.

We processed all those texts by selecting all proper names therein, and calculating the frequency allocation of references thereto. Said collection of texts contains several dozen thousand mentions of full names, with multiplicities. All frequency graphs *K(Q, T)* in the intervals of 976-1200 and 1200-1341 appeared to be virtually identical with the ideal one. Thus, the frequency damping principle proved to be true. On the other hand, it became clear that the chronological order of the texts within each of the time intervals indicated *is correct*.

Example 4. F. Gregorovius, *The History of the City of Rome in the Middle Ages*, St. Petersburg, vols. 1-6, 1902-1912. The parts picked out from this text describe

    1) 300-560 A.D.,
    2) 560-900 A.D.,
    3) 900-1250 A.D.,
    4) 1250-1500 A.D.

Each of the fragments was divided into "generation chapters". We selected all proper names and traced the frequency of references thereto. The complete reservoir of names contains several dozen thousand references. The frequency damping principle proved to be true, and the enumeration (ordering) of "chapters" in each of the texts 1-4 is chronologically correct.

A similar result is obtained also for Kohlrausch's monograph *The History of Germany*, Moscow, Volumes 1-2, 1860, out of which we picked the pieces describing

1) 600-1000 A.D.,
2) 1000-1273 A.D.,
3) 1273-1700 A.D.

7.
METHOD OF DATING OF THE EVENTS

We have processed the total of several dozen large historical texts. For all such texts describing the events of the XVI-XX century, the frequency damping principle was confirmed. Hence the procedure of chronologically correct ordering of "generation chapters" in a text, or a set of texts, where this order is disrupted or unknown. Let us examine the complete "generation chapters" of chronicle X and number them in a certain order. Let us calculate the value $K(Q, T)$, with the assigned numeration of "chapters", for each "chapter" $X(Q)$. All the values $K(Q, T)$, with variables Q and T, are naturally arranged into a square matrix $K\{T\}$ with the size $n \times n$, where n is the total number of "chapters". In the ideal theoretical case, frequency matrix $K\{T\}$ assumes the form displayed in fig. 5.38.

Fig. 5.38 displays zeroes below the main diagonal, and the absolute maximum for each line is located on the main diagonal. Then each graph, in each line, fades away evenly.

A similar damping pattern turns out to be observed for the columns of the matrix as well, which means that the frequency of the use of names of earlier origin in "chapter" $X(Q)$ also falls "on the average" as generation T, which gave birth to these names, moves away from the generation constant Q.

Fig. 5.38. A "well dampened" frequency matrix of the chronologically correct chapter disposition without any duplicates.

To evaluate the frequency damping rate, it is convenient to use the average graph

$$K_{\text{aver.}}(T) = \frac{\text{the sum of values } K(Q, P)}{n - T} \text{ ,}$$

where $P - Q = T$.

The summation of this formula is performed for all pairs (Q, P), for which the difference $P - Q$ is fixed and equals T. In other words, the graph $K_{\text{aver.}}(T)$, obtained by averaging the matrix $K\{T\}$ over its diagonals parallel to the main one, depicts an "average line" or "average column" of the frequency matrix. Here T varies from 0 to $n - 1$.

Experimental graphs may certainly not coincide with theoretical ones.

If we now change the numeration of "chapters" in the chronicle, the numbers $K(Q, T)$ will also change, due to a rather complicated redistribution of "names appearing for the first time". Consequently, the frequency matrix $K\{T\}$ and its elements will change. We shall change the order of "chapters" in the chronicle with the aid of different transpositions s, and every time calculate a new frequency matrix $K\{sT\}$, where sT is the new numeration corresponding to transposition s. We will look for such order of "chapters" of the chronicle, with which every, or almost every, graph assumes the shape shown in fig. 5.37. In this case, the experimental frequency matrix $K\{sT\}$ will be closest to the theoretical matrix in fig. 5.38. The order of "chapters" of the chronicle, in which the deviation of an experimental matrix from the "ideal" one will be the smallest, should be considered chronologically correct and desirable.

Our method also makes it possible to date events. Let us regard a historical text Y, which is simply known to describe certain events (of one single generation) from epoch (A, B) already covered in text X divided into "generation chapters", the order of "chapters" in chronicle X being chronologically correct. How can we know which particular generation is described in text Y that is of interest to us? In this case we only want to use quantitative characteristics of texts, without appealing to their semantic content, which may be substantially ambiguous and admit largely different interpretations.

The answer is as follows. Let us add text Y to the corpus of "chapters" of chronicle X, considering Y to be a new "chapter" and assigning a certain number Q

to it. Then we find an optimal, chronologically correct order of all the "chapters" of the obtained "chronicle", and in doing so, a correct place for the new "chapter" *Y*. In the simplest case, by plotting a graph *K(Q, T)* for it, and changing its position in relation to other "chapters", one can make this graph as close as possible to the ideal one. The position *Y* assumes among other "chapters" should be considered desirable one, thus making it feasible to date the events described in *Y*. The procedure is also applicable when not all names are examined, but only one or a few, for example, certain "famous names". However, in this case, an additional analysis is necessary, since the decrease of the number of used names makes the results unstable.

The method was tested on large texts with a large number of names and reliable dating known before. In all those cases the efficiency of the method was confirmed.

8.
THE FREQUENCIES DUPLICATION PRINCIPLE
The duplicate detection method

The present method is, in a way, a particular case of the previous one, but considering the importance of dating, we devoted a separate section to the duplicate detection method proposed by the author in [884], [886], [888], [1129], [891], [895], [898], [901] and [1130].

Let the time interval *(A, B)* be described in chronicle *X* as divided into "generation chapters" *X(T)*, numbered chronologically correct as a whole *but with two duplicates among them*, i.e., two "chapters" describing the same generation that duplicate each other. Let us examine the simplest situation when the same "chapter" is found in chronicle *X* exactly twice, namely, under number *Q* and number *R*. Let *Q* be less than *R*. Our procedure makes it possible to reveal and identify these duplicates. In fact, it is clear that the frequency graphs *K(Q, T)* and *K(R, T)* assume the shape displayed in fig. 5.39.

The first graph obviously does not comply with the frequency damping principle, therefore, it is necessary to transpose "chapters" within the chronicle *X* in order to attain a better compliance with the theoretical, ideal graph. All numbers *K(R, T)* equal zero, since "chapter" *X(R)* does not possess a single "new name"

Fig. 5.39. Frequency graphs for duplicate cases.

– they all have already appeared in *X(Q)*. It is clear that the best concurrence with the ideal graph in fig. 5.37 will be obtained when these two duplicates are placed next to each other, or simply identified.

Thus, if we discover two graphs resembling the shape of those in fig. 5.39 among the "chapters" of a chronicle numbered correctly in general, these "chapters" are, most likely, duplicates, – that is to say, they describe approximately the same historical events, and should be identified with each other. All of the above is applies to cases with several duplicates – three and more.

This method was also tested on experimental material. As a simple example, we considered an edition of *The History of Florence* by Machiavelli, 1973 (Leningrad), with detailed commentaries. It is clear that the commentary may be considered a series of "chapters" duplicating the main text by Machiavelli. The main text was divided into "generation chapters", which made it possible to build a square frequency matrix *K{T}*, also covering the commentary to *History*. This matrix assumes the shape conditionally displayed in fig. 5.40, where thick inclined segments consist of squares filled with maxima. It means that our procedure successfully reveals known duplicates, in this case the commentary to the main text of Macchiavelli's *History*.

Fig. 5.40. An approximated frequency matrix for Machiavelli's *History of Florence.* One sees duplicates, or repetitions.

9.
STATISTICAL ANALYSIS OF THE BIBLE

9.1. Partition of the Bible
into 218 "generation chapters"

The following example is of great importance for the analysis of the Scaligerian chronology. The Bible contains several dozen thousand references to names. Two series of duplicates are known to exist in the Bible – namely, each generation described in Samuel 1, Samuel 2, Kings 1, Kings 2, is described again in the Chronicles 1, Chronicles 2. The author of the present book divided the Old and the New Testaments into separate "generation chapters", q.v. below.

The table below displays, in parentheses, numbers of "chapter generations" selected by us, and also refers to particular fragments of the Bible composing a certain "generation chapter". The canonical division of the Bible into standard chapters and verses is used for reference. See, for example, the 1968 edition of the Bible, Moscow, Moscow Patriarchy, following the Synodal 1912 edition.

FIRST COMES THE DIVISION OF GENESIS:

(1) = ch. 1-3 (Adam, Eve),
(2) = 4:1-16 (Cain, Abel),
(3) = 4:17 (Cain got to know his wife…),
(4) = 4:18 (Herod was born to Enoch…),
(5) = 4:18 (Mehujael gave birth to Methuselah…),
(6) = 4:18 (Methuselah gave birth to Lamech…),
(7) = 4:19-24 (And Lemech took two wives…),
(8) = 4:25-26 (Adam got to know more of [Eve]…) +
        5:1-6 (Here comes the genealogy of Adam…),
(9) = 5:7-11 (Upon Enoch's birth…),
(10) = 5:12-14 (Kenan lived seventy [170] years…),
(11) = 5:15-17 (Mahalaleel lived sixty five [165]
        years…),
(12) = 5:18-20 (Horeb lived one hundred and
        sixty two years…),
(13) = 5:21-27, (14) = 5:28-31,
(15) = ch. 5:32 + ch. 6 + ch. 7+ ch. 8,
(16) = ch. 9,
(17) = 10:1,
(18) = 10:2,
(19) = 10:3,
(20) = 10:4,
…

(48) = 10:32,
(49) = 11:1-9,
(50) = 11:10-12,
(51) = 11:13-14,
(52) = 11:15-16,
(53) = 11:17-19,
(54) = 11:20-21,
(55) = 11:17-19,
(56) = 11:24-25,
(57) = 11:26-27,
(58) = 11:28,
(59) = 11:29-32,
(60) = ch. 12,
(61) = ch. 13,
(62) = ch. 14-24,
(63) = 25:1-2,
(64) = 25:3,
(65) = 25:4,
(66) = 25:5-10,
(67) = 25:11-18,
(68) = 25:19-26,
(69) = 25:27-34,
(70) = ch. 26-33,
(71) = ch. 34-36,
(72) = ch. 37-38,
(73) = ch. 39-50.

THE BOOK OF GENESIS ENDS HERE.

(74) = The book of Exodus,
(75) = The book of Leviticus,
(76) = The book of Numbers,
(77) = The book Deuteronomy,
(78) = The book of Joshua,
(79) = The book of Judges, ch. 1,
(80) = The book of Judges, ch. 2,
…
(96) = The book of Judges, ch. 18,
(97) = The book of Judges, ch. 19-20,
(98) = The book of Ruth,
(99) = The First book of Samuel, ch. 1-15,
(100) = The First book of Samuel, ch. 16-31,
(101) = The Second book of Samuel,
(102) = The First book of Kings, ch. 1-11,
(103) = The First book of Kings), ch. 12,
(104) = The First book of Kings), ch.13,
…
(112) = The First book of Kings, ch. 22,
(113) = The Second book of Kings, ch. 1,

(114) = The Second book of Kings, ch. 2,

…

(135) = The Second book of Kings, ch. 23,

(136) = The Second book of Kings, ch. 24-25,

(137) = The First book of Paralipomenon (First book
    of Chronicles), ch. 1-10,

(138) = The First book of Paralipomenon (First book
    of Chronicles), ch. 11-29,

(139) = The Second book of Paralipomenon (Second
    book of Chronicles), ch. 1-9,

(140) = The Second book of Paralipomenon (Second
    book of Chronicles), ch. 10,

…

(166) = The Second book of Paralipomenon (Second
    book of Chronicles), ch. 36,

(167) = The book of Ezra,

(168) = The book of Nehemiah,

(169) = The book of Esther,

(170) = The book of Job,

(171) = Psalm,

(172) = Proverbs,

(173) = The book of Ecclesiastes or Preacher,

(174) = Song of Solomon,

(175) = The book of Isaiah,

(176) = The book of Jeremiah,

(177) = Lamentations,

(178) = The book of Ezekiel,

(179) = The book of Daniel,

(180) = The book of Hosea,

(181) = The book of Joel,

(182) = The book of Amos,

(183) = The book of Obadiah,

(184) = The book of Jonah,

(185) = The book of Micah,

(186) = The book of Nahum,

(187) = The book of Habakkuk,

(188) = The book of Zephaniah,

(189) = The book of Haggai,

(190) = The book of Zechariah,

(191) = The book of Malachi.

    THE OLD TESTAMENT ENDS HERE.

    THE NEW TESTAMENT FOLLOWS:

(192) = The Gospel of St. Matthew,

(193) = The Gospel of St. Mark,

(194) = The Gospel of St. Luke,

(195) = The Gospel of St. John,

(196) = The Acts of the Holy Apostles,

(197) = The Epistle of St. James,

(198) = The First epistle of St. Peter,

(199) = The Second epistle of St. Peter,

(200) = The First epistle of St. John,

(201) = The Second epistle of St. John,

(202) = The Third epistle of St. John,

(203) = The epistle of St. Jude,

(204) = The epistle of St. Paul to Romans,

(205) = The First epistle of St. Paul to Corinthians,

(206) = The Second epistle of St. Paul to Corinthians,

(207) = The Epistle of St. Paul to Galatians,

(208) = The Epistle of St. Paul to Ephesians,

(209) = The Epistle of St. Paul to Philippians,

(210) = The Epistle of St. Paul to Colossians,

(211) = The First epistle of St. Paul to Thessalonians,

(212) = The Second epistle of St. Paul to Thessalonians,

(213) = The First epistle of St. Paul to Timothy,

(214) = The Second epistle of St. Paul to Timothy,

(215) = The Epistle of St. Paul to Titus,

(216) = The Epistle of St. Paul to Philemon,

(217) = The Epistle of St. Paul to Hebrews,

(218) = The Revelation of Apostle St. John the
    Evangelist (Apocalypse).

Thus, the Old Testament consists of 191 "generation chapters", and the New Testament consists of "generation chapters" 192-218. Let us start with examining the first 170 "generation chapters" covering the so-called historical books of the Old Testament.

9.2. Detection of the previously known duplicates in the Bible with the aid of the frequency dumping principle

In 1974-1979, V. P. Fomenko and T. G. Fomenko undertook an enormous job to compose a complete list of all the names in the Bible, taking into account all of their multiplicities, and a precise distribution of references to the names along all "generation chapters". In total, there appeared to be about 2,000 names mentioned in the Bible, while the number of references to them, including multiplicities, amounted to several dozen thousand. Thus, it became possible to plot all frequency graphs $K(Q, T)$, where number T runs through enumerated "chapters".

The graphs plotted for the "chapters" of 1-2 Samuel + 1-2 Kings turned out to have the shape of the graph in fig. 5.39, i.e., names appearing in these "chap-

Fig. 5.41. An approximated frequency matrix for the Bible. One sees repetitions (duplicates).

ters" for the first time "revive" in their former quantity in appropriate "chapters" of 1-2 Chronicles. The relevant part of the matrix $K\{T\}$ is presented in fig. 5.41. Two parallel diagonals filled with the absolute maxima of lines are marked with two bold lines.

The square frequency matrix of Biblical names is depicted *in greater detail* in fig. 5.42. The most essential concentrations of high frequencies are marked by accumulations of black dots. Statistical duplicates – both previously known and *new ones*, first discovered in our statistical experiment – are distinctly visible.

Thus, our method has successfully revealed and identified duplicates in the Bible, already known as such previously. Let us emphasize that our methods operate only with quantitative, numeric characteristics of texts, and require no "insight into the semantic content" of chronicles. This is a distinctive advantage of the new methods, since they do not rely on subjective – and therefore ambiguous – interpretations of old texts.

The application of the described statistical methods is sometimes facilitated by the great job on revealing repetitive text fragments already performed for many historical texts by commentators. The term "repetition" may apply to a name, as well as the description of a certain event, etc. For example, identical descriptions, lists of names, identical religious formulae, etc., repeat themselves many times over in the Bible; all of them have long ago been discovered, systematized, and assembled in the so-called apparatus of parallel places. Namely, next to certain verses

there are references to the verses in the same or other books of the Bible considered to be their "repetitions", or "parallels". If historical text X under investigation has such apparatus, or a similar one, then our duplicate detection method is applicable, considering repetitive fragments to be "repetitive names".

EXAMPLE. Let us examine every book of the Bible – both the Old Testament and the New Testament. We have earlier presented the partition of the Bible into 218 "generation chapters". Let us number them in the order they follow one another in the canonical sequence of the books of the Bible. The apparatus of "repetitions", or parallel places in the Bible is known to contain about 20 thousand repetitive verses.

For each "generation chapter" $X(Q)$, we shall calculate the number of verses which have never appeared in the preceding "chapters" $X(T)$, i.e., which first appeared in $X(Q)$, and denote their quantity by $P(Q, Q)$. Then we shall calculate how often these verses repeat themselves in subsequent "generation chapters" $X(T)$, and denote the obtained numbers by $P(Q, T)$, after which all 218 frequency graphs $P(Q,T)$ can be plotted. They differ from graphs $K(Q, T)$ only by *verses* being taken instead of *names*, and repetitions of verses instead of repetitions of names. Verses which are not repetitions of each other or some other verse are examined here as "different names". The bulk of this enormous job was performed by V. P. Fomenko.

Subsequently, in case of correct chronological order of "generation chapters" and the absence of duplicates, frequency graphs of the verse repetitions $P(Q,T)$ must have an approximate shape of an ideal damping graph as in fig. 5.37. As well as in case of using names, a chronicler speaking about events of generation Q, given the order of the events described is correct, does not report anything about these events in the preceding "generation chapters", since these events *have not yet occurred*. The chronicler would recall the events of generation Q still less frequently in subsequent "generation chapters". Subsequently, a "chronologically correct" frequency graph must have an absolute maximum at the point Q, equalling zero to the left of Q, and evenly fading out to the right of Q.

An experimental test performed by us confirmed the frequency damping principle for all fragments of the Bible enumerated below:

1) Genesis, ch. 1-5,

Fig. 5.42. A detailed frequency matrix for the Bible. The duplicates are clearly visible.

2) Genesis, ch. 6-10,

3) Genesis, ch. 11,

4) Genesis, ch. 12-38,

5) Genesis, ch. 59-50, + Exodus + Leviticus + Numbers + Deuteronomy + Joshua + Judges, ch. 1-18,

6) Judges, ch. 19-21, + Ruth + 1-2 Samuel, 1 Kings + 2 Kings, ch.1-23,

7) 1-2 Chronicles + Ezra + Nehemiah.

Frequency graphs $P(Q, T)$ for each of the texts 1-7 turned out to possess the shape of a damping theoretical graph in fig. 5.37, which means that the frequency damping principle is confirmed for these indicated cases, and furthermore, the order of "generation chapters" in each of the texts 1-7 is more or less correct from the chronological point of view, without any essential duplicates within.

If all the "generation chapters" of the chronicle are numbered correctly in general, we can reveal duplicates among them by plotting graphs of "repetitions of verses" $P(Q, T)$. If two "chapters" $X(Q)$ and $X(R)$ are duplicates, then their frequency graphs $P(Q, T)$ and $P(R, T)$ shall possess the shape presented in fig. 5.39. This procedure has also been experimentally tested for the example described above, namely, 1-2 Samuel + 1-2 Kings duplicate 1-2 Chronicles.

Plotting of frequency graphs $P(Q,T)$ for the Bible revealed that the "chapters" of 1-2 Samuel + 1-2 Kings and 1-2 of Chronicles appear to be precise duplicates from the viewpoint of frequency graphs $K(Q,T)$ as well, which indicates a complete concurrence of the results of both procedures. In this case it should be noted that the apparatus of "parallel places" is not at all identical with the apparatus of "repetitions of names", since many fragments and verses of the Bible containing no names at all are considered to be "parallel".

9.3. New, previously unknown duplicates we discovered in the Bible. General scheme of their distribution within the Bible

Now we come to a summary of results of applying the methods developed to "antique" and medieval chronological material, usually referred to as epochs, preceding the XIII-XIV century. In doing so, duplicates considered different in the Scaligerian history, and currently dated back to substantially different epochs, were unexpectedly discovered.

Let us apply, for example, the duplicates detection procedure on the basis of the frequency graphs $K(Q,T)$ and $P(Q,T)$ to the Bible – namely, to the books of the Old Testament from Genesis to Esther. We will present the obtained result as a conditional line B, where identical symbols and letters denote the duplicates we discovered – i.e., fragments of the Bible apparently describing *the same events*, as it follows from the test of duplicating frequencies principle described above. Thus,

$$\text{line } B = T\ K\ T\ N\ T\ K\ T\ K\ T\ N\quad T\quad T\quad R\quad T\quad S[a]$$
$$P$$
$$R$$

This result of ours means that an entire historical part of the Old Testament consists of several pieces: *T, K, N, P, R, S[a]*, some of which are repeated in the Bible several times and installed in different places of the Biblical canon, which leads to a "long" chronicle line B described above. In other words, many pieces in the Old Testament indicated in the chronicle line B, apparently describe *the same events*.

This fact contradicts the Scaligerian chronology, according to which different books of the Bible, except for 1-2 Samuel + 1-2 Kings and 1-2 Chronicles, describe different events. Let us explain now the meaning of the indicated symbols in the Biblical chronicle line B by presenting fragments of the Bible respectively corresponding thereto.

Thus, $B =$

$T=$ Genesis, ch. 1-3;

$K=$ Genesis, ch. 4-5;

$T=$ Genesis, ch. 6-8;

$N=$ Genesis, ch. 9-10;

$T=$ Genesis, ch. 11:1-9;

$K=$ Genesis, ch. 11:10-32;

$T=$ Genesis, ch. 12;

$K=$ Genesis, ch. 13-38;

$T=$ Genesis, ch. 39-50;

$T=$ Exodus;

$N/P/R =$ Leviticus + Numbers + Deuteronomy + Joshua + Judges, ch. 1-18;

$T =$ Judges, ch. 19-21;

$T =$ Ruth + 1-2 Samuel + 1 Kings, ch. 1-11;

$R =$ 1 Kings, ch. 12-22 + 2 Kings, ch. 1-23;

$T =$ 2 Kings, ch. 24;

$S[a] =$ 2 Kings, ch. 25 + Ezra + Nehemiah + Esther.

Thus, besides the sequence of fragments *T R T S*[*a*] at the end of the chronicle = line *B*, is repeatedly described in 1-2 Chronicles. These two last series of duplicates are the only ones known before. *Other duplicates presented above have not been known before.* This is how these duplicates within "chapters" 1-170 in the Bible are revealed on the frequency matrix *K*{*T*}: Two series of previously known duplicates – "chapters" 98-137 and "chapters" 138-167 duplicating them – lead to appearance, along with the maxima filling the main diagonal, of another diagonal, also filled with maxima and parallel to the main one for the lines numbered 98-137, fig. 5.41 and fig. 5.42.

These diagonals are depicted in fig. 5.41 by black inclined segments. Lines 138-167 virtually consist of zeroes. Remaining duplicates are revealed through local peaks approximately identical in size, arranged on intersections of the appropriate lines and columns corresponding to duplicates. The duplicates of series *T,* those most frequently encountered in the Old Testament, are depicted in fig. 5.42.

Then we had additionally analyzed frequency matrices *K*{*T*} and *P*{*T*}. Each series of duplicates that we had discovered was united a singular generation chapter, after which matrices *K*{*T*} and *P*{*T*} were calculated *again*. It turned out that these new matrices, those following the identification of duplicates differ from the initial ones notably *and satisfy the frequency damping principle substantially better.*

The application of our method to the complete frequency matrix *K*{*T*} with the size of 218 × 218 – i.e., for the entire Bible, broken up into 218 generation chapters – revealed that the current Scaligerian chronology of the books of the Old and New Testament is apparently incorrect. It turns out that in order to make the sequence of Biblical "chapters" 1-218 chronologically correct, it is necessary to shuffle "chapters" 1-191, i.e., the Old Testament, and "chapters" 192-218, i.e., the New Testament, in a certain specific manner – the books of the Old Testament and the New Testament should be mixed and moved into each other the way the teeth of two combs do. We omit the details of this rearrangement due to the bulkiness of the material, and shall only present one example below – but a very representative one.

After such a "ordering rearrangement" and the identification of duplicates we have discovered that

the matrices *K*{*T*} and *P*{*T*} become almost ideally damping ones in the Old and the New Testament.

These results indicate that, most probably, *the books of the Old and the New Testament were created more or less simultaneously, within the same historical epoch*, and it was only later that the Scaligerian chronology moved them apart by many hundred years arbitrarily, far from each other, and into the deep past. Moreover, some books of the New Testament were most likely created earlier than the Old Testament. Let us recall that the Scaligerian chronology assures us that the Old Testament was allegedly created several hundred years before the New Testament.

9.4. A representative example: the new statistical dating of the Apocalypse, which moves from the New Testament into the Old Testament

Let us illustrate the effect of mixing the books of the Old Testament and the New Testament on the example of the Apocalypse (Revelation of St. John) – the last book in the New Testament in the Scaligerian ordering. Therefore this book has the last number 218 in our numeration of the "Scaligerian generation chapters".

If this current location of the Apocalypse in the Bible was chronologically accurate, then its frequency column graph of the names *K*{*T, 218*), i.e., with *Q* = 218, would have to look like the lower graph in fig. 5.43.

However, the actual frequency graph for the Apocalypse is entirely different! See the upper graph in fig. 5.43. It is surprising that the maximum of the graph isn't reached in the "chapters" close to the Apocalypse, i.e., number 218, but, rather, in the remote "chapters" 70-80 on the frequency graph of names, and the remote chapters 74-77 and 171-179 on the frequency graph of parallel places and references.

In other words, *the absolute maximum of both graphs is not in the New, but the Old Testament books, currently separated from the Apocalypse by several hundred years*. Thus, we revealed an explicit contradiction to the frequency damping principle, soundly confirmed earlier in reliably dated and chronologically correctly ordered texts. We already know how to react in such cases – transpose the Biblical "chapters" in such a way that their frequency graphs begin to fade

Fig. 5.43. A frequency graph for the Biblical *Apocalypse.* It is amazing that the graph peaks on the chapters that are located at some distance from the actual *Apocalypse*, and not the ones in its immediate vicinity. It indicates that the current location of the *Apocalypse* in the Biblical canon is apparently incorrect.

out. As a result, we will find the chronologically accurate order of "chapters" of the Bible.

This chronologically correct "mixing" of the Biblical books was described above. It is interesting that, with the "mixing", we discovered that the New Testament Apocalypse appears to be near *the Old Testament prophecies* and "chapters" 69-75 – in particular, the Old Testament prophecy of Daniel, which is in perfect conformity with a well-known viewpoint that the prophecy of Daniel is "an Apocalypse in many ways similar to one from the New Testament" ([765], p.136).

10.
THE METHOD OF FORM-CODES
The comparison of two long currents of regal biographies

This method was proposed and developed by the author of this book in [884] and [885].

Fund phrases and adopted words used, for exam-

ple, to describe rulers, are common for the Scaligerian history. Chroniclers are believed to have sometimes assigned to their contemporary rulers the streaks and deeds of late ancient kings of long ago. The Scaligerian history assures us that this strange passion for the "old times" was widespread among chroniclers. Allegedly knowing nothing reliable about the life of their contemporary kings, chroniclers would supposedly act very simply. They provided their kings with "resounding biographies" of certain great rulers who had died a long time ago – of whose lives they, subsequently, were informed better, than of the lives of their contemporaries, which is fairly strange in itself. Such cases must have occurred, but most likely not very often. Our studies have shown that this strange "Scaliger effect" deserves a closer study, since conceals something much more serious than simply "the love of chroniclers for stock phrases".

To reveal and study such fund phrases, repetitions, and duplicates, we introduced the concept of *form*

code, or *formalized biography* ([904] and [908]). An actual ruler described in chronicles acquires "a biography of historical annals", which can have nothing in common with his true biography, e.g., be completely legendary. We are not discussing here the issue of how accurately a biography of annals of a king reflects reality – this past reality is beyond our current knowledge. Therefore, we can hardly restore authentic ancient biographies, and we do not have to do it now. Our aim is to try and reveal, among many biographical texts, those actually describing *the same person*. Though written by different people, they were not detected by posterior medieval chroniclers and chronologists as biographies of the same character, and were therefore placed into different parts of the Scaligerian "textbook of history", even into different historical epochs, as biographies of allegedly completely different persons. Thus, one actual character was "multiplied" – only on paper, though! – and gave birth to several *phantom reflections* of himself.

On the basis of studying a large number of historical biographies, we developed the table we named the form-code (*FC*). The form table hierarchically streamlines the facts of a "biography" in order of decreasing of their invariance related to subjective evaluations of chroniclers. The form-code consists of 34 items, each containing several sub-items:

1) GENDER –
a. male;
b. female.
2) LIFETIME.
3) REIGN DURATION. The end of a reign is virtually always reflected unambiguously and usually coincides with the death of a king. The beginning of a reign sometimes allows for several versions, q.v. below. All versions are noted as equal.
4) SOCIAL STATUS AND POSITION HELD –
a. czar, emperor, king;
b. commanding officer;
c. politician, public figure;
d. scientist, writer, etc.;
e. religious leader, Pope, bishop, etc.
5) DEATH OF THE RULER –
a. natural death in a peaceful environment;
b. killed on a battlefield by enemies or lethally injured;
c. assassinated as a result of a plot outside the war;

d. assassinated as a result of a plot during the war;
e. special, exotic circumstances of death.
6) NATURAL DISASTER DURING THE RULE –
a. hunger;
b. flood;
c. epidemic diseases;
d. earthquakes;
e. eruptions of volcanoes; in this case, the duration of disasters and year (or years) when they took place are also marked.
7) ASTRONOMIC PHENOMENA DURING THE RULE –
a. existent (precisely what, with indication of dates);
b. nonexistent;
c. eclipses;
d. comets;
e. "starbursts".
8) WARS DURING THE RULE –
a. existent;
b. nonexistent;
9) W = THE NUMBER OF WARS.
10) BASIC TIME CHARACTERISTICS OF WARS $W_1 \ldots$, W_p. Namely, a_k = what year of the reign war W_k occurs or begins; $c_{\{k,x\}}$ = time interval from war W_k to war W_x.
11) "POWER", "INTENSITY" OF WAR W_k according to the chronicle, for each number "k" –
a. strong;
b. weak.
More accurately, by how many lines the war is described in this chronicle.
12) NUMBER OF ENEMIES IN WAR W_k AND THEIR INTERRELATIONS – allies, enemies, neutral forces, mediators, etc.
13) GEOGRAPHICAL LOCALIZATION OF WAR W_k –
a. near the capital;
b. within the state;
c. outside the state, an external war, precisely where;
d. simultaneously internal and external war.
14) THE RESULT OF THE WAR –
a. victory;
b. defeat;
c. uncertain outcome.
15) PEACE TREATIES –
a. conclusion of a peace treaty with an uncertain outcome;
b. conclusion of a peace treaty after a defeat.
16) ON SEIZURE OF THE CAPITAL –

a. seized;

b. not seized.

17) The fate of the peace treaty –

a. broken (by whom);

b. not broken in the course of the rule.

18) Circumstances of seizure or collapse of the capital.

19) Paths of the campaign during the war.

20) Participation of the ruler in the war –

a. positive;

b. negative.

21) Plots during the life of the ruler –

a. existent;

b. nonexistent.

22) Geographical localization of plots, wars, revolts.

23) The name of the capital, translated into different languages.

24) The name of the state and the people, with translations.

25) Geographical localization of the capital.

26) Geographical localization of the state.

27) Legislative activity of the ruler –

a. reforms and their nature;

b. publication of a new code of laws;

c. restoration of old laws – precisely which.

28) List of all the names of the ruler, with translations.

29) Ethnic affiliation of the ruler as well as his family and the members of the family.

30) Ethnic affiliation of the people, tribe, clan.

31) Foundation of new cities, capitals, etc.

32) Religious situation –

a. introduction of a new religion;

b. struggle between sects, precisely which;

c. religious revolts and wars;

d. church councils, religious meetings.

33) Dynastic struggle inside the clan of the ruler's relatives, assassination of relatives, enemies, claimants, etc.

34) Remaining facts of the "biography". We will not differentiate them in detail and conditionally name point 34 "the remainder of a biography".

Let us denote the enumerated points *FC*-1, *FC*-2, …, *FC*-34. Thus, each "biography of annals" can now

be recorded as a table form with several points appearing empty if no relevant information about a character is available. Let us assume that a certain chronicle describes a certain actual dynasty; let us then number its rulers and, on the basis of this chronicle, compose the form-code *FC* for each of them. We will obtain a sequence of form-codes, which we name *the form-code flow of the dynasty*. Since the same actual dynasty can be described by different chronicles, it can also be presented by different flows of form-codes.

How can we find out whether two different chronicles describe the same actual dynasty, or whether dynasties described thereby are actually different? If durations of rules of the kings are indicated in the chronicles, then one can apply the recognition procedure for dynasties of annals, see above. However, if no numerical data has been preserved, this task becomes notably complicated. So, how is it possible to recognize the same actual dynasty of kings in a great many form-code flows? To solve this issue, we developed a procedure based on the analogue of the "small dynastic distortions" principle, which in this case is briefly formulated in the following way.

If form-code flows of two dynasties *differ from each other "a little"*, they depict *the same actual dynasty*. But if two form-code flows depict *different dynasties*, these form-code flows are *"distant" from each other*.

How can one compare form-code flows of two dynasties and answer whether they are "similar" or not? And if they are, then to what degree? Let *FC* and *FC'* be form-codes of two rulers from different dynasties, which have the same ordinal number in their dynasty. Let us compare these two form-codes by each point, evaluating discrepancies between the points by marks. For different points these marks should be established differently, depending on the importance and degree of invariance of compared "biographical facts" in respect to subjective evaluations of chroniclers. As a result of experimenting with certain "biographies of annals", we developed the following system of marks, which makes it possible to reveal possible dependencies faster.

For points 1-10, excluding the point 3 (i.e., duration of rule), we will use marks 0, +1, –1.

For points 11-21 we will use marks 0, +1/2, –1/2.

For points 22-33, marks 0, +1/3, –1/3.

Comparing points of form-codes may lead to three opportunities, which we would illustrate on the basis of an example for points number 5, i. e., *FC*-5: "circumstances of death of the ruler".

a) Compared data *coincide*. For example, both *FC* and *FC'* report that both compared kings died a natural death. In this case we will assign this pair of points the mark +1 (coincidence), and conditionally record it as $E_5 = +1$.

b) Compared data *obviously do not coincide*, but rather contradict each other. For example, *FC* reports that the king died a natural death, and *FC'* reports that the king compared to him was assassinated as a result of a plot. In this situation, we will assign the mark –1 (contradiction), and record $E_5 = -1$.

c) Compared data are *neutral*, i. e., they neither coincide, nor contradict each other. For example, *FC* reports that "the king died", and *FC'* reports that "the king was assassinated". Let us assign the mark 0 (neutral situation), i. e., record $E_5 = 0$.

Thus, for each pair of points with number i (compared form-codes) we obtain a certain number E_i. Consequently, it is possible to calculate the sum of all of the obtained numbers E_i for the pair of form-codes *FC* and *FC'* of the two compared kings:

$$f(FC, FC') = E_1 + E_2 + E_4 + E_5 + \ldots + E_{33}.$$

Let us recall that we do not examine coefficient E_3 here, as we developed a different procedure for comparing durations of rule, presented in detail above.

Experiments with specific historical form-codes showed that the value of coefficient E_i has to be considered equal to zero in many cases, since quite often, comparable data on two kings neither coincide nor contradict each other. Thus, the role of +1 and –1, when they appear, is growing. Furthermore, it turned out that, in the overwhelming majority of cases, E_{34} has to be assumed equal to 0. The fact is, that comparison of the "remainders of biographies" of two kings usually reveals such a diversity of secondary, data of minor importance that makes it hard to compare at all. For example, in the "remainder of biography" *FC*-34, one king is said to have loved art and even sung, and the other king is said to have had black hair. This information can certainly be taken into consideration, but makes any comparison senseless.

Naturally, in such cases mark E_{34} had to be assumed equal to zero.

Let us now have two dynasties of annals *a* and *b,* each consisting of *k* successive kings. "Filling in the form for each one of them", i. e., composing a form-code for each king, we obtain a sequence, a flow of form-codes

$$FC_1, FC_2, FC_3, \ldots, FC_k$$

for dynasty *a,* and another sequence, a flow of form-codes

$$FC'_1, FC'_2, FC'_3, \ldots, FC'_k$$

for dynasty *b.*

The sequence of form-codes of kings

$$(FC_1, FC_2, FC_3, \ldots, FC_k)$$

can naturally be named *the form-code flow of dynasty a.* Let us denote it as *FC(a)*. Similarly, we assign to the sequence of "forms of kings"

$$(FC'_1, FC'_2, FC'_3, \ldots, FC'_k)$$

the name of *the form-code flow of dynasty b* and denote it as *FC(b)*.

In other words, the form-code flow of a dynasty is simply a sequence of form-codes of its kings, or actual rulers.

Now we want to compare form-code flows *FC(a)* and *FC(b)* of two dynasties, *a* and *b*. For each compared pair of form-codes of kings, we calculate the coefficient $f(FC_i, FC'_i)$, which makes it finally possible to determine the number:

$$e(a, b) = \frac{f(FC_1, FC'_1) + f(FC_2, FC'_2) + \ldots + f(FC_k, FC'_k)}{k}.$$

i.e., simply an arithmetic mean value of all coefficients $f(FC_i, FC'_i)$. In other words, we compare, step by step, each pair of successive kings of two compared dynasties, calculate the "proximity quotient" $f(FC_i, FC'_i)$ for each pair, and then compute arithmetic mean values for over all the kings of the dynasty.

Thus, the proximity or distance of form-code flows for the two dynasties *a* and *b* can be evaluated by a pair of numbers

$$(c(a, b), e(a, b)),$$

where coefficient $c(a, b) = PACD$, which has been described above.

We omit the description of numeric experiments in comparing form-code flows for dynasties of annals,

and only report the result: the procedure described above turned out to quite confidently enable separation of "dependent form-codes" from "independent form-codes". For details, see [904], [908], as well as [884]. An experimental verification confirmed correctness of small distortions principle in this case as well. The form-code flows depicting one and the same dynasty, turned out to differ from each other essentially less than those of actually different dynasties, which makes clear the possibility of dating form-code flows of dynasties according to the system described above.

Below we will present specific examples of dependent form-code flows of certain pairs of duplicate dynasties. This comparative material is very useful, since it shows how clearly two duplicates, two different descriptions of the same actual dynasty manifest themselves in annals.

To conclude, let us dwell upon one important circumstance. The procedure of comparing form-codes as presented above is not simply a "tribute to the statistical fashion", but an extremely useful research tool. It is important that the procedure be aimed at comparing not just *one pair* of separate biographies of annals, but *two long sequences of such biographies*. For example, we will compare *a sequence of twenty biographies* of kings from one dynasty to *a sequence of twenty biographies* of kings from another dynasty, see examples below. *A conclusion about the dependence of two dynasties can only be made on the basis of the proximity of two "long flows of biographies"*.

Let us note that the proximity or "similarity" of just *two separate isolated* biographies of some historical characters does not necessarily point out any chronological duplication. It is no big deal to select a pair of "similar biographies" of two different historical figures from our contemporary epoch by pulling out similar, sometimes surprisingly similar, facts of their lives. Moreover, sometimes quite a lot of such "similar facts" can be collected. At the same time, it is absolutely clear that these facts should not lead to any chronological conclusions, and all these coincidences can turn out to be just a freak of chance. *But when we reveal two close long sequences, two long "flows" of amazingly similar biographies; it is an entirely different matter*. When a formal statistical procedure "catches" a pair of "*similar long flows of biographies*" in an enormous collection of ancient documents, – not "at a

glance", but in a formal way, – that means we have clearly revealed something very serious. Besides, our methods make it possible to evaluate, albeit roughly, the probability of how occasional this "proximity" is. If the probability of a random coincidence turns out to be low, it strengthens our suspicion of having actually encountered a "multiplication" of the same actual dynasty in different chronicles.

Let us emphasize again the following important circumstance unambiguously traced in all the examples of pairs of dependent dynasties *a* and *b*, which we revealed and will demonstrate soon. For example, let *a* be the Roman dynasty, *b* – the German dynasty. It turns out that:

- The biography of the first Roman king "is similar" to the biography of the first German king.
- The biography of the second Roman king "is similar" to the biography of the second German king.
- The biography of the third Roman king "is similar" to the biography of the third German king.
- And so on, until the end of the entire dynasty of fifteen or twenty kings.

But in this case, biographies of kings are individual within both the Roman and the German dynasty, and not similar to each other. This means that among fifteen or twenty biographies of Roman kings, there is not a single "similar" pair; likewise, among fifteen or twenty biographies of German kings, there is not a single "similar" pair. But *the flow of Roman biographies proves to be amazingly "similar" to the flow of German biographies*. If this similarity, statistically evaluated, appears to be "very strong", it indicates that we encountered a pair of duplicate dynasties, as well as a serious contradiction inside the Scaligerian history.

11.
CORRECT CHRONOLOGICAL ORDERING METHOD AND DATING OF ANCIENT GEOGRAPHICAL MAPS

In [908] and [904] the author has also proposed a chronologically correct ordering procedure of ancient maps. Each geographical map reflects the state of the science of the humankind in the respective epoch of its compilation. Maps are obviously getting better as scientific ideas develop, which means *as a whole, the quantity of erroneous geographical data de-*

creases, and the quantity of correct data increases. Having studied many ancient maps, we composed an optimum map-code, which makes it possible to represent each map, presented graphically or described verbally, in the form of a table similar to *FC,* which can be conditionally named *map-code.* The map-code is constructed on the same principle as the form-code is, and consists of several dozen points and signs. Let us present only the beginning of this table.

1) Type of map:
a. Globe.
b. Flat map.
2)
a. World map (map of the world).
b. Regional map (of a separate region, which precisely).
3) In case of world map, the following parameters should be indicated:
a. structure of "boundary of the world" (water, land, etc.).
b. arrangement of poles, equator, tropics, climatic zones.
4) Orientation of the map, i.e., use of the following terms:
a. Names of the sides of the world (the North, etc.).
b. Terms "above", "below", and so forth.
c. Where the North of the map is placed (top or bottom), where the East of the map is situated (on the right or on the left).
5) Depiction or description of seas in the following way:
a. "Rivers", or narrow ducts.
b. Vast reservoirs.
6) Enumeration of basic reservoirs:
a. Oceans.
b. Seas.
c. Lakes.
d. Rivers.
7) For each reservoir, its name, in translation. Visual or descriptive characteristic of the shape of the reservoir, direction of flow, etc.
Etc.

Geographical size of a region described in one point of the map-code (sea, etc.) should not be too large in order to minimize, while comparing map-codes later, the possible influence of distorting projections used by different cartographers to compile flat maps.

An experimental check performed in 1979-1980 made it possible to formulate and confirm the following *geographical map improvement principle.*

If a chronologically *correctly enumerated (ordered)* sequence of geographical maps is assigned, then in the course of transition from old maps to newer ones the following two processes take place.

A) *Incorrect* signs, i.e., those not corresponding to actual geography, *disappear* and *no longer appear* on geographical maps. In other words, "*errors are not repeated on maps*".

B) Once a *correct* sign appears on a geographical map, – for example, presence of a strait, a river, or a more correct coast line, – it is *fixed and retained on all subsequent maps*. i.e., *correct information is not forgotten on maps.*

Due to the role that maps have always played in navigation and military science, this map improvement principle is quite comprehensible and simply reflects vital practical needs. The principle we formulated was checked afterwards with the system of preceding points. We fix a certain enumeration (ordering) of maps, then build a frequency graph *L(Q, T)* for each number *Q,* where number *L(Q, Q)* is equal to the number of geographical features appearing on the map with number *Q* for the first time, and number *L(Q, T)* shows how many of them remained on the map with number *T.*

Map ordering (enumeration) should be recognized as *chronologically correct* if all graphs *L(Q, T)* are close to the ideal damping graph in fig. 5.37, and incorrect in the opposite case. In particular, maps that are visually similar prove to be close temporally as well. Each historical epoch turns out to be characterized by its unique collection of maps. The verification of the principle was hindered by scarcity of truly ancient maps available in our time, but we nevertheless managed to gather a number of maps sufficient to make the verification of our theoretical model possible.

We found out that the sequence of mediaeval maps begins in the XI-XII century A.D. with *absolutely primitive maps*, very far from reality. Then the quality of maps improves more or less evenly until we finally come across fairly correct maps and globes of the XVI century A.D. At the same time, this quality improvement has been developing quite slowly.

Thus, for instance, the geographical knowledge in

Europe of the XVI century A.D. was still very far from the contemporary. The map of 1522, compiled by Occupario and kept in the State Historical Museum of the city of Moscow, depicts Europe and Asia in proportions blatantly different from the contemporary ones. Namely, Greenland is represented as a peninsula in Europe; the Scandinavian Peninsula stretches out as a thin stripe; the Bosporus and the Dardanelles are greatly extended and enlarged; the Black Sea is skewed along the vertical axis; the Caspian Sea is horizontally elongated and literally beyond recognition, etc. The only region depicted more or less correctly is the Mediterranean coast, although Greece is represented as a triangle without Peloponnesus.

Ethnographical indications on the Occupario's map and other maps of that time are even further away from those ascribed to this period by the Scaligerian history. For example, Dacia is placed in Scandinavia; Albania is on the shore of the Caspian Sea; *Gottia* (Goths?) is marked on the Scandinavian peninsula; China is simply absent; we see *Judei* in the north of Siberia, etc. The map of Cornelius Niccolai, 1598, is also guilty of similar distortions, but to a lesser degree already. And finally, the globe of the XVII century, kept in the State Historical Museum of the city of Moscow, reflects reality sufficiently well.

The procedure described above makes it possible to date maps, including the "antique" ones, following the diagram described above. The obtained results are quite unexpected. Let us quote just a few examples.

1) The well-known map from the *Geographia* by Ptolemy, the Basler publication of 1545 (see, for example, [252], page 97), is considered today to be "very ancient". However, it falls not into the II century A.D., but the XV-XVI century A.D., or the epoch of the book's publication by the "ancient" Ptolemy, which makes us recall a perfectly similar situation with the *Almagest* by Ptolemy, q.v. in CHRON3. We reproduce this map in fig. 5.44.

2) An equally famous "ancient" map entitled *Tabula Pentingeriana*, presented, for example, in [544], Volume 3, pages 232-233, falls not into the beginning of A.D., the epoch of Augustus, but into the XIII-XV century A.D., with a deviation from the Scaligerian dating of more than one thousand years.

3) Let us also present the results for a series of "ancient" maps, which are, as a matter of fact, later re-

constructions after their verbal descriptions in "ancient" texts, see [252], – namely, the following maps:

Hesiod, allegedly the VIII century B.C.;
Hekataeus, allegedly the VI-V century B.C.;
Herodotus, allegedly the V century B.C.;
Democritus, allegedly the V-IV century B.C.;
Eratosthenes, allegedly years 276-194 B.C.;
the "globe" of *Crater,* allegedly years 168-165 B.C.

When dated by the method described above, all these maps do not fall into the above-indicated Scaligerian time intervals, but rather into the period of the XIII-XVI century A.D. See CHRON5 for learning about the dating of geographical maps in more detail.

In fig. 5.45 we present the famous map by Hans Rüst, dating to 1480 ([1160], page 39). This map is remarkable in many respects. It shows the authentic level of geographical knowledge towards the end of the XV century, – repeat, the *fifteenth century*! It is clearly evident that this level is still extremely low and primitive. This is not a map yet, but rather a "painted list", verbal enumeration of countries, peoples, and certain cities. Certainly, certain geographical regions can already be recognised, albeit hardly. This is apparently *the very beginning of cartography*, its first clumsy steps. This is why all allegedly "ancient", picturesque maps of much higher level, now presented as those of XIV-XV century, were "transposed into the past" only owing to the Scaligerian chronology, while their actual place is in the XVII-XVIII century.

In fig. 5.46 and fig. 5.47 we present a fragment of the map of Abyssinia and Congo from the *Atlas* by G. Mercator and J. Hondius, allegedly of 1607 ([90], pages 72-73). Contemporary commentators note: "To the left below, in the cartouche, we see in Latin: *Abyssinia, or the domain of Presbyter John… in Africa…* Legends of a *Christian* state… the blissful reign of the righteous, ruled by a priest – Presbyter John – had been straying over Europe from the beginning of the XII century" ([90], page 73). Pay attention to the fact that in another cartouche, on the top, the African country of Congo is named a *Christian* state: *Congi Regni in Africa Christiani,* q.v. in fig. 5.47. Thus, in the beginning of the XVII century cartographers believed the domain of *Christian* Presbyter John to have extended not only into Asia and Europe, but also Africa, q.v. in CHRON5.

Fig. 5.44. World map from the *Geography* by the "ancient" Ptolemy. Taken from [1353], map 2.

Fig. 5.45. A mediaeval map by Hans Rüst dating from 1480. One sees that the geographical science was still pretty rudimentary towards the end of the XV century. Taken from [1160], page 39.

Fig. 5.46. A fragment of the map of Abyssinia and Congo from the *Atlas* of Mercator-Hondius, 1607. Taken from [1160], pages 72-73.

Fig. 5.47 A close-in of a fragment of the map of Abyssinia and Congo with a cartouche inscription. Taken from [90], pages 72-73.

Fig. 5.48. World map by Petrus Apianus allegedly dated 1520. Taken from [1459], sheet XXIII, map 61.

Fig 5.49 A close-in of a fragment of the map by Apianus showing Judaea that is located to the East from India. Taken from [1459], sheet XXIII, map 61.

Some more remarkable mediaeval maps: fig. 5.48 shows the map of the world by Petrus Apianus, made allegedly in 1520 ([1459], sheet XXIII, map 61). Let us point out that America is already painted. Enormous regions of China and Burma located to the East of India are named *Judah*. See names *Iudia* and *Iudiame* on the map, fig. 5.49. The Far East is named *India Superior*. It is interesting that Siberia is named Scythia: *Scitia Extra*. The European part of Russia is named *Tartaria,* fig. 5.50.

Fig. 5.51 shows a map of allegedly 1538, Solinus, Basel ([1459], map 71). One should notice that *the entire Europe to the North of Greece is named Moskovia*, fig. 5.52. This map has many other interesting names, which do not fit the Scaligerian version of history and geography.

Fig. 5.53 presents a rare map of Jerusalem of the alleged XIV century ([1177], page 475). We see Chris-

tian crosses on the buildings of Jerusalem. It is very interesting that at the same time, to the left below, *an Ottoman mosque with two high minarets* is shown, fig. 5.54. Apparently, this medieval map depicts Czar-Grad (King-City) = Jerusalem of the Gospels, with Ottoman mosques and Christian temples. Such maps, poorly fitting the Scaligerian version of history, must invoke irritation in contemporary historians. In this case, commentators named this image "a *stylized* map of Jerusalem", as if calling to distrust the information presented on the map ([1177], page 475).

Fig. 5.55 shows the map of the World compiled by Isidore, in the alleged VII century A.D., but published in the book of the alleged XV century ([1177], page 302). We see an extremely primitive map, most likely drawn in the XV century for the first time the earliest, and reflecting the ideas of the XV century cartographers about the structure of the world.

Fig. 5.50. A close-in of a fragment of the map by Apianus showing Russia, or Tartaria. Taken from [1459], sheet XXIII, map 61.

In fig. 5.56 we see a fragment of the map of the world by Gregor Reisch, allegedly dating to 1515 ([1009], page 65). According to its level, it was most likely created later than the beginning of the XVI century. America is present. Russia is called Tartaria. White Russia (Belaya Rus') is shown in the north of Russia. Moreover, there are several Tartarias on the map, q.v. in fig. 5.57.

Fig. 5.58 represents the map of the world by Macrobius, an "ancient" late Roman philosopher. The map, however, has only appeared in the book allegedly dating from 1483 ([1009], page 16). It is clearly evident that the level of geographical ideas is still very primitive. Most likely, this map reflects the concepts of cartographers of the XV-XVI century.

Fig. 5.59 shows a fragment of the map of "the Holy Land", allegedly dating from 1556 ([1189], page 94).

We see the city of Saint George next to Asur! To the left, a city named Indi – probably the "city of India" – is marked. Of interest are the city names of Skandalium and Skandaria, containing the root *Skanda* or *Scandia.*

Fig. 5.60 shows a fragment of an ancient map of 1649, on which the German river Moselle is named River *Mosa*, i.e., probably the river of Moses ([1189], page 171). Why and when such Biblical geographical names appeared, and how they became blurred subsequently in the territory of the Western Europe, is discussed in CHRON6.

Fig. 5.61 shows a fragment of a well-known map of the world by Schedel, allegedly dating from 1493 ([1459], map 44). A still extremely low level of geographical ideas towards the end of the XV century is clearly visible, see fig. 5.62.

Fig. 5.51. A map allegedly dated to 1538, Solinus, Basel. Taken from [1459], sheet XXV, map 71.

Fig. 5.52. Fragment of a map allegedly dated to 1538. Taken from [1459], sheet XXV, map 71.

Fig. 5.53. A map of Jerusalem allegedly dating from the XIV century. We can observe buildings with Christian crosses, as well as an Ottoman mosque with minarets in this mediaeval city. Taken from [1177], page 475.

Fig. 5.54. Fragment of a map of Jerusalem. Taken from [1177], page 475.

Fig. 5.55. World map compiled by Isidorus in the alleged VII century A.D. that was published in a XV century book. Taken from [1177], page 475.

Fig. 5.56. A world map by Gregor Reisch allegedly dating from 1515. Taken from [1009], page 65.

Fig. 5.57 A close-in of a fragment with several Tartarias. Taken from [1009], page 65.

Fig. 5.58. A world map by the "ancient" late Roman philosopher Macrobius that only appeared in a book allegedly dating from 1483. Taken from [1009], page 16.

Fig. 5.59. Fragment of a map of the "Holy Land" allegedly dating from 1556. Taken from [1189], page 94.

Fig. 5.60. The German river Mosel is called the river *Mosa* on a map dating from 1649. Could this mean "the Moses river"? Taken from [1189], page 171.

Fig. 5.61. A map by Schedel allegedly dating from 1493. One sees just how far the geographical concepts of the mediaeval cartographers had been from reality. Taken from [1459], sheet XII, map 44.

Fig. 5.62. Europe on Schedel's map. Taken from [1459], sheet XII, map 44.

Per annum volume distribution in some Russian chronicles

1. VOLUME FUNCTION FOR *DVINSKOY LETOPISETS* (The complete version of the chronicle)

Volumes calculated as per edition of *The Complete Russian Chronicles*, Volume 33, Leningrad, 1977. For every year described in the chronicle, the volume of the relevant text fragment (in lines) is indicated. For instance, entry 1342-7 means that the volume of the fragment related to 1342 equals 7, etc.

For certain years, there are two volume values and not one. This means that the commentators of this chronicle distinguish between the principal ancient text and later inserts and addenda. Therefore, in order to obtain a complete picture of the evolution of a certain text, we calculated the volume of the principal fragment separately, as well as the volume of the same fragment including addenda. We only provide values of volumes *other than zero*. If a certain year is not described in a chronicle, we omit this year in our table.

1342 – 7;	1397 – 5;	1398 – 13;	1417 – 6;	1431 – 2;	1464 – 19;	1491 – 5;
1499 – 4;	1511 – 19;	1530 – 3;	1534 – 2;	1541 – 2;	1543 – 2;	1546 – 25;
1547 – 1;	1549 – 3;	1550 – 2;	1553 – 17;	1555 – 19;	1556 – 4;	1557 – 2;
1584 – 8;	1587 – 1;	1588 – 12;	1589 – 12;	1591 – 3;	1593 – 3;	1597 – 4;
1598 – 5;	1600 – 2;	1601 – 2;	1603 – 12;	1604 – 5;	1608 – 3;	1610 – 4;
1611 – 3;	1613 – 9;	1614 – 11;	1615 – 11;	1616 – 11;	1617 – 11;	1618 – 2;
1619 – 2;	1620 – 2;	1621 – 2;	1622 – 2;	1624 – 3;	1627 – 4;	1629 – 5;
1633 – 1;	1634 – 5;	1635 – 1;	1636 – 14;	1638 – 2;	1640 – 2;	1641 – 1;
1642 – 4;	1643 – 1;	1644 – 1;	1645 – 5;	1646 – 14;	1647 – 6;	1648 – 2;
1650 – 2;	1652 – 28;	1653 – 6;	1654 – 15;	1655 – 16;	1656 – 5;	1658 – 8;
1659 – 3;	1661 – 3;	1663 – 12;	1664 – 3;	1665 – 7;	1666 – 8;	1667 – 30;
1668 – 41 – 85;		1669 – 0 – 4;		1670 – 15 – 25;		
1671 – 9 – 18;		1672 – 4 – 19;		1673 – 7 – 15;		
1674 – 22 – 50;		1675 – 31 – 54;		1676 – 69 – 149;		
1677 – 0 – 20;		1678 – 17;	1679 – 29;	1680 – 6;	1681 – 17;	1682 – 61;
1683 – 15;	1684 – 4;	1685 – 12;	1686 – 5;	1688 – 8;	1689 – 3;	1690 – 16;
1691 – 69;	1692 – 17;	1693 – 106;	1694 – 68;	1695 – 3;	1696 – 121;	1697 – 7;
1698 – 6;	1699 – 9;	1700 – 17;	1701 – 3;	1702 – 36;	1703 – 3;	1704 – 3;
1705 – 18;	1706 – 12;	1707 – 3;	1708 – 17;	1709 – 8;	1710 – 20;	1711 – 9;
1712 – 11;	1713 – 2;	1714 – 9;	1715 – 9;	1716 – 8;	1717 – 7;	1718 – 8;

1719 – 7;	1720 – 12;	1721 – 12;	1722 – 3;	1723 – 15;	1724 – 15;	1725 – 5;
1726 – 8;	1727 – 13;	1728 – 4;	1729 – 5;	1730 – 21;	1731 – 11;	1732 – 12;
1733 – 6;	1734 – 13;	1735 – 23;	1736 – 5;	1737 – 46;	1738 – 22;	1739 – 11;
1740 – 15;	1741 – 59;	1742 – 32;	1743 – 28;	1744 – 3;	1745 – 29;	1747 – 7;
1748 – 8;	1749 – 15;	1750 – 26.				

2. VOLUME FUNCTION FOR *DVINSKOY LETOPISETS* (The concise version of the chronicle)

Volumes calculated as per edition of *The Complete Russian Chronicles*, Volume 33, Leningrad, 1977.

1397 – 4;	1398 – 6;	1417 – 6;	1431 – 1;	1464 – 19;	1491 – 5;	1499 – 4;
1530 – 2;	1534 – 2;	1541 – 2;	1543 – 3;	1546 – 2;	1547 – 1;	1549 – 4;
1550 – 2;	1553 – 16;	1555 – 19;	1556 – 6;	1584 – 5;	1587 – 2;	
1588 – 1 – 2;		1589 – 1 – 2;		1590 – 2;	1593 – 3;	1597 – 8;
1605 – 6;	1606 – 5;	1610 – 4;	1611 – 7;	1614 – 7;	1615 – 7;	1616 – 7;
1617 – 7;	1618 – 2;	1619 – 2;	1620 – 2;	1621 – 2;	1622 – 5;	1627 – 10;
1636 – 9;	1637 – 5;	1638 – 6;	1645 – 2;	1646 – 13;	1647 – 6;	1648 – 2;
1650 – 2;	1652 – 9;	1655 – 3;	1656 – 3;	1658 – 5;	1659 – 3;	1663 – 11;
1664 – 3;	1665 – 7;	1666 – 6;	1667 – 5;	1668 – 33;	1669 – 4;	1670 – 8;
1671 – 9;	1672 – 4;	1673 – 7;	1674 – 19 – 24;		1675 – 0 – 8;	
1676 – 15 – 49;		1678 – 4;	1679 – 9;	1681 – 10;	1682 – 30;	1683 – 16;
1685 – 7;	1686 – 3;	1688 – 6;	1690 – 3;	1691 – 14;	1692 – 7;	1693 – 22;
1694 – 2;	1698 – 3;	1700 – 4;	1701 – 4;	1702 – 21;	1703 – 5;	1705 – 2.

3. VOLUME FUNCTION FOR *POVEST' VREMENNYKH LET*

Volumes calculated as per edition of *Memorials of Literature of the Ancient Russia.*
The Beginning of the Russian Literature, Moscow, 1978.

852 – 25;	858 – 5;	859 – 4;	862 – 31;	866 – 15;	868 – 1;	869 – 1;
879 – 3;	882 – 26;	883 – 2;	884 – 3;	885 – 7;	887 – 3;	898 – 75;
902 – 5;	903 – 2;	907 – 67;	911 – 2;	912 – 223;	913 – 3;	914 – 3;
915 – 13;	920 – 2;	929 – 4;	933 – 2;	941 – 30;	942 – 3;	943 – 2;
944 – 21;	945 – 276;	946 – 56;	947 – 7;	955 – 89;	964 – 10;	965 – 4;
966 – 2;	967 – 4;	968 – 48;	969 – 38;	970 – 12;	971 – 105;	972 – 5;
973 – 1;	975 – 7;	977 – 23;	980 – 143;	981 – 5;	982 – 2;	983 – 40;
984 – 7;	985 – 9;	986 – 523;	987 – 347;	989 – 7;	991 – 3;	992 – 44;
996 – 73;	997 – 48;	1000 – 2;	1001 – 2;	1003 – 2;	1007 – 2;	1011 – 1;
1014 – 7;	1015 – 262;	1016 – 19;	1017 – 1;	1018 – 30;	1019 – 48;	1020 – 2;
1021 – 6;	1022 – 18;	1023 – 2;	1024 – 19;	1025 – 19;	1026 – 5;	1027 – 2;
1028 – 2;	1029 – 1;	1030 – 6;	1031 – 5;	1032 – 1;	1033 – 1;	1036 – 26;
1037 – 45;	1038 – 1;	1039 – 3;	1040 – 1;	1041 – 1;	1042 – 3;	1043 – 23;
1044 – 9;	1045 – 2;	1047 – 2;	1050 – 1;	1051 – 117;	1052 – 3;	1053 – 2;
1054 – 16;	1055 – 16;	1057 – 3;	1058 – 1;	1059 – 3;	1060 – 8;	1061 – 5;
1063 – 4;	1064 – 4;	1065 – 48;	1066 – 16;	1067 – 17;	1068 – 122;	1069 – 30;
1070 – 3;	1071 – 152;	1072 – 26;	1073 – 23;	1074 – 322;	1075 – 12;	1076 – 6;
1077 – 7;	1078 – 104;	1079 – 7;	1080 – 3;	1081 – 3;	1082 – 1;	1083 – 4;

1084 – 7;   1085 – 7;   1086 – 32;   1088 – 6;   1089 – 14;   1090 – 14;   1091 – 114;
1092 – 23;   1093 – 214;   1094 – 18;   1095 – 60;   1096 – 225;   1097 – 374;   1098 – 3;
1099 – 4;   1100 – 32;   1101 – 15;   1102 – 34;   1103 – 71;   1104 – 17;   1105 – 4;
1106 – 16;   1107 – 30;   1108 – 13;   1109 – 5;   1110 – 30.

4. VOLUME FUNCTION FOR *SUPRASL'SKAYA LETOPIS'*
Volumes calculated as per edition of *The Complete Russian Chronicles*, Volume 35, Moscow, 1980.

854 – 1;   858 – 2;   859 – 4;   862 – 17;   869 – 1;   879 – 2;   881 – 49;
912 – 7;   913 – 26;   947 – 6;   970 – 7;   972 – 3;   977 – 4;   980 – 45;
981 – 2;   988 – 36;   989 – 3;   1015 – 6;   1016 – 2;   1017 – 4;   1019 – 10;
1021 – 3;   1037 – 2;   1039 – 2;   1041 – 5;   1045 – 1;   1047 – 2;   1050 – 2;
1053 – 1;   1073 – 1;   1074 – 1;   1237 – 36;   1238 – 48;   1240 – 70;   1241 – 2;
1242 – 2;   1246 – 1;   1247 – 2;   1253 – 1;   1258 – 1;   1263 – 1;   1280 – 1;
1283 – 1;   1285 – 2;   1303 – 1;   1305 – 4;   1306 – 1;   1310 – 10;   1315 – 6;
1316 – 3;   1317 – 3;   1318 – 3;   1322 – 3;   1325 – 4;   1326 – 4;   1327 – 7;
1328 – 2;   1332 – 1;   1333 – 2;   1334 – 2;   1338 – 2;   1339 – 5;   1340 – 4;
1341 – 5;   1342 – 2;   1343 – 3;   1344 – 2;   1346 – 4;   1348 – 2;   1349 – 9;
1350 – 4;   1352 – 6;   1353 – 16;   1354 – 6;   1356 – 3;   1357 – 8;   1359 – 9;
1360 – 4;   1362 – 7;   1364 – 1;   1365 – 15;   1366 – 2;   1368 – 7;   1370 – 4;
1371 – 6;   1372 – 5;   1373 – 9;   1375 – 9;   1376 – 5;   1377 – 2;   1378 – 10;
1379 – 4;   1380 – 33;   1382 – 5;   1383 – 7;   1384 – 2;   1385 – 1;   1386 – 1;
1387 – 8;   1388 – 8;   1389 – 4;   1390 – 3;   1391 – 2;   1392 – 5;   1393 – 5;
1394 – 1;   1395 – 28;   1396 – 2;   1397 – 2;   1398 – 19;   1399 – 1;   1400 – 3;
1401 – 10;   1402 – 10;   1403 – 4;   1404 – 22;   1405 – 19;   1406 – 16;   1407 – 7;
1408 – 4;   1409 – 3;   1410 – 20;   1411 – 4;   1412 – 5;   1414 – 7;   1415 – 15;
1416 – 19;   1418 – 22;   1419 – 1;   1420 – 4;   1421 – 4;   1425 – 6;   1426 – 7;
1427 – 13;   1430 – 138;   1432 – 2;   1433 – 1;   1435 – 2;   1436 – 2;   1437 – 2;
1438 – 2;   1440 – 30;   1443 – 5;   1444 – 4;   1445 – 18;   1446 – 2.

5. VOLUME FUNCTION FOR *NIKIFOROVSKAYA LETOPIS'*
Volumes calculated as per edition of *The Complete Russian Chronicles*, Volume 35, Moscow, 1980.

854 – 1;   858 – 2;   859 – 3;   862 – 16;   869 – 1;   880 – 2;   881 – 39;
912 – 7;   913 – 26;   947 – 10;   970 – 36;   981 – 2;   985 – 1;   986 – 1;
988 – 36;   989 – 3;   990 – 2;   1015 – 6;   1016 – 2;   1017 – 4;   1019 – 9;
1021 – 3;   1037 – 2;   1039 – 2;   1041 – 5;   1045 – 1;   1047 – 2;   1050 – 2;
1054 – 1;   1073 – 1;   1074 – 1;   1237 – 53;   1238 – 47;   1240 – 70;   1241 – 2;
1242 – 2;   1246 – 1;   1247 – 2;   1253 – 1;   1306 – 2;   1310 – 10;   1313 – 3;
1315 – 3;   1316 – 4;   1317 – 4;   1318 – 3;   1322 – 3;   1325 – 4;   1326 – 4;
1327 – 7;   1328 – 2;   1329 – 2;   1330 – 2;   1332 – 2;   1334 – 2;   1338 – 2;
1339 – 5;   1340 – 4;   1341 – 5;   1342 – 2;   1343 – 3;   1344 – 3;   1350 – 3;
1353 – 9;   1368 – 7;   1370 – 4;   1371 – 2;   1372 – 1;   1373 – 8;   1377 – 1;
1378 – 11;   1380 – 31;   1387 – 3;   1389 – 3;   1392 – 2;   1394 – 1;   1395 – 26;
1397 – 2;   1398 – 28;   1405 – 18;   1406 – 16;   1407 – 7;   1408 – 4;   1409 – 3;

1410 – 18;   1411 – 6;   1412 – 2;   1414 – 8;   1415 – 14;   1416 – 9;   1421 – 7;
1427 – 14;   1430 – 73.

6. VOLUME FUNCTION FOR *KHOLMOGORSKAYA LETOPIS'*
Volumes calculated as per edition of *The Complete Russian Chronicles*, Volume 33, Moscow, 1977.

852 – 6;   858 – 4;   859 – 3;   862 – 25;   866 – 8;   868 – 2;   869 – 1;
882 – 15;   883 – 2;   885 – 2;   898 – 43;   902 – 3;   903 – 2;   907 – 37;
912 – 49;   914 – 5;   915 – 7;   920 – 2;   929 – 3;   934 – 2;   941 – 21;
942 – 2;   943 – 1;   944 – 12;   945 – 26;   946 – 45;   947 – 4;   955 – 46;
964 – 7;   965 – 3;   966 – 4;   967 – 2;   968 – 29;   969 – 7;   970 – 8;
971 – 51;   972 – 4;   973 – 2;   975 – 4;   977 – 12;   980 – 56;   981 – 2;
982 – 1;   983 – 23;   985 – 6;   986 – 47;   987 – 36;   988 – 112;   989 – 9;
992 – 2;   993 – 38;   997 – 26;   1001 – 1;   1011 – 1;   1014 – 4;   1015 – 160;
1020 – 2;   1021 – 8;   1022 – 12;   1024 – 16;   1027 – 1;   1030 – 2;   1031 – 3;
1032 – 2;   1033 – 1;   1034 – 9;   1036 – 5;   1037 – 1;   1038 – 1;   1040 – 1;
1041 – 1;   1043 – 21;   1044 – 5;   1045 – 1;   1047 – 2;   1049 – 3;   1050 – 2;
1051 – 4;   1052 – 3;   1053 – 1;   1054 – 16;   1055 – 3;   1057 – 2;   1058 – 1;
1059 – 2;   1060 – 8;   1061 – 3;   1064 – 3;   1066 – 10;   1067 – 20;   1068 – 26;
1069 – 18;   1070 – 2;   1072 – 13;   1074 – 1;   1075 – 5;   1076 – 4;   1077 – 3;
1078 – 28;   1079 – 4;   1080 – 1;   1081 – 2;   1087 – 5;   1088 – 3;   1093 – 9;
1094 – 3;   1095 – 15;   1097 – 4;   1099 – 1;   1101 – 3;   1103 – 8;   1104 – 3;
1105 – 1;   1106 – 4;   1107 – 7;   1109 – 1;   1112 – 8 – 4;   1113 – 2;
1114 – 5;   1115 – 2;   1116 – 2;   1118 – 49;   1120 – 3;   1121 – 2;   1123 – 6;
1125 – 3;   1128 – 3;   1131 – 1;   1132 – 2;   1135 – 5;   1136 – 4;   1138 – 2;
1139 – 4;   1141 – 4;   1146 – 3;   1147 – 87;   1148 – 27;   1149 – 52;   1150 – 107;
1153 – 2;   1154 – 36;   1155 – 9;   1156 – 7;   1157 – 9;   1158 – 4;   1159 – 17;
1160 – 23;   1161 – 8;   1162 – 11;   1163 – 2;   1164 – 10;   1166 – 40;   1167 – 19;
1169 – 11;   1171 – 4;   1172 – 3;   1174 – 6;   1175 – 34;   1176 – 21;   1177 – 50;
1178 – 5;   1179 – 3;   1180 – 10;   1181 – 3;   1182 – 3;   1184 – 6;   1185 – 29;
1187 – 6;   1188 – 4;   1189 – 2;   1191 – 1;   1194 – 3;   1196 – 23;   1198 – 2;
1199 – 4;   1200 – 5;   1201 – 11;   1203 – 13;   1204 – 23;   1205 – 7;   1206 – 14;
1207 – 30;   1208 – 8;   1209 – 5;   1210 – 5;   1211 – 8;   1212 – 27;   1215 – 14;
1216 – 34;   1217 – 12;   1218 – 18;   1220 – 31;   1221 – 8;   1223 – 115; 1226 – 27;
1228 – 6;   1229 – 20;   1231 – 6;   1234 – 3;   1235 – 3;   1236 – 4;   1237 – 48;
1238 – 4;   1239 – 11;   1240 – 18;   1241 – 41;   1242 – 19;   1243 – 12;   1244 – 3;
1245 – 6;   1246 – 4;   1247 – 95;   1248 – 11;   1252 – 11;   1255 – 4;   1256 – 8;
1259 – 5;   1261 – 2;   1262 – 6;   1263 – 8;   1264 – 4;   1265 – 43;   1269 – 5;
1270 – 16;   1272 – 10;   1273 – 9;   1275 – 3;   1277 – 43;   1278 – 5;   1279 – 4;
1280 – 13;   1281 – 13;   1282 – 7;   1283 – 9;   1286 – 3;   1288 – 3;   1292 – 1;
1293 – 13;   1294 – 8;   1295 – 1;   1296 – 11;   1297 – 1;   1300 – 6;   1301 – 15;
1305 – 4;   1307 – 1;   1308 – 2;   1311 – 2;   1313 – 2;   1314 – 7;   1316 – 3;
1317 – 80;   1318 – 26;   1321 – 4;   1322 – 7;   1323 – 3;   1324 – 3;   1325 – 2;
1326 – 18;   1329 – 11;   1330 – 11;   1335 – 2;   1337 – 2;   1338 – 2;   1339 – 11;
1340 – 11;   1342 – 14;   1343 – 15;   1346 – 6;   1346 – 9;   1347 – 5;   1349 – 7;
1350 – 10;   1352 – 24;   1353 – 6;   1354 – 7;   1357 – 18;   1359 – 6;   1360 – 2;

1361 – 8;	1362 – 6;	1363 – 7;	1365 – 15;	1367 – 27;	1370 – 15;	1371 – 16;
1372 – 2;	1373 – 14;	1375 – 26;	1376 – 10;	1377 – 47;	1379 – 5;	1381 – 5;
1382 – 72;	1383 – 5;	1384 – 2;	1385 – 4;	1386 – 9;	1387 – 13;	1388 – 12;
1389 – 39;	1390 – 7;	1392 – 63;	1396 – 2;	1397 – 4;	1398 – 34;	1400 – 1;
1401 – 5;	1402 – 4;	1403 – 4;	1404 – 12;	1406 – 8;	1407 – 7;	1408 – 45;
1409 – 9;	1411 – 1;	1412 – 6;	1415 – 6;	1417 – 44;	1418 – 12;	1422 – 2;
1423 – 5;	1424 – 8;	1426 – 2;	1429 – 2;	1431 – 12;	1432 – 44;	1433 – 31;
1434 – 31;	1436 – 24;	1438 – 189;	1440 – 1;	1441 – 42;	1445 – 34;	1446 – 217;
1448 – 14;	1450 – 12;	1452 – 2;	1453 – 429;	1454 – 4;	1456 – 8;	1459 – 3;
1461 – 1;	1462 – 5;	1463 – 4;	1464 – 4;	1468 – 9;	1469 – 63;	1470 – 2;
1471 – 182;	1472 – 2;	1474 – 2;	1475 – 2;	1477 – 1;	1478 – 1;	1479 – 7;
1480 – 3;	1481 – 2;	1483 – 21;	1485 – 12;	1487 – 8;	1488 – 2;	1489 – 6;
1490 – 4;	1491 – 144;	1492 – 20;	1494 – 38;	1495 – 43;	1496 – 80 – 45;	
1497 – 22 – 10;		1498 – 10;	1499 – 14;	1500 – 36;	1502 – 12;	1505 – 12;
1506 – 28;	1507 – 6;	1508 – 9;	1509 – 12;	1510 – 10;	1511 – 1;	1525 – 6;
1526 – 6;	1529 – 2;	1530 – 4;	1533 – 1;	1534 – 8;	1537 – 2;	1538 – 2;
1541 – 6;	1544 – 3;	1546 – 9;	1547 – 3;	1549 – 5;	1550 – 20;	1553 – 29;
1554 – 12;	1555 – 16;	1558 – 4;	1559 – 12.			

7. VOLUME FUNCTION FOR *VOLYNSKAYA LETOPIS'*

Volumes calculated as per edition of *The Complete Russian Chronicles*, Volume 35, Moscow, 1980.

862 – 3;	866 – 4;	980 – 2;	988 – 1;	1015 – 17;	1028 – 1;	1035 – 1;
1052 – 1;	1054 – 1;	1055 – 2;	1061 – 1;	1065 – 24;	1074 – 2;	1088 – 3;
1089 – 2;	1090 – 2;	1091 – 1;	1092 – 6;	1094 – 2;	1095 – 2;	1100 – 3;
1104 – 3;	1108 – 2;	1114 – 2;	1124 – 1;	1125 – 2;	1145 – 1;	1154 – 1;
1155 – 3;	1165 – 3;	1166 – 1;	1177 – 4;	1192 – 3;	1204 – 1;	1224 – 2;
1230 – 3;	1237 – 1;	1240 – 1;	1268 – 1;	1327 – 1;	1341 – 2;	1346 – 1;
1348 – 1;	1371 – 1;	1372 – 4;	1377 – 7;	1378 – 2;	1380 – 2;	1381 – 4;
1382 – 4;	1386 – 3;	1390 – 2;	1393 – 1;	1395 – 2;	1399 – 3;	1401 – 5;
1403 – 2;	1404 – 2;	1405 – 13;	1415 – 2;	1417 – 1;	1428 – 1;	1429 – 2;
1430 – 1;	1431 – 1;	1433 – 1;	1434 – 3;	1440 – 4;	1441 – 1;	1449 – 2;
1453 – 1;	1461 – 4;	1481 – 3;	1483 – 5 – 2;		1486 – 5;	1487 – 1;
1488 – 1;	1489 – 3;	1491 – 9;	1492 – 13;	1493 – 6;	1494 – 10;	1495 – 10;
1486 – 42;	1497 – 45;	1498 – 2;	1500 – 7;	1514 – 3;	1515 – 95;	1544 – 9.

8. VOLUME FUNCTION FOR *THE CHRONICLER OF PRINCE VLADIMIR OF KIEV*

Volumes calculated as per edition of *The Complete Russian Chronicles*, Volume 35, Moscow, 1980.

970 – 7;	973 – 1;	977 – 5;	980 – 44;	981 – 2;	986 – 37;	989 – 3;
1015 – 6;	1016 – 2;	1017 – 4;	1019 – 10;	1021 – 3;	1037 – 2;	1039 – 2;
1041 – 5;	1045 – 1;	1047 – 2;	1050 – 2;	1054 – 1;	1073 – 1;	1074 – 1;
1237 – 92.						

9. VOLUME FUNCTION FOR *LETOPIS' RACHINSKOGO*

Volumes calculated as per edition of *The Complete Russian Chronicles*, Volume 35, Moscow, 1980.

1401 – 12;   1404 – 16;   1418 – 12;   1428 – 44;   1430 – 7;   1432 – 1;   1433 – 61;
1434 – 3;   1438 – 7;   1440 – 31;   1444 – 2;   1447 – 32;   1482 – 3;   1492 – 16;
1500 – 7;   1501 – 8;   1505 – 11;   1506 – 21;   1507 – 1;   1508 – 35;   1509 – 1;
1510 – 1;   1512 – 13;   1513 – 3;   1514 – 41;   1515 – 2;   1517 – 4;   1518 – 4;
1519 – 4;   1520 – 4;   1521 – 2;   1523 – 2;   1524 – 4;   1525 – 6;   1526 – 9;
1527 – 5;   1528 – 2;   1529 – 4;   1530 – 8;   1531 – 4;   1533 – 1;   1534 – 9;
1542 – 6;   1543 – 7;   1544 – 17;   1545 – 23;   1547 – 25;   1548 – 11.

10. VOLUME FUNCTION FOR *YEVREINOVSKAYA LETOPIS'*

Volumes calculated as per edition of *The Complete Russian Chronicles*, Volume 35, Moscow, 1980.

1401 – 23;   1404 – 15;   1428 – 41;   1430 – 7;   1433 – 52;   1434 – 5;   1440 – 27;
1452 – 4;   1500 – 5;   1506 – 7;   1508 – 8;   1514 – 32;   1517 – 9;   1526 – 5;
1527 – 6;   1528 – 32;   1531 – 3;   1534 – 15;   1535 – 24;   1536 – 3;   1538 – 3;
1539 – 2;   1541 – 2;   1542 – 16;   1543 – 10;   1544 – 15;   1545 – 10;   1547 – 20.

11. VOLUME FUNCTION FOR *AKADEMICHESKAYA LETOPIS'*

Volumes calculated as per edition of *The Complete Russian Chronicles*, Volume 35, Moscow, 1980.

1339 – 5;   1340 – 4;   1341 – 5;   1342 – 2;   1343 – 3;   1344 – 3;   1346 – 4;
1350 – 4;   1352 – 6;   1353 – 16;   1354 – 6;   1356 – 2;   1357 – 7;   1359 – 8;
1360 – 4;   1362 – 7;   1363 – 1;   1365 – 13;   1366 – 2;   1368 – 7;   1370 – 4;
1371 – 6;   1372 – 5;   1373 – 14;   1416 – 20;   1418 – 4;   1430 – 134;   1432 – 2;
1433 – 1;   1435 – 2;   1436 – 2;   1437 – 2;   1438 – 2;   1440 – 29;   1443 – 5;
1444 – 4;   1445 – 18;   1446 – 3.

Frequency matrix of names and parallels in the Bible

By *V. P. Fomenko* and *T. G. Fomenko*

Frequency square matrix of *names in the Bible*. The Bible is broken up into 218 'generation chapters'; therefore the size of the matrix should be 218 × 218. These 'generation chapters' are different from the regular chapters in the Bible. For more detail, see CHRON1, Ch. 5:9.

The leftmost column of numbers contains the numbers of *lines* in the matrix. After that, the frequencies of this line are listed. We do not enter zeros. Moreover, within every conglomeration like that, the column numbers are given *in succession – without gaps*, that is.

The number in parentheses denotes the value of the initial column of this conglomeration of non-void frequencies. One can see the list of frequencies for every such frequency conglomeration (the ones that do not equal zero).

1   (1) = 10, 2; (8) = 5; (78) = 1; (137) = 1; (180) = 2; (185) = 1; (194) = 1; (203) = 1, 2, 3, 1; (213) = 3.

2   (2) = 20, 1; (7) = 1, 2; (76) = 1; (192) = 1; (194) = 1; (200) = 1.

3   (3) = 2, 1; (12) = 2, 4; (137) = 1; (194) = 1.

4   (4) = 2.

5   (5) = 2.

6   (6) = 3, 4; (13) = 7, 3; (137) = 2; (194) = 2.

7   (7) = 11; (71) = 5; (104) = 2; (137) = 1; (142) = 2, 1; (167) = 2; (190) = 2; (194) = 1.

8   (8) = 7, 6; (137) = 2; (194) = 2.

9   (9) = 2, 3; (137) = 1; (194) = 2.

10   (10) = 2, 3; (137) = 1; (194) = 1.

11   (11) = 2, 3; (137) = 1; (194) = 1.

12   Only zeros. In future we omit such lines.

14   (14) = 2, 27, 9, 1; (48) = 1; (137) = 1; (175) = 2; (178) = 2; (192) = 2; (194) = 3; (198) = 1, 1; (217) = 1.

15   (15) = 33, 10, 3, 1; (21) = 1; (35) = 1, 2, 1; (47) = 1; (50) = 3; (73) = 1, 28, 3, 1, 8, 30; (97) = 1; (99) = 39; (101) = 21, 12; (137) = 8, 34, 13; (165) = 1; (171) = 4; (176) = 1; (192) = 1; (194) = 1; (199) = 1; (217) = 2, 1.

16   (16) = 5; (21) = 1; (30) = 1; (33) = 1; (137) = 2.

18   (18) = 7, 1, 1; (137) = 10; (178) = 4; (180) = 1; (218) = 1.

19   (19) = 3; (137) = 2; (178) = 1.

20   (20) = 4; (137) = 4; (139) = 1; (169) = 1; (171) = 1; (175) = 4.

21   (21) = 3, 1; (24) = 1; (137) = 7; (171) = 1; (186) = 1.

22   (22) = 5, 1; (45) = 1; (101) = 1; (137) = 7; (169) = 1; (171) = 1.

23   (23) = 2; (44) = 1; (64) = 3; (137) = 7; (171) = 2; (175) = 1, 1; (178) = 3.

24   (24) = 2; (137) = 1.

25   (25) = 1; (49) = 1; (129) = 1; (132) = 4; (136) = 26; (162) = 1, 1; (166) = 7, 15, 1, 1; (171) = 3; (175) = 12, 166; (178) = 21, 16; (185) = 1; (190) = 1; (192) = 4; (196) = 1; (198) = 1; (218) = 6.

26   (26) = 1; (37) = 1; (76) = 2; (137) = 1; (171) = 1; (175) = 1; (178) = 8; (180) = 5; (185) = 3; (188) = 1.

30   (30) = 2; (137) = 1; (175) = 2.

36   (36) = 1; (40) = 1, 1; (51) = 1, 2, 1; (76) = 1; (137) = 6; (168) = 1; (194) = 1.

37   (37) = 4, 1, 1; (50) = 3, 1; (62) = 1; (98) = 2; (137) = 9; (166) = 5, 4; (175) = 3; (178) = 2; (192) = 2; (194) = 2.

38 (38) = 4; (62) = 1; (71) = 1; (137) = 4.

39 (39) = 1, 1; (50) = 1, 2, 1; (76) = 1; (137) = 1; (168) = 2; (194) = 1.

41 (41) = 2, 1; (45) = 1; (52) = 1, 3; (137) = 5; (194) = 1.

42 (42) = 4; (137) = 3.

43 (43) = 3; (137) = 4; (140) = 1.

44 (44) = 2; (137) = 1.

45 (45) = 2; (71) = 1; (78) = 1; (137) = 6.

53 (53) = 2, 2; (137) = 1; (194) = 1.

54 (54) = 2, 2; (137) = 1; (194) = 1.

55 (55) = 2, 2, 2; (59) = 2; (62) = 6; (70) = 2; (78) = 1; (137) = 1; (194) = 1.

56 (56) = 2, 3, 1, 3; (78) = 1; (137) = 1; (194) = 1.

57 (57) = 6, 1, 7, 14, 18, 152; (66) = 8, 3, 2; (70) = 15, 3; (73) = 6, 9, 1, 1, 9, 2; (108) = 1; (125) = 1; (137) = 6, 2; (150) = 1; (160) = 1; (168) = 2; (171) = 5; (175) = 4, 1; (178) = 1; (185) = 1; (192) = 7, 1, 17, 11, 7, 2, 1, 1; (204) = 9; (206) = 1, 9; (217)=11.

59 (59) = 6, 3; (62) = 50; (66) = 1, 1; (73) = 1; (76) = 3; (78) = 1; (185) = 1; (198) = 1; (204) = 2; (217) = 1.

60 (60) = 10, 2, 2; (67) = 2; (70) = 1; (72) = 4, 151, 278, 12, 30, 50, 17; (80) = 2; (84) = 3; (88) = 1, 2; (97) = 1; (99) = 13, 1, 2, 33, 3, 1; (119) = 1; (129) = 3, 4, 1; (133) = 1; (135) = 8, 4, 1, 2, 8, 2; (142) = 3; (150) = 1; (156) = 1; (165) = 1, 2; (168) = 2; (171) = 14; (175) = 45, 70, 1, 65, 4, 12, 1, 6; (185) = 4, 1; (189) = 1, 4; (192) = 3; (196) = 19; (203) = 1; (217) = 4, 1.

62 (62) = 141; (66) = 8, 8, 9, 2, 113, 9; (73) = 15, 12, 1, 6, 12, 9; (87) = 38, 1, 1; (99) = 2; (101) = 5, 1; (105) = 3; (108) = 1; (113) = 2; (115) = 5; (125) = 1; (136) = 2, 24, 13; (141) = 3; (145) = 1; (149) = 1, 1; (153) = 1; (160) = 1; (167) = 8, 3; (170) = 2, 7; (175) = 12, 44; (178) = 4; (182) = 5; (188) = 2; (192) = 4, 1, 4; (196) = 4, 1; (204) = 3; (207) = 3; (217) = 13.

63 (63) = 7, 1, 2; (137) = 10.

65 (65) = 5; (73) = 1, 1; (76) = 2; (137) = 9.

67 (67) = 12; (137) = 17; (176) = 1.

68 (68) = 3, 15, 158, 56, 3, 39, 11, 1, 9, 17, 5; (99) = 1; (108) = 1; (125) = 2; (137) = 3, 2; (171) = 34; (175) = 42, 18, 3, 4; (180) = 3; (182) = 6, 10; (185) = 11, 1; (191) = 6, 12, 15, 12, 3, 15, 1; (203) = 1, 3, 1; (207) = 3; (217) = 5.

70 (70) = 101, 64, 38, 220, 176, 60, 382, 88, 242, 23, 8, 15, 10, 9, 11, 3, 4; (88) = 12, 18, 3, 4; (95) = 2, 16, 34, 6, 41, 9, 49, 28, 11, 6, 5, 2; (108) = 6, 2, 6, 3; (113) = 1, 1, 1; (117) = 1; (120) = 3; (122) = 4; (125) = 5, 5, 5, 1, 13, 1, 1; (133) = 5, 1, 4, 1, 77, 56, 12, 4, 6, 1, 6, 3,

5, 1, 2; (149) = 1, 4, 2, 1, 1; (155) = 1; (158) = 3, 1, 8, 2; (163) = 3, 6, 3; (167) = 18, 26; (171) = 59; (174) = 1, 53, 92, 6, 152, 2, 54, 5, 43, 3; (185) = 10, 1; (188) = 3; (190) = 20, 5, 30, 8, 33, 14, 26; (203) = 1, 9, 1, 2; (209) = 1; (217) = 9, 14.

71 (71) = 145; (73) = 16, 9; (175) = 37, 5, 14, 3; (81) = 2, 5, 6; (88) = 1; (90) = 1; (97) = 35; (99) = 139, 194, 70, 11, 2; (105) = 1, 4; (134) = 2; (136) = 136, 140, 33; (141) = 6; (144) = 2, 3; (147) = 1; (150) = 1, 1; (155) = 3; (161) = 2; (164) = 2; (168) = 7, 1, 6, 25; (175) = 3, 12, 2, 9, 1, 1; (182) = 1, 4; (186) = 1; (190) = 1; (194) = 2, 2, 2; (203) = 1, 1; (209) = 1; (218) = 1.

72 (72) = 22, 9; (76) = 13; (78) = 1; (98) = 4; (101) = 15; (137) = 20, 6; (168) = 3; (192) = 4; (194) = 2.

73 (73) = 84, 18; (76) = 146, 14, 80, 2, 1, 2, 5, 3, 2, 2, 2; (88) = 3; (90) = 5; (95) = 2, 3, 3, 2, 3; (101) = 9, 4, 1; (117) = 1; (122) = 1; (126) = 1; (132) = 1, 7; (135) = 2, 1, 101, 28; (143) = 1; (145) = 3; (147) = 1; (149) = 1, 1; (155) = 3; (158) = 1, 3, 7, 3, 1, 10, 6; (167) = 4, 5; (170) = 56, 9; (175) = 14, 9; (178) = 8; (180) = 34; (183) = 1; (190) = 3; (192) = 3; (194) = 1; (197) = 1; (218) = 1.

74 (74) = 503, 178, 454, 58, 258, 3, 8, 1, 1; (87) = 1, 1, 2; (91) = 1; (97) = 2, 4, 22; (101) = 27, 6; (104) = 1, 4, 2; (126) = 1; (128) = 5; (130) = 3; (133) = 1; (135) = 2; (137) = 76, 78, 6; (143) = 2; (146) = 1; (151) = 1; (153) = 2, 2, 1, 1; (158) = 1, 3, 1, 3; (163) = 1, 1, 4; (167) = 29, 33; (171) = 17; (175) = 4, 6; (179) = 7; (185) = 3; (189) = 5, 6, 1, 190, 116, 135, 274, 94, 2, 11, 9, 12, 2; (203) = 7, 44, 29, 24; 18, 22, 23, 10, 17, 13, 15, 16, 4, 7, 27, 16.

75 (75) = 7; (102) = 1; (134) = 1, 1; (175) = 1, 1; (182) = 1; (196) = 1.

76 (76) = 415, 39, 61, 9; (81) = 1, 1, 1; (88) = 3, 7, 2; (97) = 5; (99) = 119, 8; 13, 7; (104) = 1; (127) = 3; (129) = 4, 1; (135) = 6, 1, 82, 28; (141) = 2; (147) = 2, 1; (151) = 1; (163) = 5; (165) = 2; (167) = 4, 16, 1; (171) = 11; (174) = 1, 1, 21; (178) = 7, 3, 3; (182) = 1; (185) = 2; (188) = 3; (192) = 2, 1, 1, 6, 4; (199) = 1; (203) = 2, 1; (217) = 1, 3.

77 (77) = 4; (137) = 5; (170) = 1; (175) = 1.

78 (78) = 43, 7, 2, 3, 5; (84) = 8; (86) = 3; (88) = 2; (97) = 1; (99) = 1, 1, 32, 18, 4, 2, 4, 3; (108) = 8, 1; (112) = 2; (115) = 1; (120) = 2, 1, 17, 2, 3; (126) = 6, 3, 2, 1, 6, 3; (133) = 9, 2, 17, 12, 18, 18, 14; 1, 4, 7, 1, 1, 1; (147) = 1; (149) = 4, 7, 4, 2, 2, 6, 5, 4, 2, 5, 2, 10, 1, 12, 8; 11, 4, 11, 48, 39, 1; (171) = 18; (173) = 5, 8, 47, 119, 7, 29,

10, 6, 5, 3, 2; (185) = 8; (188) = 5; (190) = 38, 2, 13, 10, 33, 13, 62, 1; (204) = 5; (207) = 5; (217) = 2, 3.

79 (79) = 7.

80 (80) = 1; (88) = 1; (99) = 3, 1, 2; (135) = 1; (175) = 1.

81 (81) = 23, 1, 2; (187) = 1.

82 (82) = 31, 11; (171) = 1; (217) = 1.

84 (84) = 18, 15, 21, 9; (99) = 1; (101) = 1; (112) = 1; (123) = 1, 9, 10, 15; (137) = 1, 1; (148) = 1; (152) = 1; (154) = 5, 7; (180) = 1; (182) = 1; (217) = 1.

85 (85) = 8, 2; (171) = 2.

86 (86) = 24; (101) = 1, 2; (137) = 5; (171) = 1.

87 (87) = 27; (102) = 2; (124) = 1; (127) = 6, 1; (137) = 3, 1; (156) = 2, 4; (162) = 1; (167) = 1; (175) = 2; (180) = 1; (185) = 1; (192) = 2.

88 (88) = 1; (101) = 1; (138) = 2; (150) = 1.

89 (89) = 22, 5; (99) = 1; (217) = 1.

90 (90) = 5; (137) = 3; (164) = 1.

91 (91) = 19, 9, 9, 19; (217) = 1.

94 (94) = 7; (99) = 10; (137) = 1.

95 (95) = 8, 12; (101) = 1; (137) = 6, 4; (168) = 3.

96 (96) = 1; (99) = 29, 43, 23, 2; (137) = 7, 4; (147) = 1; (167) = 2, 5; (176) = 4.

97 (97) = 1; (99) = 2; (101) = 3, 8; (137) = 1; (171) = 1.

98 (98) = 84; (100) = 317, 285, 62, 6, 4, 6; (112) = 1; (120) = 2, 1; (123) = 1, 1; (126) = 2, 2, 2, 1, 1, 1, 2, 1, 1; (137) = 19, 182, 33, 4, 3, 1, 4; (146) = 1, 1; (151) = 5; (153) = 4, 2; (157) = 1, 1, 5, 1; (162) = 3, 2, 2, 3; (167) = 3, 8; (171) = 88, 1, 1, 1, 12, 15; (178) = 4; (180) = 1; (182) = 2; (190) = 6; (192) = 26, 7, 17, 2, 12; (204) = 4; (214) = 1; (217) = 2, 3.

99 (99) = 92, 33, 84, 9; (104) = 8, 7; (107) = 9, 23, 10; (111) = 4; (113) = 9, 12, 2; (121) = 1, 2; (127) = 3; (131) = 1; (137) = 39, 31, 1, 1, 2; 1, 11; (151) = 1; (153) = 1; (159) = 2; (168) = 6, 1, 6, 12; (175) = 56, 78; (179) = 2; (181) = 1, 7; (185) = 1, 2, 2, 2, 13, 42, 22, 31, 17, 23, 22, 37, 2; 21, 9, 11, 4; (203) = 6, 71, 71, 51, 41, 47, 38, 27, 15, 13, 17, 16, 4, 7, 16, 11.

100 (100) = 97, 157, 31; (137) = 16, 32; (167) = 3, 2; (171) = 3; (175) = 1; (193) = 1.

101 (101) = 435, 269, 6, 2, 3; (109) = 4; (112) = 23, 3; (115) = 9; (118) = 1; (120) = 21, 16, 4, 5, 8, 5; (127) = 1; (133) = 1; (135) = 1, 4, 51, 105, 77, 2; 5, 1, 2; (147) = 9, 11, 4, 15, 10, 12, 9, 11; (157) = 1; (159) = 1, 1, 2; (163) = 1; (165) = 2; (167) = 16, 23, 1; (171) = 4, 3; (174) = 6; (176) = 28; (178) = 6; (181) = 2, 1; (188) = 1; (192) = 10; (194) = 5, 1, 3.

102 (102) = 56, 22, 30, 11, 9; (111) = 2, 2; (115) = 2;

(121) = 2, 3; (125) = 6, 8, 17; (129) = 4; (134) = 1, 2; (137) = 26, 17, 9, 15, 10, 15, 13; (145) = 2; (151) = 1, 1, 2; (156) = 2; (158) = 1, 3; (161) = 2; (165) = 1; (167) = 4, 11; (171) = 1; (176) = 1; (179) = 5, 1; (182) = 4; (192) = 2.

105 (105) = 32, 16; (110) = 14, 1, 3; (118) = 1; (120) = 2, 1; (125) = 3; (137) = 3; (143) = 1, 6, 8, 17, 2; (150) = 1, 1; (176) = 3; (182) = 1; (192) = 2.

106 (106) = 42, 1, 20, 6, 4, 24, 6, 1; (115) = 2; (120) = 10, 32, 26; (124) = 1; 1, 1, 1; (133) = 2; (137) = 4, 2; (148) = 5, 2, 2, 3, 9; (155) = 1, 1; (167) = 2, 6; (176) = 2; (185) = 2; (218) = 1.

108 (108) = 7; (137) = 1; (159) = 1; (167) = 1; (183) = 1.

109 (109) = 5; (114) = 13, 3, 7, 6, 11, 1, 8, 4; (125) = 7; (194) = 1.

111 (111) = 18; (121) = 4.

112 (112) = 21; (120) = 4, 6, 2, 3, 1, 1, 1; (134) = 1; (136) = 6, 5; (147) = 1, 16; (150) = 3; (152) = 11; (164) = 1; (166) = 2; (168) = 3; (176) = 52; (185) = 1.

113 (113) = 3.

115 (115) = 1.

116 (116) = 7, 3; (120) = 1.

117 (117) = 11; (194) = 1.

120 (120) = 1; (123) = 6; (152) = 3, 3, 1.

121 (121) = 1.

122 (122) = 1; (125) = 9, 3; (135) = 3; (151) = 1; (155) = 3; (164) = 1; (166) = 3.

123 (123) = 2; (152) = 2, 1; (176) = 1; (192) = 2.

124 (124) = 6, 1, 11, 2; (137) = 4, 1; (147) = 2; (154) = 3, 16, 2; (182) = 3.

126 (126) = 4, 2; (130) = 1; (137) = 3, 9; (147) = 1; (150) = 1, 1; (154) = 1, 1, 1; (159) = 2; (164) = 1, 1; (167) = 6, 6; (175) = 1; (184) = 18; (190) = 4; (192) = 7; (194) = 14, 4.

127 (127) = 40, 23, 2, 3; (132) = 1; (135) = 1; (137) = 7; (156) = 13, 3, 9, 1; (167) = 1, 1; (175) = 22, 2; (180) = 1; (182) = 1; (185) = 1; (190) = 1; (192) = 4.

128 (128) = 1; (130) = 17, 9, 15, 1; (137) = 3; (158) = 2, 7, 5, 9, 19, 1; (167) = 1, 2; (172) = 1; (175) = 33, 3; (185) = 1; (188) = 1; (192) = 2.

129 (129) = 8, 1, 1; (175) = 1, 3.

130 (130) = 23, 7; (134) = 6, 3; (137) = 9, 15, 1; (150) = 1; (159) = 4; (162) = 5; (164) = 8, 3, 1, 3, 12; (171) = 11; (175) = 28, 2; (192) = 2; (194) = 1.

131 (131) = 13, 11; (137) = 1, 3; (156) = 2; (159) = 1; (161) = 1, 4; (167) = 1; 1; (175) = 28, 3; (182) = 8; (192) = 6, 1, 3, 4, 3; (204) = 5.

132 (132) = 3.

133 (133) = 6, 2, 10; (137) = 4; (163) = 1, 2, 13, 1, 1, 1;
     (176) = 18; (188) = 1; (190) = 1; (192) = 4, 3, 1;
     (196) = 1.
134 (134) = 21; (136) = 2, 13, 11; (153) = 1; (158) = 1;
     (164) = 13; (167) = 8; 18; (176) = 17.
135 (135) = 14, 6, 5, 4; (158) = 1; (163) = 1; (165) = 4, 7,
     1, 13; (176) = 159; (178) = 1, 3; (190) = 1; (192) = 5.
136 (136) = 32, 9, 4; (147) = 2; (150) = 1; (159) = 1;
     (166) = 6, 14, 12, 2; (176) = 82; (178) = 4, 30; (188)
     = 1; (192) = 2.
137 (137) = 566, 107, 12; (141) = 5; (147) = 3; (149) = 2, 1,
     1, 1; (154) = 1; (156) = 1; (158) = 3, 6; (161) = 7; (164)
     = 2, 4; (167) = 76, 129; (175) = 1; 22; (178) = 14, 80;
     (185) = 1; (189) = 17, 6; (192) = 5, 1, 3; (196) = 11.
138 (138) = 236; (141) = 1; (146) = 1, 1; (150) = 1, 1;
     (153) = 3; (155) = 1, 1; (158) = 2, 3; (161) = 4; (164)
     = 1, 2; (167) = 23, 40; (176) = 7; (178) = 2; (190) = 1;
     (194) = 3; (215) = 1.
139 (139) = 3.
141 (141) = 2, 2.
143 (143) = 1.
145 (145) = 2; (158) = 1.
147 (147) = 5; (167) = 2, 14; (190) = 2.
150 (150) = 1.
151 (151) = 1.
152 (152) = 1.
153 (153) = 1.
154 (154) = 1.
158 (158) = 5; (168) = 1; (190) = 1.
161 (161) = 5; (165) = 1; (168) = 2.
163 (163) = 1.
164 (164) = 2.
166 (166) = 3, 15; (175) = 3; (179) = 3.
167 (167) = 203, 128, 84; (175) = 2, 1; (179) = 8; (189) = 12, 3.
168 (168) = 115; (171) = 3, 2; (176) = 23; (178) = 1.
169 (169) = 169.
170 (170) = 18; (218) = 1.
171 (171) = 5; (180) = 1.
172 (172) = 5.
174 (174) = 2.
175 (175) = 22; (182) = 1; (190) = 3; (192) = 2; (199) = 1.
176 (176) = 117; (178) = 3; (188) = 1; (190) = 2; (194) = 3.
178 (178) = 25.
179 (179) = 67; (194) = 2.
180 (180) = 21; (190) = 1; (196) = 2.
181 (181) = 1.
182 (182) = 1; (196) = 1.

185 (185) = 1.
186 (186) = 1; (194) = 1.
187 (187) = 2.
188 (188) = 1.
190 (190) = 8.
191 (191) = 1.
192 (192) = 144, 118, 135, 158, 139; (199) = 1; (207) = 6;
     (213) = 2; (218) = 5.
193 (193) = 8; (196) = 3; (204) = 1; (207) = 1; (213) = 1, 1.
194 (194) = 34, 11, 3.
195 (195) = 10; (205) = 4; (207) = 1.
196 (196) = 361; (198) = 1, 1; (202) = 2; (204) = 10, 25,
     3, 5, 3, 3, 9, 5, 3, 4, 9; 3, 6, 1.
198 (198) = 1; (206) = 1; (211) = 1, 1.
202 (202) = 1.
203 (203) = 1; (211) = 1.
204 (204) = 22.
205 (205) = 4.
206 (206) = 11, 2; (214) = 1.
209 (209) = 5.
210 (210) = 7; (214) = 2; (216) = 5.
213 (213) = 1, 1.
214 (214) = 14.
215 (215) = 1.
216 (216) = 2.
217 (217) = 2.
218 (218) = 2.

Here we have a square frequency matrix of *parallel places (repetitions, anagoges and the like) in the Bible*. The Bible is broken up into 218 'generation chapters'.

The size of the matrix is 218×218. The numbers in the leftmost column indicate the amount of lines in the matrix. After that, we give a listing of non-zero frequencies for every line. Moving along the line from the left to the right, we omit the zeroes. As soon as we come across a conglomeration of frequencies other than zero arranged in succession, that is, without gaps, we indicate the number of a column that which this group of frequencies *begins with*. We no longer give the numbers of the following columns (within this group of frequencies). For instance, in line 2 you will see (among other things) the following group of numbers: (170) = 2, 24. This means that in line 2, column 170, one can observe the frequency of 2, following it in column 171 – frequency 24, etc. Within

every conglomeration of frequencies of this variety, their column numbers follow *sequentially* – that is, *without gaps.*

1   (1) = 46, 2; (8) = 2; (14) = 1, 2, 3; (62) = 2; (74) = 2; (77) = 1; (170) = 2, 24; (173) = 3; (175) = 1, 3; (179) = 1; (182) = 1; (192) = 2, 3; (195) = 4, 1; (204) = 2, 5, 2; (208) = 1; (210) = 1; (213) = 2; (217) = 2, 4.

2   (2) = 7; (16) = 1; (171) = 3, 1; (175) = 1; (192) = 2; (195) = 1; (203) = 1, 1; (207) = 1; (217) = 2, 1.

3   (3) = 1.

4   (4) = 1.

5   (5) = 1.

6   (6) = 1.

7   (7) = 5.

8   (8) = 6; (16) = 1; (137) = 1; (194) = 1; (205) = 2.

9   (9) = 5.

10   (10) = 3.

11   (11) = 3.

12   (12) = 3.

13   (13) = 6; (217) = 1.

14   (14) = 3; (198) = 1; (217) = 1.

15   (15) = 56, 2; (76) = 1, 1; (100) = 1; (119) = 1; (170) = 1, 2, 1; (176) = 1; (192) = 5, 2, 1, 1, 1; (198) = 3, 1; (207) = 1; (217) = 1.

16   (16) = 23; (75) = 3; (78) = 1, 1; (175) = 1; (192) = 1; (218) = 1.

19   (19) = 1; (76) = 1; (137) = 1; (175) = 1.

21   (21) = 1.

22   (22) = 1.

23   (23) = 1.

24   (24) = 1; (137) = 1; (176) = 1; (182) = 1.

26   (26) = 1.

27   (27) = 1.

28   (28) = 1.

29   (29) = 1; (77) = 1.

30   (30) = 1.

31   (31) = 1.

32   (32) = 1.

33   (33) = 1.

34   (34) = 1.

35   (35) = 1.

36   (36) = 1; (137) = 1.

38   (38) = 1.

39   (39) = 1.

40   (40) = 1; (49) = 1; (137) = 1.

42   (42) = 1.

43   (43) = 1.

44   (44) = 1.

45   (45) = 1; (76) = 1.

47   (47) = 1.

48   (48) = 1.

49   (49) = 7; (77) = 2.

50   (50) = 2; (137) = 2.

51   (51) = 2.

52   (52) = 1; (137) = 1.

53   (53) = 3.

54   (54) = 2.

55   (55) = 2.

56   (56) = 2.

57   (57) = 2; (78) = 1; (137) = 2.

58   (58) = 1.

59   (59) = 3; (78) = 1.

60   (60) = 12, 3, 6; (70) = 5; (72) = 1; (77) = 1; (171) = 1; (196) = 1; (207) = 2.

61   (61) = 6, 6; (70) = 2, 2; (76) = 1, 2; (171) = 2, 1; (175) = 1; (178) = 2.

62   (62) = 267; (66) = 2, 5; (70) = 11; (73) = 4, 3, 3; (77) = 5, 4; (97) = 1; (100) = 1, 1; (107) = 1; (125) = 1; (160) = 1; (170) = 2, 7; (173) = 1; ((175) = 7, 4; (178) = 3; (182) = 1; (190) = 1; (192) = 5; (194) = 8, 3, 6, 2, 2, 3; (203) = 1, 7; (207) = 7; (213) = 1; (217) = 12.

63   (63) = 1; (137) = 2.

64   (64) = 1.

65   (65) = 1.

66   (66) = 2; (71) = 1; (73) = 2.

67   (67) = 4; (137) = 1; (170) = 1.

68   (68) = 4; (70) = 1; (137) = 1; (180) = 1; (191) = 1, 1; (196) = 1; (204) = 3.

69   (69) = 4, 1, 2; (217) = 1.

70   (70) = 245, 8; (73) = 6, 2; (76) = 3, 5, 5; (86) = 2, 1; (91) = 1; (100) = 1, 4; (103) = 1; (120) = 1; (151) = 1; (171) = 3, 2; (175) = 5; (180) = 4; (183) = 1; (192) = 1; (195) = 1, 1; (213) = 1; (217) = 4.

71   (71) = 57; (73) = 5, 4; (77) = 3, 4; (87) = 1; (99) = 1, 3; (137) = 1; (175) = 2; (208) = 1; (210) = 1.

72   (72) = 39, 7; (75) = 4, 4, 2; (86) = 1; (99) = 1, 2, 1; (110) = 1; (118) = 1; (137) = 3; (170) = 1, 2, 2; (176) = 3; (179) = 1; (190) = 1; (192) = 3, 1, 2; (196) = 1; (217) = 1.

73   (73) = 301, 11; (76) = 10, 10, 6; (82) = 1, 1; (91) = 1; (96) = 1, 2, 2, 2; (101) = 2; (120) = 1; (137) = 13; (168) = 2, 1, 2, 15, 1; (174) = 1, 5, 1; (178) = 2, 8; (182) = 1; (189) = 1; (192) = 4, 1, 5, 4, 15; (199) = 1; (205) = 1; (217) = 5, 1.

74 (74) = 968, 51, 79, 102, 22; (82) = 1, 2, 1; (91) = 1; (95) = 1; (97) = 1; (99) = 7, 5, 4, 9, 2, 1; (108) = 1, 1; (137) = 16; (139) = 3; (149) = 1, 2; (168) = 5; (170) = 1, 84, 2; (174) = 1, 15, 5, 1, 14, 3, 2, 2; (184) = 2; (190) = 1; (192) = 16, 5, 10, 5, 20; (198) = 2; (200) = 3; (204) = 12, 15, 5, 3, 3, 1; (213) = 1, 2; (217) = 31, 5.

75 (75) = 741, 44, 77, 5; (85) = 1; (98) = 5, 2, 3, 5, 2; (108) = 1; (111) = 3; (116) = 1; (118) = 2; (129) = 1; (133) = 1; (135) = 2; (137) = 1, 1; (159) = 3, 1; (168) = 7; (170) = 3, 17, 2; (174) = 2, 8, 10; (178) = 19, 1, 3, 1, 1; (186) = 1; (189) = 1; (191) = 4, 26, 8, 14, 5, 8, 3, 8, 2, 2; (204) = 7, 7, 4, 4, 2; (210) = 3, 1; (213) = 3, 2; (217) = 18, 2.

76 (76) = 1020, 91, 47, 3; (86) = 1; (89) = 4; (91) = 2; (97) = 1; (99) = 7, 2, 7, 6; (111) = 1; (117) = 1; (123) = 1; (130) = 1; (136) = 1, 10, 12, 2; (143) = 1; (153) = 1; (155) = 1; (160) = 1; (165) = 1; (167) = 2, 8; (170) = 1, 37; (173) = 1; (175) = 9, 9; (178) = 2, 2; (181) = 1, 2; (185) = 2; (191) = 1, 9, 1, 4, 7, 3; (198) = 1, 1; (203) = 4, 2, 16, 1, 1, 1; (210) = 1, 1; (213) = 1; (215) = 1; (217) = 14, 3.

77 (77) = 646, 50; (80) = 3; (83) = 2, 1, 1; (87) = 1; (89) = 3; (91) = 1; (98) = 2, 9, 2, 11, 24; (104) = 4; (106) = 1, 1, 4; (111) = 1; (118) = 2; (125) = 1, 2; (128) = 1; (133) = 1, 1, 1; (139) = 2; (145) = 1; (149) = 4, 1; (155) = 1; (158) = 1, 1; (163) = 1; (165) = 2; (168) = 12; (170) = 3, 53, 18, 2; (175) = 32, 51, 5, 15, 3, 12, 1, 4; (185) = 3, 2, 2; (189) = 1, 2, 2, 41, 10, 17, 14, 11, 5, 2, 1; (203) = 2, 10, 13, 7, 3, 3; (210) = 1; (213) = 4; (217) = 16, 3.

78 (78) = 461, 9, 5, 1, 2, 1; (87) = 2; (95) = 1, 2, 1; (99) = 8, 8, 16, 14, 1, 1, 2, 1; (108) = 4; (113) = 1; (121) = 1; (126) = 3, 1; (132) = 1; (135) = 1; (137) = 16, 1, 1, 1; (143) = 1, 1; (150) = 1; (161) = 1; (167) = 1, 6; (170) = 9; (172) = 1; (175) = 11, 10; (178) = 3, 2, 1, 1; (184) = 2, 1; (190) = 2; (191) = 5; (194) = 4, 2, 4, 1; (204) = 1; (206) = 1; (217) = 7.

79 (79) = 8; (96) = 1, 1; (99) = 2, 1, 1; (113) = 1; (137) = 1; (192) = 1.

80 (80) = 6, 5; (86) = 1; (88) = 1; (171) = 1, 1; (175) = 1; (192) = 1; (196) = 1.

81 (81) = 20, 2, 1, 1; (86) = 1; (99) = 1; (176) = 1.

82 (82) = 13, 3; (99) = 2; (101) = 1; (108) = 1; (171) = 3.

83 (83) = 15; (88) = 1; (99) = 1; (101) = 1; (137) = 1; (171) = 4; (196) = 2.

84 (84) = 14, 2; (89) = 1; (91) = 1; (93) = 1; (97) = 1, 2, 5, 1, 2; (108) = 1; (171) = 2; (175) = 1; (180) = 1; (194) = 2.

85 (85) = 11; (87) = 1; (99) = 1; (144) = 1; (171) = 3; (173) = 1; (175) = 2; (192) = 1; (195) = 1.

86 (86) = 18, 3 (90) = 1; (97) = 1; (103) = 1; (122) = 1; (171) = 1; (176) = 1; (180) = 1.

87 (87) = 38; (90) = 1; (99) = 1, 2, 4; (122) = 2; (171) = 3; (178) = 3; (188) = 1; (192) = 1.

88 (88) = 9, 2; (99) = 2; (108) = 1; (176) = 1.

89 (89) = 19, 1; (92) = 1, 1; (99) = 1; (102) = 1; (135) = 1; (171) = 1; (182) = 1; (191) = 1; (194) = 1; (217) = 1.

90 (90) = 7; (101) = 2; (137) = 1; (192) = 1.

91 (91) = 10; (94) = 1; (100) = 1; (192) = 3; (194) = 4; (217) = 1.

92 (92) = 14; (94) = 2; (100) = 1, 1, 1; (217) = 1.

93 (93) = 15, 1 (100) = 1.

94 (94) = 16, 1 (99) = 1, 1; (109) = 1; (176) = 1; (192) = 2, 1, 1; (217) = 3.

95 (95) = 9, 3, 2, 1, 1; (175) = 1.

96 (96) = 17; (100) = 2, 1; (103) = 1; (175) = 1, 2.

97 (97) = 89; (99) = 3, 2, 3, 1; (176) = 1; (180) = 3; (196) = 1; (208) = 1; (217) = 1.

98 (98) = 55, 1, 3, 3; (111) = 1; (120) = 1; (137) = 1; (158) = 1; (168) = 1; (170) = 1, 4; (176) = 1; (178) = 1; (190) = 1; (192) = 5; (194) = 1; (206) = 2.

99 (99) = 265, 13, 6, 9; (108) = 1, 1; (117) = 1; (129) = 1; (133) = 1; (137) = 2, 1; (142) = 1; (144) = 1; (171) = 14, 3; (175) = 5, 5; (178) = 2, 1, 4; (182) = 3; (184) = 1; (186) = 1; (188) = 1; (190) = 1, 1, 7; (194) = 8, 1, 8; (204) = 2, 1, 1; (217) = 3.

100 (100) = 346, 33, 1; (130) = 1, 2; (137) = 5; (171) = 29, 7, 1; (175) = 2, 2; (178) = 3; (180) = 1; (192) = 3, 1, 3, 1, 3; (204) = 3, 1; (214) = 1; (217) = 2, 1.

101 (101) = 514, 31, 1; (105) = 2; (110) = 1, 1; (117) = 1; (120) = 1; (136) = 1, 15, 96, 2; (141) = 1, 1; (151) = 1; (163) = 1; (170) = 9, 38, 4; (175) = 12, 7; (178) = 4; (181) = 1; (192) = 7; (194) = 4, 4, 6; (204) = 3, 1; (207) = 1; (210) = 1; (217) = 3.

102 (102) = 242, 7, 4; (109) = 1; (111) = 1, 2; (116) = 1; (123) = 1, 2; (127) = 1, 1, 1; (133) = 4; (135) = 1, 2, 4, 17, 102; (143) = 1; (162) = 1, 1; (168) = 1; (171) = 14, 6, 3, 1, 4, 7; (178) = 10, 2; (192) = 6, 1, 6, 4, 7; (198) = 1; (217) = 1, 2.

103 (103) = 11; (129) = 2; (140) = 10, 3; (143) = 1; (176) = 1; (180) = 1; (182) = 1; (196) = 1; (204) = 1.

104 (104) = 35, 3, 3, 1; (110) = 1; (128) = 1, 1; (133) = 1; (135) = 3; (140) = 2; (142) = 6, 2; (163) = 1; (168) = 1; (175) = 1, 1; (204) = 1; (206) = 1, 1.

105 (105) = 10, 8; (111) = 1, 3; (120) = 1, 1; (124) = 1; (128) = 1; (141) = 1, 1, 3, 2, 2, 9, 1.

106 (106) = 19; (111) = 1; (120) = 1, 3, 1; (125) = 1;

(127) = 1; (138) = 1; (146) = 1; (218) = 1.

107 (107) = 15, 1; (116) = 1; (171) = 1; (183) = 1; (194) = 2; (196) = 3, 1; (217) = 1.

108 (108) = 23; (112) = 1; (114) = 2, 1; (129) = 1; (138) = 1, 1; (148) = 2; (175) = 1; (179) = 1, 1; (190) = 1; (194) = 3; (196) = 2, 3.

109 (109) = 7, 1; (113) = 1; (121) = 3; (152) = 1; (170) = 2, 1; (190) = 1; (192) = 1; (196) = 1, 1; (204) = 3.

110 (110) = 35; (112) = 5; (118) = 1; (131) = 1; (148) = 1.

111 (111) = 14, 1 (121) = 2; (129) = 1; (142) = 1; (170) = 3, 1; (178) = 1; (192) = 2.

112 (112) = 14; (115) = 1; (145) = 1; (147) = 1, 22, 2, 1, 1; (170) = 1, 1; (175) = 1, 4; (178) = 1, 2; (182) = 1; (192) = 1; (207) = 1; (212) = 1; (214) = 1.

113 (113) = 9; (115) = 2; (152) = 1; (171) = 1; (175) = 2; (190) = 1; (192) = 2; (194) = 2; (213) = 1; (218) = 1.

114 (114) = 15; (116) = 1; (120) = 1; (171) = 1; (193) = 1; (217) = 1.

115 (115) = 16, 1; (151) = 1; (171) = 1.

116 (116) = 31; (120) = 1; (192) = 1; (194) = 1, 1; (217) = 1.

117 (117) = 22; (194) = 2, 1.

118 (118) = 23, 1; (162) = 1; (172) = 1; (177) = 1, 1; (195) = 1, 1; (204) = 1; (217) = 1.

119 (119) = 17; (131) = 1.

120 (120) = 14; (122) = 1, 1, 1, 1; (128) = 1; (148) = 1; (151) = 5, 2; (176) = 1; (194) = 1.

121 (121) = 16; (152) = 4; (178) = 1; (180) = 1; (217) = 1, 1.

122 (122) = 20, 1 (125) = 2; (127) = 1; (152) = 2; (176) = 1; (180) = 1.

123 (123) = 4; (127) = 1; (135) = 1; (137) = 1; (152) = 3, 13.

124 (124) = 4, 1, 1; (128) = 1; (134) = 2; (154) = 11.

125 (125) = 17, 5, 1; (154) = 1, 1; (182) = 1.

126 (126) = 5, 3; (142) = 1; (155) = 12, 2; (178) = 1; (180) = 1; (182) = 2; (184) = 1; (190) = 1.

127 (127) = 11, 1; (135) = 1; (137) = 2; (154) = 2; (156) = 6, 4, 2; (175) = 1, 1; (178) = 1; (182) = 1.

128 (128) = 8; (139) = 1; (158) = 8; (175) = 3, 1; (180) = 1.

129 (129) = 12, 3; (135) = 1; (167) = 1; (171) = 1; (175) = 3, 4; (178) = 1; (180) = 4; (184) = 1; (194) = 1, 2; (204) = 2, 1.

130 (130) = 11, 2; (158) = 1, 1; (162) = 8; (172) = 2; (175) = 15; (178) = 1, 1; (185) = 1.

131 (131) = 15, 1 (162) = 4; (167) = 1; (171) = 3; (175) = 19; (178) = 1; (190) = 1.

132 (132) = 9; (136) = 1; (159) = 1; (162) = 4; (168) = 1; (170) = 1; (175) = 6, 1; (217) = 1.

133 (133) = 3; (136) = 1; (158) = 1; (163) = 13;

(175) = 1, 4, 1, 1; (182) = 1.

134 (134) = 5, 2, 1, 1; (164) = 12, 1; (171) = 1; (175) = 2, 5.

135 (135) = 6, 3; (145) = 1; (164) = 6, 7, 4; (176) = 2.

136 (136) = 7; (139) = 1; (166) = 9, 1; (169) = 2; (171) = 1; (175) = 1, 32, 1, 2, 3; (192) = 1.

137 (137) = 323, 5; (167) = 3, 2; (171) = 6; (176) = 2; (192) = 4.

138 (138) = 344, 6; (150) = 1; (159) = 1; (161) = 3; (167) = 1, 1; (170) = 1, 17; (175) = 3, 4, 1, 1; (192) = 2; (194) = 3; (196) = 3; (207) = 1; (213) = 2; (216) = 1, 3, 2.

139 (139) = 64; (150) = 1; (167) = 3; (171) = 6, 1, 1; (175) = 4, 4, 1; (179) = 1; (182) = 1; (192) = 3; (194) = 1, 1; (197) = 1; (200) = 1; (208) = 1; (217) = 1.

140 (140) = 10.

141 (141) = 12, 1, 2; (195) = 1.

142 (142) = 5; (145) = 1; (176) = 1; (179) = 1.

143 (143) = 10; (171) = 1.

144 (144) = 8; (146) = 1, 1; (150) = 1.

145 (145) = 10; (152) = 1; (175) = 1; (180) = 1; (182) = 1; (192) = 1; (194) = 2; (205) = 1; (207) = 1.

146 (146) = 6; (149) = 1; (175) = 1.

147 (147) = 14, 1, 1.

148 (148) = 16; (170) = 1, 1; (175) = 1; (178) = 1; (193) = 1; (195) = 2; (200) = 1.

149 (149) = 4; (168) = 1; (170) = 1, 1; (190) = 1; (196) = 1; (198) = 1; (204) = 1; (207) = 1, 1; (210) = 1.

150 (150) = 24; (154) = 1; (171) = 4; (175) = 1; (192) = 1.

151 (151) = 11.

152 (152) = 2.

153 (153) = 5; (159) = 1; (167) = 1.

154 (154) = 7; (163) = 1; (192) = 1; (194) = 2.

155 (155) = 12, 2; (171) = 1; (178) = 1.

156 (156) = 12; (182) = 1; (217) = 1.

157 (157) = 4; (168) = 3.

158 (158) = 10; (167) = 1; (175) = 1, 2; (180) = 1.

159 (159) = 15; (165) = 1; (168) = 1; (176) = 2; (178) = 1.

160 (160) = 14; (186) = 2; (195) = 1, 2.

161 (161) = 12; (168) = 1.

162 (162) = 12; (175) = 10; (194) = 1; (200) = 1.

163 (163) = 11; (168) = 1; (176) = 1; (179) = 1; (196) = 1.

164 (164) = 16; (176) = 1.

165 (165) = 11; (176) = 1; (190) = 1.

166 (166) = 3; (175) = 2, 7; (178) = 1, 3; (190) = 1; (192) = 2.

167 (167) = 222, 23; (171) = 2; (175) = 3, 2; (179) = 2; (189) = 4, 2, 2, 2; (198) = 1; (205) = 1, 1; (213) = 1.

168 (168) = 311, 1, 3, 4, 2; (175) = 2, 8, 1; ((179) = 6, 2;

(182) = 1; (189) = 1, 1; (192) = 3; (194) = 2, 2, 2;
(204) = 2; (206) = 1, 1, 1; (211) = 1; (217) = 1.

169 (169) = 153, 1, 2, 11, 1, 1; (178) = 1, 4; (195) = 1.

170 (170) = 847, 131, 37, 8; (175) = 50, 25, 3, 13, 6, 6;
(182) = 5; (185) = 3, 3, 2, 1; (190) = 2, 2, 8, 1, 4, 4, 2,
7, 3, 4, 3; (203) = 1, 8, 9, 1, 3, 2; (210) = 2, 1, 2, 4;
(215) = 1; (217) = 9, 5.

171 (171) = 1775, 70, 13, 3, 195, 69, 10, 30, 24, 14, 6, 6;
((184) = 5, 8, 4, 7; (190) = 8, 8, 69, 16, 57, 35, 42, 4,
17, 3, 10; (203) = 1, 48, 16, 11, 9, 13, 1, 4; (213) = 2;
(215) = 1, 3, 41, 39.

172 (172) = 706, 22; (175) = 26, 13; (178) = 4, 4, 3; (182)
= 2; (185) = 2; (188) = 1; (191) = 13, 17, 2, 14, 7, 3,
17, 10, 2, 5; (204) = 17, 4, 6, 1, 4; (210) = 1, 1; (213)
= 8, 1, 3; (217) = 8, 4.

173 (173) = 143; (175) = 1, 1; (179) = 2, 2; (192) = 3, 1,
9, 2, 7, 3, 2; (200) = 3; (204) = 7, 4, 4; (208) = 2, 3;
(213) = 2, 1.

174 (174) = 84, 13, 2 (178) = 4; (185) = 1; (192) = 10, 1,
4, 7, 1; (198) = 2; (204) = 1, 1, 2, 2, 8, 2; (211) = 1;
(214) = 1; (217) = 1, 4.

175 (175) = 815, 160; (178) = 64, 20, 27, 7, 17, 4; (185) =
17, 5, 10, 8; (190) = 26, 10, 68, 14, 60, 45, 30, 4, 13, 4, 5;
(204) = 33, 15, 6, 3, 10, 1, 1, 1, 2, 2, 3, 1; (217) = 12, 59.

176 (176) = 1150; (178) = 81, 10, 25, 8, 20, 5, 2, 14, 2, 3,
6, 2, 8, 2, 23, 4, 13, 14; 7, 2, 5, 2, 1; (204) = 21, 5, 2, 2;
(212) = 1; (214) = 1; (217) = 7, 30.

177 (177) = 68, 11, 4, 6; (182) = 1, 1; (185) = 1; (187) =
1; (192) = 3; (194) = 3, 2; (205) = 2; (218) = 2.

178 (178) = 982, 13, 28, 8, 12, 6; (185) = 9, 6, 2, 10, 1, 20,
3, 15, 2, 8, 8, 8; (198) = 3, 3; (204) = 14, 5, 2, 3; (209)
= 1, 1; (212) = 1, 1, 1; (217) = 5, 33.

179 (179) = 282; (181) = 1, 1; (185) = 2; (188) = 1, 1, 1,
1, 15, 2, 10, 3, 9; (198) = 4; (200) = 1; (203) = 1, 1, 5;
(208) = 1; (211) = 2, 1, 2, 1, 1; (217) = 4, 33.

180 (180) = 100, 3, 4; (185) = 8; (188) = 1, 1, 3; (192) =
5; (194) = 5, 4, 4; (198) = 2; (204) = 2, 2, 1; (208) =
1; (216) = 1, 4, 3.

181 (181) = 40, 2; (184) = 1, 1, 1; (188) = 2; (190) = 2;
(192) = 1, 1, 1, 1, 2; (198) = 1; (204) = 1, 1; (207) =
1; (218) = 4.

182 (182) = 69, 2; (188) = 3, 1, 1, 1, 1; (194) = 3; (196) =
6, 1; (204) = 2; (207) = 1.

183 (183) = 6; (185) = 2; (195) = 1; (205) = 1.

184 (184) = 26; (185) = 1; (192) = 6; (194) = 2; (197) =
1; (205) = 1; (217) = 2, 1.

185 (185) = 31; (188) = 2, 1, 5; (192) = 7; (199) = 3, 3, 1;

(204) = 1; (212) = 1; (217) = 3, 1.

186 (186) = 26, 1; (204) = 1; (214) = 1; (218) = 2.

187 (187) = 20; (192) = 1, 1, 1, 1, 1; (200) = 1; (204) = 1;
(207) = 1; (213) = 1; (217) = 2.

188 (188) = 19; (190) = 4, 1; (195) = 2; (198) = 2; (204)
= 2, 1; (218) = 2.

189 (189) = 17, 3, 1, 1; (195) = 1; (217) = 1, 1.

190 (190) = 114, 1, 13, 2, 6, 7, 3; (203) = 1, 3, 4, 1; (208)
= 4; (217) = 5, 19.

191 (191) = 13, 6, 2, 4; (103) = 1, 2, 1, 1; (108) = 1.

192 (746, 178, 228, 61, 22, 11, 10, 3, 5; (204) = 15, 21, 3;
(208) = 4, 5, 2, 4, 2, 4, 2; (217) = 11, 9.

193 (193) = 456, 122, 42, 13, 5, 2; (200) = 2; (204) = 4, 11;
(207) = 1, 2, 2, 3, 1, 1, 4; (215) = 2; (217) = 7, 1.

194 (194) = 79, 63, 24, 5, 12, 4, 4; (204) = 11, 14, 3; (208)
= 7, 3, 1, 4, 11, 4; (217) = 9, 10.

195 (195) = 734, 19, 3, 8, 1, 22; (204) = 15, 8, 7, 3, 12, 4,
4, 4; (213) = 2, 1, 1; (217) = 11, 5.

196 (196) = 888, 1, 6, 3, 4; (204) = 25, 22, 11, 19, 9, 6, 7,
8, 2, 12, 8, 4; (217) = 8, 5.

197 (197) = 41, 6; (200) = 2; (204) = 8, 4, 2, 4, 3; (213) =
3, 2; (207) = 5.

198 (198) = 31, 1, 2; (204) = 18, 4, 7, 4, 9, 3, 4; (213) = 2,
2; (217) = 5, 2.

199 (199) = 20, 3; (203) = 6, 6, 5; (209) = 1; (211) = 2;
(213) = 4, 2, 1; (217) = 1, 2.

200 (200) = 52; (204) = 5, 6, 4; (208) = 4; (213) = 2;
(217) = 4, 2.

201 (201) = 7; (204) = 1, 1; (215) = 1.

202 (202) = 12; (205) = 1.

203 (203) = 8; (205) = 1; (208) = 1, 1, 1; (213) = 2;
(218) = 2.

204 (204) = 212, 43, 23, 31, 20, 8, 9, 4, 1, 3, 5, 3; (217) = 14, 6.

205 (205) = 239, 19, 9, 17, 8, 10, 13, 4, 7, 8, 2, 1, 5, 4.

206 (206) = 167, 5, 4, 6, 4, 2, 1, 4, 1, 1; (217) = 6, 4.

207 (207) = 72, 4, 3, 4, 2, 1; (215) = 2; (217) = 6, 1.

208 (208) = 59, 2, 23, 5, 2, 1, 2, 4; (217) = 5.

209 (209) = 45, 5, 7, 1, 3, 1; (217) = 6, 2.

210 (210) = 33, 1; (215) = 2; (217) = 9.

211 (211) = 42, 5, 1, 2; (217) = 1, 2.

212 (212) = 29; (217) = 1, 2.

213 (213) = 71, 2, 3; (218) = 2.

214 (214) = 44, 5, 1, 1, 2.

215 (215) = 20; (217) = 1.

216 (216) = 19.

217 (217) = 145, 11.

218 (218) = 347.

The square frequency matrix of *parallel places (repetitions, or anagoges) in the Bible after the identification* of the duplicates in the *T* series. This 'summary chapter *T*' is placed in the 15th position. The matrix obtained as a result satisfies the frequency damping principle a great deal better. However, since we have not yet identified all the duplicates, the matrix is not completely 'evenly damped' yet.

During this operation, the size of the matrix decreases somewhat. Having changed the order of 'generation chapters', we did not calculate the frequencies from scratch, but restricted ourselves to describing the relocation of part of its frequencies. The remaining columns and lines retained their previous numbers. It is obvious that certain numbers of lines and columns have now disappeared.

2   (2) = 7; (16) = 1; (171) = 2, 1; (175) = 1; (192) = 2; (195) = 1; (203) = 1, 1; (207) = 1; (217) = 2, 1.

3   (3) = 1.

4   (4) = 1.

5   (5) = 1.

6   (6) = 1.

7   (7) = 5.

8   (8) = 6; (16) = 1; (194) = 1; (205) = 1.

9   (9) = 5.

10   (10) = 3.

11   (11) = 3.

12   (12) = 3.

13   (13) = 6; (217) = 1.

14   (14) = 3; (198) = 1; (217) = 1.

15   (15) = 4155, 3; (61) = 3, 5; (70) = 4; (72) = 1; (75) = 44, 84, 109, 26; (82) = 2, 3, 1; (91) = 2; (95) = 1, 1; (103) = 10, 3, 2; (108) = 2, 3, 1, 3, 2; (116) = 1, 2; (119) = 1, 3, 1; (123) = 1, 2; (127) = 1, 1, 2, 1, 2; (133) = 5; (135) = 3, 3; (141) = 1, 2, 1, 1, 1; (148) = 1, 4, 1; (158) = 1, 1; (161) = 3, 1, 2; (168) = 37, 1, 21, 203, 24, 6, 3, 50, 48, 2, 35, 22, 10, 3, 6, 3; (186) = 1; (188) = 1, 5, 6, 2, 62, 12, 39, 25, 63, 1, 7, 2, 3; (204) = 18, 25, 11, 7, 6, 1, 2; (213)= 6, 3; (216) = 1, 48, 13.

16   (16) = 23; (75) = 1; (78) = 1, 1; (175) = 1; (192) = 1; (218) = 1.

19   (19) = 1; (76) = 1; (175) = 1.

21   (21) = 1.

22   (22) = 1.

23   (23) = 1.

24   (24) = 1; (176) = 1; (182) = 1.

26   (26) = 1.

27   (27) = 1.

28   (28) = 1.

29   (29) = 1; (77) = 1.

30   (30) = 1.

31   (31) = 1.

32   (32) = 1.

33   (33) = 1.

34   (34) = 1.

35   (35) = 1.

36   (36) = 1.

38   (38) = 1.

39   (39) = 1.

40   (40) = 1.

42   (42) = 1.

43   (43) = 1.

44   (44) = 1.

45   (45) = 1; (76) = 1.

47   (47) = 1.

48   (48) = 1.

50   (50) = 2.

51   (51) = 2.

52   (52) = 1.

53   (53) = 3.

54   (54) = 2.

55   (55) = 2.

56   (56) = 2.

57   (57) = 2; (78) = 1.

58   (58) = 1.

59   (59) = 3; (78) = 1.

61   (61) = 6, 5; (70) = 2, 2; (76) = 1, 2; (171) = 2; (172) = 1; (175) = 1; (178) = 2.

62   (62) = 259; (66) = 2, 2; (70) = 9; (75) = 3, 4, 3; (107) = 1; (125) = 1; (160) = 1; (170) = 2, 9, 1, 1; (175) = 5, 4; (178) = 3; (182) = 1; (190) = 1; (192) = 5; (194) = 7, 3, 6, 2, 2, 2; (203) = 1, 7; (207) = 6; (213) = 1; (217) = 11.

63   (63) = 1.

64   (64) = 1.

65   (65) = 1.

66   (66) = 2; (71) = 1; (75) = 1; (217) = 1.

67   (67) = 4; (170) = 1.

68   (68) = 4; (70) = 1; (180) = 1; (191) = 1, 1; (196) = 1; (204) = 1.

69   (69) = 4; (70) = 1, 1; (217) = 1.

70   (70) = 240, 7; (76) = 2, 3, 4; (86) = 2, 1; (91) = 1; (103) = 1; (120) = 1; (151) = 1; (171) = 3, 1; (175) = 4; (180)

= 3; (192) = 1; (195) = 1, 1; (213) = 1; (217) = 4.

71 (71) = 57; (77) = 2, 4; (87) = 1; (175) = 1; (185) = 1; (208) = 1; (210) = 1.

72 (72) = 39; (75) = 3, 4, 2; (86) = 1; (110) = 1; (118) = 1; (170) = 1, 1, 2; (176) = 2; (179) = 1; (190) = 1; (192) = 3, 1, 1; (196) = 1; (217) = 1.

75 (75) = 652, 41, 57, 5; (108) = 1; (111) = 1; (116) = 1; (127) = 1; (129) = 1; (133) = 1; (135) = 1; (159) = 3; (160) = 1; (168) = 6; (170) = 3, 15, 2; (174) = 2, 8, 8, 2, 28, 1, 1, 1, 1; (186) = 1; (189) = 1; (191) = 3, 17, 8, 12, 5, 4, 3, 5, 2, 1; (204) = 7, 7, 5, 3, 3; (210) = 3, 1; (213) = 3, 2; (217) = 16, 2.

76 (76) = 974, 84, 43, 3; (86) = 1; (89) = 4; (91) = 2; (109) = 1; (111) = 1; (116) = 1; (123) = 1; (130) = 1; (143) = 1; (153) = 1; (155) = 1; (160) = 1; (165) = 1; (168) = 8; (170) = 1, 33; (173) = 1; (175) = 8, 6; (178) = 2; (180) = 2; (182) = 1, 2; (186) = 2; (191) = 1, 9, 1, 4, 7, 2; (198) = 1, 2; (203) = 4, 2, 15, 1, 1, 1; (210) = 1, 1; (213) = 1; (215) = 1; (217) = 12, 3.

77 (77) = 524, 44; (80) = 3; (83) = 1, 1, 2; (87) = 1; (89) = 2; (91) = 1; (104) = 1; (106) = 1, 1, 4; (111) = 1; (115) = 3; (118) = 1; (125) = 1, 2; (128) = 1; (131) = 1; (134) = 1, 1; (145) = 1; (149) = 1, 1; (155) = 1; (157) = 1; (159) = 1; (163) = 1; (165) = 2; (168) = 12; (170) = 3, 44; 17, 2; (175) = 27, 46, 5, 15; (179) = 3, 12, 1, 4; (185) = 3, 2, 2, 1, 1, 2, 2, 35, 9, 16, 11, 9, 4, 1, 1; (203) = 2, 9, 12, 7, 3, 3; (210) = 1; (213) = 4; (217) = 14, 3.

78 (78) = 444, 8, 5, 1, 2, 1; (87) = 2; (103) = 1, 1, 1, 1; (108) = 1; (113) = 1; (121) = 1; (126) = 3, 1; (132) = 1; (135) = 1; (143) = 1, 1; (150) = 1; (161) = 1; (168) = 6; (171) = 8, 1; (175) = 11, 10; (178) = 3, 2, 1, 1; (184) = 2, 1; (187) = 1; (190) = 2; (192) = 5; (194) = 4, 2, 6, 1; (204) = 1; (206) = 1; (217) = 7.

79 (79) = 8; (96) = 1; (113) = 1; (192) = 1.

80 (80) = 6, 5; (86) = 1; (88) = 1; (171) = 1, 1; (175) = 1; (193) = 1; (196) = 1.

81 (81) = 20, 2, 1, 1; (86) = 1; (176) = 1.

82 (82) = 13, 3; (108) = 1; (171) = 3.

83 (83) = 15; (88) = 1; (171) = 4; (196) = 2.

84 (84) = 14, 2; (89) = 1; (91) = 1; (93) = 1; (108) = 1; (129) = 1; (171) = 2; (175) = 1; (180) = 1; (194) = 2.

85 (85) = 11; (87) = 1; (144) = 1; (171) = 3; (173) = 1; (175) = 2; (192) = 1; (195) = 1.

86 (86) = 18, 3; (90) = 1; (103) = 1; (122) = 1; (171) = 1; (176) = 1; (180) = 1.

87 (87) = 38; (90) = 1; (122) = 1; (171) = 3; (178) = 2;

(188) = 1; (192) = 1.

88 (88) = 9, 2; (108) = 1; (176) = 1.

89 (89) = 19, 1; (92) = 1, 1; (135) = 1; (171) = 1; (182) = 1; (191) = 1; (194) = 1; (217) = 1.

90 (90) = 7; (192) = 1.

91 (91) = 10; (94) = 1; (192) = 3; (194) = 4; (217) = 1.

92 (92) = 14; (94) = 2; (217) = 1.

93 (93) = 15, 1.

94 (94) = 16, 1; (109) = 1; (176) = 1; (192) = 2, 1, 1; (217) = 3.

95 (95) = 9, 3; (175) = 1.

96 (96) = 17; (103) = 1; (175) = 1, 2.

103 (103) = 11; (129) = 2; (141) = 3; (143) = 1; (176) = 1; (180) = 1; (182) = 1; (204) = 1.

104 (104) = 34, 3, 3; (110) = 1; (128) = 1, 1; (133) = 1; (135) = 3; (142) = 6, 2; (163) = 1; (168) = 1; (175) = 1; (176) = 1; (196) = 1; (204) = 1; (206) = 1, 1.

105 (105) = 10, 6; (111) = 1, 3; (120) = 1, 1; (124) = 1; (128) = 1; (141) = 1, 1, 3, 2, 2, 8, 1.

106 (106) = 16; (111) = 1; (120) = 1, 3, 1; (125) = 1; (127) = 1; (146) = 1; (185) = 1; (218) = 1.

107 (107) = 15; (116) = 1; (171) = 1; (183) = 1; (194) = 2; (196) = 4, 1; (217) = 1.

108 (108) = 23; (112) = 1; (114) = 2, 1; (129) = 1; (148) = 2; (170) = 1; (175) = 1; (178) = 1, 1; (190) = 1; (194) = 3; (196) = 2, 3.

109 (109) = 7, 1; (113) = 1; (121) = 2; (152) = 1; (170) = 2, 1; (190) = 1; (192) = 1; (196) = 1, 1; (211) = 1.

110 (110) = 35; (112) = 5; (118) = 1; (131) = 1; (148) = 1.

111 (111) = 14, 1; (121) = 2; (129) = 1; (142) = 1; (170) = 2; (171) = 1; (178) = 1; (192) = 2.

112 (112) = 14; (115) = 1; (145) = 1; (147) = 1, 22, 2, 1, 1; (170) = 1, 1; (175) = 1, 3; (178) = 1, 1; (182) = 1; (192) = 1; (207) = 1; (212) = 1; (214) = 1.

113 (113) = 9; (115) = 2; (152) = 1; (171) = 1, 2; (182) = 1; (190) = 1; (192) = 2; (194) = 2; (213) = 1; (218) = 1.

114 (114) = 15; (116) = 1; (120) = 1; (171) = 1; (193) = 1; (217) = 1.

115 (115) = 16, 1; (151) = 1; (171) = 1.

116 (116) = 31; (120) = 1; (192) = 1; (194) = 1, 1; (217) = 1.

117 (117) = 22; (194) = 2, 1.

118 (118) = 23, 1; (161) = 1; (171) = 1; (177) = 1, 1; (195) = 1, 1; (204) = 1; (217) = 1.

119 (119) = 17; (131) = 1.

120 (120) = 14, 1, 1, 1, 1, 1; (128) = 1; (148) = 1; (151) = 4, 2; (176) = 1; (194) = 1.

121 (121) = 16; (152) = 4; (178) = 1; (180) = 1; (217) = 1;

(218) = 1.

122 (122) = 20, 1; (125) = 1; (127) = 1; (152) = 2; (176) = 1; (180) = 1.

123 (123) = 4; (127) = 1; (135) = 1; (152) = 3, 2.

124 (124) = 4; (125) = 1; (126) = 1; (128) = 1; (134) = 2; (154) = 10.

125 (125) = 17, 5, 1; (154) = 1, 1; (182) = 1.

126 (126) = 5, 2; (142) = 1; (155) = 12, 2; (178) = 1; (180) = 1; (182) = 1; (184) = 1; (190) = 1.

127 (127) = 11, 1; (135) = 1; (154) = 1; (156) = 5, 4, 2; (175) = 1, 1; (178) = 1; (182) = 1; (185) = 1.

128 (128) = 8; (158) = 7; (175) = 3, 1; (180) = 1.

129 (129) = 12, 3; (135) = 1; (171) = 1; (175) = 3, 4; (178) = 1; (180) = 4; (184) = 1; (194) = 1, 2; (204) = 2, 1.

130 (130) = 11, 2; (158) = 1, 1; (162) = 8; (172) = 2; (175) = 13; (178) = 1, 1; (185) = 1.

131 (131) = 15, 1; (162) = 4; (172) = 1; (175) = 16; (178) = 1; (190) = 1.

132 (132) = 9; (159) = 1; (162) = 4; (168) = 1; (170) = 1; (175) = 6, 1; (217) = 1.

133 (133) = 3; (136) = 2; (158) = 1; (163) = 12; (175) = 1, 4, 1, 1; (182) = 1.

134 (134) = 5, 2, 1; (164) = 11, 1; (171) = 1; (175) = 2, 4.

135 (135) = 6, 3; (145) = 1; (164) = 6, 6; (176) = 2.

136 (136) = 7; (169) = 2; (171) = 1; (175) = 1, 26, 1, 2, 3, 1; (192) = 2.

141 (141) = 12, 1, 2.

142 (142) = 5; (145) = 1; (176) = 1; (179) = 1.

143 (143) = 10; (171) = 1; (195) = 1.

144 (144) = 8; (146) = 1, 1; (150) = 1.

145 (145) = 10; (152) = 1; (175) = 1; (180) = 1; (182) = 1; (192) = 1; (194) = 2; (205) = 1; (207) = 1.

146 (146) = 6; (149) = 1; (175) = 1.

147 (147) = 14, 1, 1.

148 (148) = 16; (171) = 1, 1; (175) = 1; (178) = 1; (193) = 1; (195) = 2; (200) = 1.

149 (149) = 4; (168) = 1; (170) = 1, 1; (190) = 1; (196) = 1; (198) = 1; (204) = 1; (207) = 1, 1; (210) = 1.

150 (150) = 24; (154) = 1; (171) = 2; (175) = 1; (192) = 1.

151 (151) = 11.

152 (152) = 2.

153 (153) = 5; (159) = 1.

154 (154) = 7; (163) = 1; (192) = 1; (194) = 1.

155 (155) = 12, 2; (171) = 1; (178) = 1.

156 (156) = 12; (180) = 1; (217) = 1.

157 (157) = 4; (168) = 1.

158 (158) = 10; (175) = 1, 2; (180) = 1.

159 (159) = 15; (165) = 1; (168) = 1; (176) = 2; (178) = 1.

160 (160) = 14; (176) = 2; (195) = 1, 1.

161 (161) = 12; (168) = 1.

162 (162) = 12; (175) = 9; (185) = 1; (194) = 1; (200) = 1.

163 (163) = 11; (168) = 1; (176) = 1; (179) = 1; (196) = 1.

164 (164) = 16; (176) = 1.

165 (165) = 11; (176) = 1; (190) = 1.

168 (168) = 304, 1, 2, 4, 2; (175) = 2, 7; (178) = 1, 4, 2; (182) = 1; (189) = 1, 1; (192) = 2; (194) = 2, 2, 2; (204) = 2; (206) = 1, 1, 1; (213) = 1; (217) = 1.

169 (169) = 146, 1, 2, 8, 1, 1; (178) = 1, 3; (195) = 1.

170 (170) = 805, 116, 33, 8; (175) = 44, 25, 2, 13, 6, 6; (182) = 4; (185) = 3, 3, 2, 1; (190) = 2; (192) = 8; (194) = 4, 4, 2; (197) = 6, 3, 2, 3; (203) = 1, 7, 8, 1, 3, 2; (210) = 2, 1, 3, 4; (215) = 1; (217) = 9; (218) = 5.

171 (171) = 1682, 63, 12, 4, 186; (186) = 60; (177) = 10, 28, 24, 13, 6, 6; (184) = 5, 7, 4, 6; (190) = 8, 4, 68, 15, 54, 36, 41, 7, 17, 3, 10; (203) = 1, 47, 15; 9, 7, 12, 1, 4; (213) = 2; (215) = 1, 3, 37, 36.

172 (172) = 660, 18; (175) = 24, 13; (178) = 4, 5, 3; (182) = 2; (185) = 2; (188) = 1; (191) = 1, 27, 5, 13, 7, 3, 14, 10, 2, 5; (204) = 17, 4, 5, 1, 4; (210) = 1, 1; (213) = 7; (215) = 3; (217) = 8, 4.

173 (173) = 140; (175) = 1, 1; (179) = 2, 2; (192) = 2, 1, 6, 2, 5, 3, 2; (200) = 3; (204) = 6, 4, 4; (208) = 2, 2; (213) = 2, 1.

174 (174) = 73, 11, 2; (178) = 4; (185) = 1; (192) = 8, 1, 4, 7, 1; (198) = 2; (204) = 1, 1, 2, 2, 6, 2; (211) = 1; (214) = 1; (217) = 1, 3.

175 (175) = 754, 142; (178) = 60, 18, 26, 5, 16, 4; (185) = 17, 5, 4, 9; (190) = 25, 8, 59, 15, 56, 42, 29, 4, 13, 5, 5; (204) = 33, 15, 8, 3, 10, 2, 1, 1, 2; 2, 3, 1; (217) = 12, 52.

176 (176) = 1029; (178) = 71, 9, 23, 8, 20, 5, 2, 13, 2, 3, 6, 1, 7, 2, 22, 5, 13; 10, 6, 2, 5, 2, 1; (204) = 20, 4, 2, 3; (212) = 1; (214) = 1; (217) = 7, 26.

177 (177) = 66, 11, 4, 4; (182) = 1, 1; (185) = 1; (187) = 1; (192) = 3; (194) = 3, 2; (205) = 2; (218) = 1.

178 (178) = 923, 13, 25, 6, 13, 6; (185) = 10, 6, 3, 10, 1, 19, 2, 13, 2, 8, 8, 7; (198) = 3, 3; (204) = 13, 4, 1, 2; (209) = 1, 1; (212) = 1, 1, 1; (217) = 5, 31.

179 (179) = 261; (181) = 1, 1; (185) = 2; (188) = 1, 1, 1, 1, 15, 2, 9, 3, 9; (198) = 4; (200) = 1; (203) = 1, 1, 5; (208) = 1; (211) = 2, 1, 2, 1, 1; (217) = 4, 25.

180 (180) = 97, 3, 4; (185) = 8; (188) = 1, 1, 3; (192) = 4; (194) = 5, 4, 4; (198) = 2; (204) = 2, 2, 1; (208) = 1; (216) = 1, 4, 3.

181 (181) = 38, 4; (184) = 1, 1, 1; (188) = 2; (190) = 2;

(192) = 1, 1, 1, 1, 1; (198) = 1; (204) = 1, 1; (207) = 1; (218) = 4.

182 (182) = 68, 2; (188) = 3, 1, 1, 1, 1; (194) = 3; (196) = 6, 1; (204) = 2; (207) = 1.

183 (183) = 6; (185) = 2; (195) = 1; (205) = 1.

184 (184) = 26; (186) = 1; (192) = 4; (194) = 2; (197) = 1; (205) = 1; (217) = 2, 1.

185 (185) = 31; (188) = 2, 1, 5; (192) = 5; (194) = 3, 3, 1; (204) = 1; (212) = 1; (217) = 2, 1.

186 (186) = 26, 1; (204) = 1; (214) = 1; (218) = 2.

187 (187) = 20; (192) = 1, 1, 1, 1, 1; (200) = 1; (204) = 1; (207) = 1; (213) = 1; (217) = 2.

188 (188) = 19; (190) = 4, 1; (195) = 2; (198) = 2; (204) = 2, 1; (218) = 2.

189 (189) = 17, 3, 1, 1; (195) = 1; (217) = 1, 1.

190 (190) = 111, 1, 11, 2, 6, 7, 3; (203) = 1, 3, 4, 1, 4; (217) = 5, 16.

191 (191) = 13, 6, 2, 4; (203) = 1, 2, 1, 1; (208) = 1.

192 (192) = 736, 170, 210, 57, 17, 10, 10, 3, 5; (204) = 15, 20, 3; (208) = 4, 5, 2, 4, 2, 4, = 2; (217) = 10, 9.

193 (193) = 455, 117, 40, 10, 5, 2; (200) = 2; (204) = 4, 8; (207) = 1, 2, 2, 3, 1, 1, 4, 1, 2; (217) = 6, 1.

194 (194) = 790, 57, 21, 5, 12, 4, 4; (204) = 11, 13, 3; (208) = 6, 3, 1, 4, 1, 9, 4; (217) = 8, 8.

195 (195) = 705, 17, 3, 7, 1, 18; (204) = 15, 7, 7, 3, 10, 4, 4, 4; (213) = 2, 1, 1; (217) = 8, 5.

196 (196) = 836, 1, 6, 3, 3; (204) = 23, 19, 8, 16, 9, 6, 7, 8, 2, 11, 8, 3; (217) = 8, 4.

197 (197) = 41, 6; (200) = 2; (204) = 8, 3, 2, 4, 2; (213) = 2, 2; (217) = 5.

198 (198) = 29, 1, 2; (204) = 17, 4, 7, 4, 9, 3, 4; (213) = 2, 2, 1, (217) = 5, 2.

199 (199) = 20, 3; (203) = 6, 6, 5; (209) = 1; (211) = 2; (213) = 4, 2, 1; (217) = 1, 2.

200 (200) = 50; (204) = 5, 6, 4; (208) = 4; (213) = 2; (217) = 4, 2.

201 (201) = 7; (204) = 1, 1; (215) = 1.

202 (202) = 12; (205) = 1.

203 (203) = 8; (205) = 1; (208) = 1, 1, 1; (213) = 2; (218) = 2.

204 (204) = 53, 41, 22, 31, 18, 8, 8, 4, 1, 3, 5, 3; (217) = 14, 5.

205 (205) = 237, 19, 9, 17, 8, 10, 12, 4, 7, 8, 2, 1, 5, 4.

206 (206) = 163, 4, 4, 5, 4, 2, 1, 4, 1, 1; (217) = 6, 4.

207 (207) = 72, 4, 3, 4, 2, 1; (215) = 2; (217) = 5, 1.

208 (208) = 59, 2, 22, 5, 2, 1, 2, 4; (217) = 5.

209 (209) = 45, 5, 7, 1, 3, 1; (217) = 6, 2.

210 (210) = 33, 1; (215) = 2; (217) = 9.

211 (211) = 42, 5, 1, 2; (217) = 1, 1.

212 (212) = 29; (217) = 1, 2.

213 (213) = 70, 2, 3; (218) = 2.

214 (214) = 43; (215) = 4, 1, 1, 2.

215 (215) = 20; (217) = 1.

216 (216) = 19.

217 (217) = 117, 10.

218 (218) = 299.

The construction of a global chronological map

and the results of applying mathematical procedures of dating to the Scaligerian version of the ancient history

1.
TEXTBOOK OF ANCIENT AND MEDIAEVAL HISTORY IN THE CONSENSUAL SCALIGER-PETAVIUS DATINGS

In 1974-1980 the author analyzed the Scaligerian chronology of ancient and mediaeval history of Europe, the Mediterranean, Egypt, and the Middle East with the following idea in mind: the historical and chronological data of Blair's tables ([76]) and 14 others indicated in the bibliography were complemented by information from more than two hundred other texts – chronicles, annals, etc., – which collectively contain descriptions of virtually all main events in the mentioned regions allegedly between 4000 B.C. and 1900 A.D., in the Scaligerian dating. All this data – wars, kings, main events, empires, etc. – was then displayed graphically on a plane as a global chronological map stretched along the horizontal time axis. It took several years to work this map out. At different times, different participants of the *New Statistical Chronology* project, which emerged as a result, would assist the author.

Each epoch, with all its events in Scaligerian dating, was depicted on the map in detail, in due place along the time axis. Each event was shown on the plane as a point or a horizontal segment. The date of an event was

determined by projecting a point or segment onto the time axis. The beginning of a segment showed the beginning of an event, the end of a segment marked the end of an event, – for example, the reign of a king. If epochs (*A, B*) and (*C, D*), as described by different chronicles, were simultaneous or overlapping for different countries, they were depicted on the global chronological map one on top the other in vertical development, to avoid confusion resulting from their identification with one another.

Thus, this global chronological map depicts a most complete "textbook" on ancient and mediaeval history for all indicated regions in the Scaligerian dating.

2.
MYSTERIOUS DUPLICATE CHRONICLES INSIDE THE "SCALIGER-PETAVIUS TEXTBOOK"

A graphic representation of the global chronological map takes up an area of several dozen square metres. Various duplicate detection procedures (as described above and in [904], [908], [883]-[886]) were applied to the material on this map. In particular, values of coefficients $p(X, Y)$ were calculated for different pairs of chronicles and texts X, Y covering long time intervals. Numbers $c(a, b)$ for different dy-

nasties *a* and *b*, and coefficients *e*(*a*, *b*) measuring proximity of map-code flows for dynasties *a* and *b* have been calculated, and map-codes of ancient maps examined. As a result, we unexpectedly discovered pairs of epochs that the Scaligerian history thought to have been different and independent, but which appeared to possess extremely small coefficients *p*(*X*, *Y*), *c*(*a*, *b*), etc. – i.e. such as *a priori dependent* chronicles, dynasties or map-codes would have. An example to explain this:

We discovered an identification of the history of "*antique*" Rome for the period of the alleged years 753-236 years B.C. with the history of *mediaeval* Rome for the period of the alleged years 300-816 years A.D. Therefore, this chronological shift is of about 1050 years. Now, more precisely:

EXAMPLE 1.

1) The mediaeval epoch (*A, B*), allegedly covering the period of 300-816 A.D., is described, for example, in a fundamental work by F. Gregorovius entitled *History of the City of Rome in the Middle Ages*, Volumes 1-5, St. Petersburg, 1902-1912. We used this text as "mediaeval chronicle *X*". In CHRON1, Appendix 6.1 we present a partition of the work [196] into fragments in accordance with the chronological instructions by F. Gregorovius. We also present the distribution of per annum volumes here.

2) The "ancient" epoch (*C, D*), allegedly spanning the years 1-517 from the foundation of Rome, is de-scribed in "chronicle *Y*" that we compiled from two following texts:

2a) **Roman History** by *Titus Livy*, Volumes 1-6, Moscow, 1897-1899, describing events allegedly spanning the years 1-459 from the foundation of Rome. After that, the text of Livy comes to a sudden end. His subsequent books are considered lost. In CHRON1, Appendix 6.2, we present distribution of per annum volumes in the books by Titus Livy. In doing so, "year zero" of *Livy* must be identified with approximately the year 300 A.D. of *F. Gregorovius*.

2b) To fill up the end of the "ancient" period (*C, D*) allegedly from year 459 up to 517 from the foundation of Rome, we used a relevant part of a contemporary monograph – **Essays on History of Ancient Rome** by *V. S. Sergeyev*, Moscow, 1928, OGIZ. In doing so, we relied on the strong dependence of the book by *Sergeyev* on the one by *Livy* that we discovered, with the coefficient of proximity $p = 2 \times 10^{-12}$. See fig. 5.9 and fig. 5.10 in CHRON1, Chapter 5.

The calculation of the coefficient *p(X, Y)*, where *X* stands for books by *Gregorovius* describing mediaeval Rome, and *Y* is the sum of books by *Titus Livy* and *Sergeyev* describing the "ancient" Rome, shows that $p(X, Y) = 6 \times 10^{-11}$ – a very small value. If we discard Sergeyev's text and compare text $X' =$ the part of Gregorovius' text allegedly from 300 to 758 A.D., and text $Y' =$ the part of the **Roman History** by Livy allegedly from year 1 to 459 from the foundation of

Fig. 6.1. The peak correlation of the volume functions for the "ancient" Titus Livy and his description of the "ancient" Rome ([482]) as compared to that of the modern work of F. Gregorovius ([196]) describing Rome in the Middle Ages.

Fig. 6.2. The peak correlation of the volume functions for the "ancient" Titus Livy and his description of the "ancient" Rome ([482]) as compared to that of the modern work of F. Gregorovius ([196]) describing Rome in the Middle Ages. Continued.

Fig. 6.3. The peak correlation of the volume functions for the "ancient" Titus Livy and his description of the "ancient" Rome ([482]) as compared to that of the modern work of F. Gregorovius ([196])describing Rome in the Middle Ages. Continued.

Rome, then calculation yields $p(X', Y') = 6 \times 10^{-10}$. This is another very small value.

Both results indicate dependence between the two epochs described in different places of "the Scaligerian textbook" – namely, the "ancient" epoch and the mediaeval one. To be more precise, we have discovered a dependence between the original sources describing them. This dependence manifests itself explicitly and is of the same nature as that between texts describing events known to be "the same", fig. 6.1, fig. 6.2 and fig. 6.3. The chronological shift which identifies the "antiquity" and the Middle Ages is one of approximately 1050 years.

EXAMPLE 2.

We have similarly compared the graphs of per annum volumes of the book by *V. S. Sergeyev* ([767]) which describes "antique" Rome in years 1-510 from the foundation of the City, and the book by *F. Gregorovius* ([196]) which describes mediaeval Rome from allegedly 300 A.D. to allegedly 817 A.D. The result is represented in fig. 6.4, fig. 6.5 and fig. 6.6. The correlation between the principal peaks on both graphs is clearly visible, indicating a strong dependence between these texts. This result was fairly predictable, since, as we have already seen, Sergeyev's book is a fairly faithful follower of "ancient" Titus Livy. The chronological shift here is one of approximately 1050 years.

EXAMPLE 3.

Comparison between per annum volumes of the "ancient" work by Titus Livy and the mediaeval work by C. Baronius ([50]) yields a similar result – namely, the dependence between the descriptions of "antique Rome" and "mediaeval Rome". We examined the book by Baronius *Deeds, Ecclesiastic and Secular, from the Nativity to 1198.* – Moscow, 1913. Printing house of P. P. Ryabushinsky. (Baronius, *Annales ecclesiastici a Christo nato ad annum 1198.*) This work was first published in 1588-1607 in Rome, in 12 volumes. In CHRON1, Appendix 6.3 we provide the distribution of per annum volumes in the work of Baronius as calculated by us.

The fundamental "*ancient*" work by Titus Livy, in several volumes, describes the Regal Rome, or the First Roman empire in our terms, and the "ancient" Roman republic. In general, Titus Livy spans the time interval from year 1 to 380 from the foundation of the City. The Scaligerian conversion of dates yields an interval of the alleged years 753-373 B.C.

The first part of the *mediaeval* work by C. Baronius

Fig. 6.4. The peak correlation of the volume functions for the modern book by V. S. Sergeyev describing the "ancient" Rome ([767]) as compared to that of the modern work of F. Gregorovius ([196]) describing Rome in the Middle Ages.

Fig. 6.5. The peak correlation of the volume functions for the modern book by V. S. Sergeyev describing the "ancient" Rome ([767]) as compared to that of the modern work of F. Gregorovius ([196]) describing Rome in the Middle Ages. Continued.

Fig. 6.6. The peak correlation of the volume functions for the modern book by V. S. Sergeyev describing the "ancient" Rome ([767]) as compared to that of the modern work of F. Gregorovius ([196]) describing Rome in the Middle Ages. Continued.

Fig. 6.7. The peak correlation of the volume functions for the "ancient" Titus Livy and his description of the "ancient" Rome ([482]) as compared to the description of the mediaeval Rome by Caesar Baronius (Baron, or *Barin*? [the archaic Russian word for "Master", or "Gentleman"]) ([50]).

Fig. 6.8. The peak correlation of the volume functions for the "ancient" Titus Livy and his description of the "ancient" Rome ([482]) as compared to the description of the mediaeval Rome by Caesar Baronius ([50]). Continued.

Fig. 6.9. The peak correlation of the volume functions for the "ancient" Titus Livy and his description of the "ancient" Rome ([482]) as compared to the description of the mediaeval Rome by Caesar Baronius ([50]). Continued.

Fig. 6.10. The peak correlation of the volume functions for the "ancient" Titus Livy and his description of the "ancient" Rome ([482]) as compared to the description of the mediaeval Rome by Caesar Baronius ([50]). Continued.

is dedicated to the Second and the Third Roman empires, i.e., an epoch allegedly from the beginning of A.D. up to year 400 A.D.

Both books are divisible into per annum fragments, i.e., pieces describing exactly one year each, see Chron1, Appendix 6.3. By calculating the volumes of each of such "chapters" we obtain a sequence of numbers – the volume function for a given book. Then we draw a volume graph for each book by year, showing the degree of detail in covering each year. Let us compare the volume graphs for the "ancient" *Titus Livy* and the mediaeval *Caesar Baronius*, superposing graphs one on top the other. We identify Titus Livy's year 1 from the foundation of the City with Caesar Baronius' year 17 A.D.

Comparison between the graphs of *Livy* and *Baronius* is shown on fig. 6.7, fig. 6.8, fig. 6.9 and fig. 6.10. The graphs are explicitly "similar". Namely, notwithstanding the different quantity of local maxima in the two graphs, whenever a peak or a close group of peaks appear on Livy's graph, a pronounced "hump", formed by several closely situated peaks, unmistakably raises on Baronius' graph. Roughly speaking, the "humps" on Livy's graph and those of Baronius occur more or less *simultaneously*.

Application of the empirico-statistical procedure described above confirms that *local peaks on both graphs do correlate well* – that is, the chronicles by the "ancient" Livy and the mediaeval Baronius *are dependent*. In other words, they apparently describe *the same period in the history of the same region*. Simply speaking, "ancient" Rome and mediaeval Rome are probably "the same thing". The thing is, certain sources "remained in place" and were later named mediaeval. Others were artificially shifted deep into the past and named "ancient" afterwards. In general, both tell the same story.

Thus, the chronological shift identifying "antiquity" and the Middle Ages is approximately 1050 years.

Then all (A, B) and (C, D) epochs appearing to be abnormally close from the viewpoint of coefficient $p(X, Y)$ were marked on the global chronological map. Let us name such epochs p-dependent. We depict them with identical symbols on the chronological map. Let us reiterate: when we speak about the "dependence of historical epochs", in no way do we mean that certain actual periods in the history of civilizations are "dependent", repeating one another. We have found no data of this kind. We only assert *dependence of certain chronicles*, actually describing the same historical period but erroneously placed in different epochs in the "Scaligerian textbook."

3.
MYSTERIOUS DUPLICATE REGAL DYNASTIES INSIDE THE "TEXTBOOK BY SCALIGER-PETAVIUS"

We then carried out an independent experimental study of the "Scaligerian textbook" – that is, a global chronological map – on the basis of dependent dynasty recognition procedure as well. Let us recall that for that purpose we have compiled lists of all the rulers in the range spanning the alleged years 4000 B.C.-1900 A.D. for the regions indicated. In particular, we used the chronological tables ([76]); list of other tables and books presented above. The dependent dynasty recognition procedure was applied to this set of dynasties featured in annals. The experiment has unexpectedly revealed particular pairs of featured dynasties a and b, which used to be considered independent in all senses but for which the proximity coefficient of $c(a, b)$ proved to be very small, of the same order of magnitude as for *a priory dependent* dynasties: 10^{-12} to 10^{-8}. The results obtained above indicate a most probable correspondence of these dynasties to the same "flow of events". A few examples below.

Examples of the dependent historical annalistic dynasties

Example 1 is shown in fig. 6.11, fig. 6.12, fig. 6.12a.

a = the second "antique" Roman Empire actually founded by Lucius Sulla allegedly in 82-83 B.C., ending with Caracalla in the alleged year 217 A.D.

b = the third "ancient" Roman Empire restored by Lucius Aurelian allegedly in 270 A.D., ending with Theodoric the Gothic in the alleged year 526 A.D. Here $c(a, b) = 10^{-12}$ dynasty a obtained from dynasty b by shifting the latter by approximately 333 years downward.

Thus, if we examine the proximity of these dynasties as a random event, its probability is 10^{-12} – that is, very low. This parallelism is *secondary* in the sense

Second Roman Empire in the
1st c. B.C. – 3rd c. A.D.

Third Roman Empire in the
3rd–6th cc. A.D.

1) Lucius Sulla 82-78 (5)
2) Confusion 78-77 (1)
3) Sertorius 78-72 (6)
4) Confusion 72-71 (2)
5) Pompey the Great 70-49 (21)
6) Pompey and Caesar 60-49 (11)
7) Confusion 49-45 (4)
8) Julius Caesar, winner in
   1st Triumvirate 45-44 (1)
9) Triumvirs and Octavianus Augustus
   (Octavian) 44-27 (17)

10) Octavianus Augustus
    27 B.C.-14 A.D. (41) or
    37 if counting from 23 B.C.
11) Nativity of Jesus in 27th year since
    Octavianus Augustus (27)
12) Tiberius 14-37 (23)
13) Tiberius and Germanicus 6-19 (13)
14) Caligula 37-41 (4)
15) Confusion 41 (1)
16) Claudius 41-54 (13)
17) Claudius and Pallas 41-54 (13)
18) Nero 54-68 (14)
19) Nero, Burrus and Seneca 54-62 (8)
19*) Nero and Seneca 54-65 (11)
20) Galba 68-69 (1)
21) Confusion 69 (1)
22) Two Tituses Vespasianuses 69-81 (12)
23) Domitian 81-96 (15)
24) Nerva 96-98 (2)
25) Nerva co-ruling 96-98 (2)
26) Trajan 98-117 (19) or 101-117 (16)
27) Hadrian 117-138 (21)
28) Titus Antoninus Pius
    138-161 (23)
29) Marcus Aurelius 161-180 (19)
30) Lucius Commodus 176-192 (16)
31) Pertinax 193 (1)
32) Didius Julian 193 (1)
33) Clodius 193 (1)
34) Pescennius Niger 193-194 (1)
35) Septimius Severus 193-211 (18)
36) Caracalla 193-217 (24). Well-known
    reforms in 2nd Empire
37) End of 2nd Roman Empire.
    Crisis in mid-III c. A.D.
    Gothic war. Shift by c. 333 years

1) Lucius Aurelius 270-275 (5)
2) Confusion 275-276 (1)
3) Probus 276-282 (6)
4) Confusion 282-284 (2)
5) Diocletian the Great 284-305 (21)
6) Diocletian and Constantius Chlorus
   293-305 (12)
7) Confusion 305-309 (4)
8) Constantius Chlorus, winner of 1st
   tetrarchy 305-306 (1)
9) Tetrarchs and Constantine Augustus
   306-324 (18)
10) Constantine Augustus 306-337 (31)
11) Birth of Basil the Great in
    27th year since Constantine
    Augustus (27)
12) Constantius II 337-361 (24)
13) Constantius II and Constans
    337-350 (13)
14) Julian 361-363 (2)
15) Confusion 363 (1)
16) Valentinian I 364-375 (11)
17) Valentinian and Valens (Pallas?)
    367-375 (11)
18) Valens 364-378 (14)
19) Valens, Valentinian and Gratian
    364-375 (11)
19*) Valens and Gratian 367-378 (11)
20) Jovian 363-364 (1) interchanged 18)
21) Confusion 378 (1)
22) Gratian and Valentinian II after
    Valens and Confusion 379-392 (13)
23) Theodosius I 379-395 (16)
24) Eugenius 392-394 (2)
25) Eugenius co-ruling 392-394 (2)
26) Arcadius 395-408 (13)
27) Honorius 395-423 (28)
28) Aetius 423-444 or 423-438 (21)
29) Valentinian III 437-455 (18)
    or 444-455 (11)
30) Ricimer 456-472 (16)
31) Olybrius 472 (1)
32) Glycerius 473-474 (1)
33) Julis Nepos 474-475 (1)
34) Romulus Augustulus 475-476 (1)
35) Odoacer 476-493 (17)
36) Theodoric 493-526 (33) or 497-526 (29).
    Well-known reforms.
37) End of Western
    3rd Roman Empire.
    Gothic war in mid-VI c. A.D.

Approximately 333-year shift

Fig. 6.11. Reign correlation for the "ancient" Second Roman Empire (the alleged period between 82 B.C. and 217 A.D.) and the "ancient" Third Roman Empire (the alleged period between 270 and 526 A.D.).

Fig. 6.12. A superposition of the Second and the Third Roman Empire (both presumably ancient) on the temporal axis with a rigid shift of about 330-360 years. A general scheme. Just a couple of reign duration versions are given here; refer to the table in the text for the complete list.

Fig. 6.12a. A superposition of the Second and the Third Roman Empire (both presumably ancient) on the temporal axis with a rigid shift of about 330-360 years. A detailed scheme giving the names of the rulers.

Fig. 6.13. The so-called "double-entry chronology" as obtained from the Bible that shows the temporal correlations between the Israelite and the Judaic kings.

Fig. 6.14. Reign correlation of the "ancient" Biblical Israelite kingdom of the alleged years 922-724 B.C. and the "ancient" Third Roman Empire of the alleged III-VI century A.D.

Fig. 6.15. Reign correlation of the "ancient" Biblical Judaic kingdom of the alleged years 928-587 B.C., and the "early mediaeval" Eastern Roman Empire of the alleged IV-VII century A.D.

Fig. 6.16. Reign correlation of two consecutive periods in the Papal history of the "early Middle Ages".

that not only do both of these dynasties duplicate each other, but they themselves appear to be phantom reflections of a more recent original located closer to us.

Example 2 is shown in fig. 6.13 and fig. 6.14.

a = "ancient" kings of Israel of allegedly 922-724 B.C. ([72], p. 192). They are described in the Bible, 1-2 Samuel + 1-2 Kings and Chronicles.

b = dynastic jet from the "antique" Roman Empire, of allegedly 300-476 A.D. Here $c(a, b) = 1.3 \times 10^{-12}$.

As in example 1, the small value of coefficient $c(a, b)$ means a virtual coincidence of both featured dynasties. This parallelism is also *secondary*. Relative chronology of kingdoms of Israel and Judah, restored after the information presented in the Bible, is shown on fig. 6.13. This is a so-called "dual entry", which makes it possible to see mutual arrangement of kings of Israel and Judah in time. For details of this "dual entry", see appendix 6.4 in the end of CHRON1.

Example 3 is shown in fig. 6.13 and fig. 6.15.

a = "ancient" kings of Judah of allegedly 928-587 B.C. [72], p. 192. They are described in the Bible, 1-2 Samuel + 1-2 Kings and Chronicles.

b = the dynastic jet from the "antique" and "early mediaeval" Eastern Roman Empire, allegedly of 300-552 A.D. Here $c(a, b) = 1.4 \times 10^{-12}$.

This parallelism is also *secondary*. The original for both phantom dynasties is located even closer to us, q.v. below.

The three pairs of dynasties discovered by our procedure proved to be close to the three pairs indicated by N. A. Morozov in [544]. However, the dynasties found by us differ, sometimes notably – especially in the third case – from the dynasties indicated in [544] on the grounds of plain selection. The fact that the three pairs indicated in [544] proved not entirely optimum from the point of view of the coefficient $c(a, b)$ is explained by N. A. Morozov being guided only by "visual similarity" of dynastic graphs. Our analysis did prove the existence of "visually similar", though obviously independent, pairs of dynasties. For this very reason, the task was set to develop a formal procedure making it possible to *quantitatively* distinguish between dependent pairs of dynasties and obviously independent ones.

All the remaining pairs of dependent dynasties listed below, as well as additional pairs indicated on the global chronological map (see further), have not been known before. We exposed them with the aid of the empirico-statistical methods of dating as described above.

Example 4 is shown in fig. 6.16.

a = the "early mediaeval" Popes of Rome, allegedly 140-314 A.D.

b = the "early mediaeval" Popes of Rome, allegedly 324-532 A.D. Here $c(a, b) = 8.66 \times 10^{-8}$. This parallelism perfectly conforms to the above-indicated parallelism of the two Roman Empires. See example 1.

Example 5 is shown in fig. 6.17 and fig. 6.18.

a = the "mediaeval" Empire of Charles the Great from Pepin (Pipin) of Heristal to Charles the Fat, allegedly 681-887 A.D.

b = the dynastic jet from the "early-mediaeval" Eastern Roman Empire of the alleged years 324-527 A.D. Here $c(a, b) = 8.25 \times 10^{-9}$.

Example 6 is shown in fig. 6.19 and fig 6.20.

a = the mediaeval Holy Roman empire of allegedly 983-1266 A.D.

b = the dynastic jet of the "ancient" Roman Empire of allegedly 270-553 A.D. Here $c(a, b) = 2.3 \times 10^{-10}$. Dynasty b is obtained from dynasty a by shifting the latter by approximately 720 years downward.

Example 7 is shown in fig. 6.21 and fig. 6.22.

a = the mediaeval Holy Roman Empire of the alleged years 911-1254 A.D.

b = the mediaeval, allegedly German-Roman empire of the Habsburgs 1273-1637 A.D. Here $c(a, b) = 1.2 \times 10^{-12}$. Dynasty b is obtained from dynasty a by shifting the latter by approximately 362 years downward as a rigid whole.

Example 8 is shown in fig. 6.23 and fig. 6.24.

a = the mediaeval Holy Roman Empire of the alleged years 936-1273 A.D.

b = the second "antique" Roman Empire allegedly from 82 B.C. until 217 A.D. Here $c(a, b) = 1.3 \times 10^{-12}$.

Example 9 is shown in fig. 6.25 and fig. 6.26.

a = the "ancient" kings of Judah, allegedly 928-587

VII-IX A.D. - The Carolingians
(Charlemagne's Empire)

III-VI A.D. - A fragment of the Third Roman Empire
(primarily in the East)

50 40 30 20 10 | 10 20 30 40 50

A shift of 360 years

Pepin of Heristal (681-714), see [2] (33)

(37) Constantius II (324-361), see [3]

$$714 - 361 = 353$$

Charles Martell (721-741), see [2] (20)

(16) Theodosius I (379-395), see [3]

$$741 - 395 = 346$$

Pepin the Short (754-768), see [2] (14)

(13) Arcadius (395-408), see [1]

$$768 - 408 = 360$$

Charles the Great (768-814), see [1] (46)

(42) Theodosius II (408-450), see [1]

$$814 - 450 = 364$$

$$772 - 411 = 361$$

Charlemagne (768-771 or 772), see [1], [2] (3 or 4)

(4) Constantine III (407-411)

Louis I the Pious (814-833) (abdication) (19)
see [1], [2] (page 161)

(17) Leo I (457-474), see [1]

$$833 - 474 = 359$$

Lothair the Western (840-855), see [1] (15)

(17) Zeno (474-491), see [1]

$$855 - 491 = 364$$

Charles the Bald (840-875), see [1] (35)

(33) Theodorich (493-526), see [1]

$$875 - 526 = 349$$

Louis (the German) (843-875), see [1] (32)

(27) Anastasius (491-526), see [1]

$$875 - 518 = 357$$

Louis II (the Western) (855-875) (20), see [2] (page 163)

(17) Odoacer (476-493), see [1]

$$875 - 493 = 382$$

Charles the Fat (880-888), see [1] (8)
The end of the Carolingian Empire (West)

(9) Justin I (518-527), see [1].
The end of the official Third Roman Empire (in the West)

$$888 - 527 = 361$$

The average reign shift equals 359.6 years, which concurs with the rigid 360 year shift.

[1] Blair J. Chronological Tables Spanning the Entire Global History, Containing Every Year since the Genesis and until the XIX Century, Published in English by J. Blair, a Member of the Royal Society, London. Volumes 1 and 2. Moscow University Press, Moscow, 1808-1809.
[2] Bemont C., Monod G. The Mediaeval History of Europe. Petrograd, 1915.
[3] Cagnat R. Cours d'épigraphie latine. 4e éd. Paris, 1914.

Fig. 6.17. Reign correlation of the "mediaeval" Carolingian Empire of the alleged years 681-888 A.D. and the "ancient" Third Roman Empire of the alleged years 324-527 A.D.

Fig. 6.18. A superposition of the Carolingian Empire of the alleged years 681-888 A.D. and the Third Roman Empire of the alleged years 324-527 A.D. on the time axis with a rigid shift of about 360 years.

The average reign shift equals 723 years, which is close to 720 years.

Roman Empire X-XIII A.D.   *720 year shift*   Third Roman Empire IV-VI A.D.
(720 = 1053 − 333)

Otto III the Red (Chlorus!) (983-1002), see [1] (19)   1002 − 306 = 695   (13) Constantius I Chlorus (293-306)

Henry II (1002-1024), see [1] (22)   1024 − 305 = 719   (21) Diocletian (284-305), see [4], [1]

Conrad II the Salian (1024-1039), see [1] (15)   1039 − 324 = 715   (16) Licinius (308-324), see [3]

Henry III (1028-1056), see [1], [2] (28)   1056 − 337 = 719   (29) Constantine I (306-337), see [1]

Henry IV(1053-1106) (53)
See [1], [2]. Hildebrand's epoch
(1049-1085, 36 years) falls
into the period of his reign.

Shift from Henry to Basil the Great: 1106 − 378 = 728
Shift from "birth" of Hildebrand to Basil the Great: 1053 − 333 = 720   (45) Basil the Great (?) (333-378)

Henry V (1098-1125), see [1], [2] (27)   1125 − 423 = 702   (28) Honorius (395-423), see [1]

Lothair (1125-1137), see [1], [2] (12)   1137 − 395 = 742   (16) Theodosius I (379-395), see [3]

Conrad III (1138-1152), see [1], [2] (14)   1152 − 408 = 744   (13) Arcadius (395-408), see [1]

Friedrich I Barbarossa (1152-1190) (38)
See [2]   1190 − 450 = 740   (42) Theodosius II (408-450), see [1]

Henry VI (1169-1197), see [2] (28)   1197 − 455 = 742   (28) Valentinian III (423-455), see [1]

Anarchy and Philip Gibellin (1198-1208), see [2] (10)   1208 − 472 = 736   (16) Anarchy and Ricimer (456-472), see [1]

Otto IV (1201-1217), 17 or 16 years as the king of Rome,
according to Gregorovius; 1197-1218, see [2] (21)   1218 − 493 = 725   (17) Anarchy and Odoacer (476-493), see [1]

Friedrich II as Roman king (1220-1250). Final coronation
in 1220, after the death of Otto IV, see [2] (30)   1250 − 526 = 724   (29) Theodorich. 2 versions.
Primary: (497-526), see [4]

Or: Friedrich II (1198-1250) (54)
Co-ruler: Otto IV until 1218,
see [1]   1250 − 526 = 724   (50) Or: Theodorich + Odoacer (co-ruler
(476-526), see [1]

Conrad IV (1237-1254), see [2] (17)   1254 − 541 = 713   (15) The Gothic dynasty (526-541), see [4]

Manfred (1254-1266), see [4] (12)   1266 − 552 = 714   (11) Totila (541-552), see [4]

Conradin, see [4] (1266-1268) (2)   (1 or 2) Teia (552-553), see [4]
1268 − 553 = 715

The end of the Empire of the X-XIII centuries.
The defeat and decline of the Hogenstaufens.   The end of Empire III in Italy.
The defeat and decline of the Goths.

[1] Blair J. Chronological Tables Spanning the Entire Global History, Containing Every Year since the Genesis and until the XIX Century, Published in English by J. Blair, a Member of the Royal Society, London. Volumes 1 and 2. Moscow University Press, Moscow, 1808-1809.
[2] Bemont C., Monod G. The Mediaeval History of Europe. Petrograd, 1915.
[3] Cagnat R. Cours d'épigraphie latine. 4e éd. Paris, 1914.
[4] Gregorovius F. History of the City of Rome in the Middle Ages. St. Petersburg, 1902-1912.

Fig. 6.19. Reign correlation of the mediaeval Holy Roman Empire of the alleged X-XIII century A.D. and the "ancient" Third Roman Empire of the alleged III-VI century A.D.

Fig. 6.20. A superposition of the Holy Roman Empire of the alleged X-XIII century A.D. and the "ancient" Third Roman Empire of the alleged III-VI century A.D. on the time axis with a rigid shift of about 720 years.

A rigid shift of 362 years

Roman-German Empire of the X-XIII century.
911 A.D. – the beginning of the Saxon dynasty

The Habsburg Empire.
1273 A.D. – the first year of the House of Austria.

Conrad I (911-918), see [2] (7)

1298 – 918 = 380

(18) Adolf Nass (1273-1291), see [1] (transposed)

Henry I the Fowler (919-936), see [2] (17)

1291 – 936 = 355

(7) Rudolf Habsburg (1291-1298), see [1]

Otto I the Great (936-973), see [2] (37)

1347 – 973 = 374

(38) Henry VII (1309-1314)
+ Ludwig V (1314-1347), see [1]

Otto II from the death of Otto I in 973 until his own demise in 983 + Otto III (983-1002), see [1] (29)

1378 – 1002 = 376

(31) Charles IV (1347-1378), see [1]

Henry II the Holy (1002-1024), see [1], [2] (22)

1400 – 1024 = 376

(22) Wenceslaw (1378-1400), see [1]

Conrad II from the coronation in Rome (1027) until his death in 1039, see [2] (12)

1410 – 1039 = 371

(10) Robert Palatine (1400-1410), see [1]

Henry III the Black (1028-1056), see [2] (28)

1438 – 1056 = 382

(28) Sigismund (1410-1438), see [1]

Henry IV (1053-1106), see [2] (53)

1493 – 1106 = 387

(53) Friedrich III (1440-1493), see [1]

Henry V (1098-1125) or Henry V from the coronation in Rome (1111) until his death in 1125 + Lothair II (1125-1137), 26 years altogether, see [2] (27)

{ 1519 – 1137 = 382
{ 1519 – 1125 = 394

(26) Maximilian I (1493-1519), see [1]

Wars in Italy with the participation of Germany. 1143-1155, the revolt of Arnold the Brescian

(1138 – 1155)   1494

The beginning of the "Italian wars", German wars in Italy. 1512 – the revolt in Brescia

Friedrich I Barbarossa (1152-1190), see [2] (38)

1156 – 1190 = 366

(37) Charles V (1519-1556), see [1], [3]

(Friedrich the Wise and the war with Barbarossa)

Henry VI (1191-1197). Coronated in Rome in 1191, see [1], [2] (6)

1564 – 1197 = 367

(6) Ferdinand I (1556-1564), see [1]

Philip (1198-1208), see [2] (10)

1576 – 1208 = 368

(12) Maximilian II (1564-1576), see [1], [3]

Friedrich II (1211-1250), see his three coronations in 1196, 1211, 1220, see [1], [2] (39)

1612 – 1250 = 362

(36) Rudolf II (1576-1612), see [1]

1619 – 1256 = 363

Wilhelm (1250-1256), see [1] (6)

(7) Mathias (1612-1619), see [1]

Conrad IV (1237-1254), see [2] (17)

1637 – 1254 = 383

(18) Ferdinand II (1619-1637), see [1]

The end of the X-XIII century empire 1250-1254

o – – – – – o

1618-1619. The end of the Habsburg Empire.

War in Italy 1250-1268

o – – – – – o

1618. The 30 year war begins in Germany.

The beginning of the 17-year anarchy in Germany 1256

o

1618 – 1256 = 362

The average reign end shift equals 373 years.

[1] Blair J. Chronological Tables Spanning the Entire Global History, Containing Every Year since the Genesis and until the XIX Century, Published in English by J. Blair, a Member of the Royal Society, London. Volumes 1 and 2. Moscow University Press, Moscow, 1808-1809.

[2] Bemont C., Monod G. The Mediaeval History of Europe. Petrograd, 1915.

[3] Kohlrausch. The History of Germany. Volumes 1 and 2. Moscow, 1860.

Fig. 6.21. Reign correlation of the mediaeval Holy Roman Empire of the alleged X-XIII century A.D. and the mediaeval Habsburg Empire of the XIII-XVII century with a rigid shift of about 360 years.

Fig. 6.22. A superposition of the Holy Roman Empire of the alleged X-XIII century A.D. and the mediaeval Habsburg Empire of the alleged XIII-XVII century A.D. on the time axis with a rigid shift of about 360 years.

A rigid shift of 1053 years

The Holy Roman Empire
of German Nation in Italy.
X-XIII century A.D.

Otto I the Great + Pompey the Great
Otto II the Wild + Sulla Lucius
Otto III the Red (Chlorus) + Julius Caesar (Chlorus in 3rd Empire)

The Second Roman Empire.
I century B.C. –
III century A.D.

Otto I as German king (936-973) (37)

(37) Octavianus Augustus (23 B.C.-14 A.D.)

Otto II (960-983) (23)

(23) Tiberius (14-37)

Henry II the Saint +
Conrad the Salian (1002-1039) (37)

(37) Octavianus Augustus (23 B.C.-14 A.D.)

1039 − 14 = 1025
1039 − 19 = 1020

Conrad II the Salian (1024-1039) (15)
Gregory Hildebrand (1053-1073-1085) pope in Rome

(13) Germanicus (6-19)
Jesus Christ (0-33)

Henry III the Black (1028-1056) (28)

1056 − 41 = 1015

(27) Tiberius + Caligula (14-41)

Henry IV (1053-1106) (53)

1106 − 68 = 1038

(54) Tiberius + Caligula + Claudius
+ Nero (14-68) (?)

Henry V the Black (1098-1125) (27),
German king (?)

1125 − 68 = 1057

(27) Claudius + Nero (41-68) (?)

Henry V the Black (1111-1125), Roman emperor (14)

1125 − 68 = 1057

(14) Nero (54-68)

Lothair (1125-1137) (12)
Eruption of Vesuvius (1138-1139)

1137 − 81 = 1056

(12) Two Tituses Vespasianuses (69-81)
Eruption of Vesuvius (79 A.D.) burying Pompeii

Conrad III (1138-1152) (14)

1152 − 96 = 1056

(15) Domitian (81-96)

Friedrich I Barbarossa (1152-1190) (38)

1190 − 138 = 1052

(40) Trajan + Hadrian (98-138)

Henry VI (1169-1197) (28)

1197 − 161 = 1036

(23) Antoninus Pius (138-161)

1208 − 169 = 1039

Philip Ghibelline (1198-1208) (10)

(8) Lucius Verus (161-169)

Otto IV Gwelf (1198-1218) (20)

1218 − 180 = 1038

(19) Marcus Aurelius (161-180)

Friedrich II (1211-1250) (39)

1250 − 217 = 1033

(37) Commodus + Caracalla (180-217)

1254 − 211 = 1043

Conrad IV (1237-1254) (17)

(18) Septimus Severus (193-211)

1273 − 235 = 1038

Interregnum (1256-1273) (17)

(18) Anarchy: Julia Maesa and her favorites (217-235)

End of X-XIII century A.D. Empire.
War in Italy in mid-XIII century.
(See: Bemon C., Monod G.
The Mediaeval History of Europe.
Petrograd, 1915.)

*The average reign end
shift equals 1039 years.
Close to the rigid shift
of 1053 years.*

End of the Second Roman Empire.
War in Italy in mid-III century A.D.

This is one of the main parallels.

Fig. 6.23. Reign correlation of the mediaeval Holy Roman Empire of the alleged X-XIII century A.D. and the "ancient" Second Roman Empire Empire of the alleged I century B.C. – III century A.D.

Fig. 6.24. A superposition of the mediaeval Holy Roman Empire of the alleged X-XIII century A.D. and the "ancient" Second Roman Empire of the alleged I century B.C. – III century A.D. on the time axis with a rigid shift of about 1053 years.
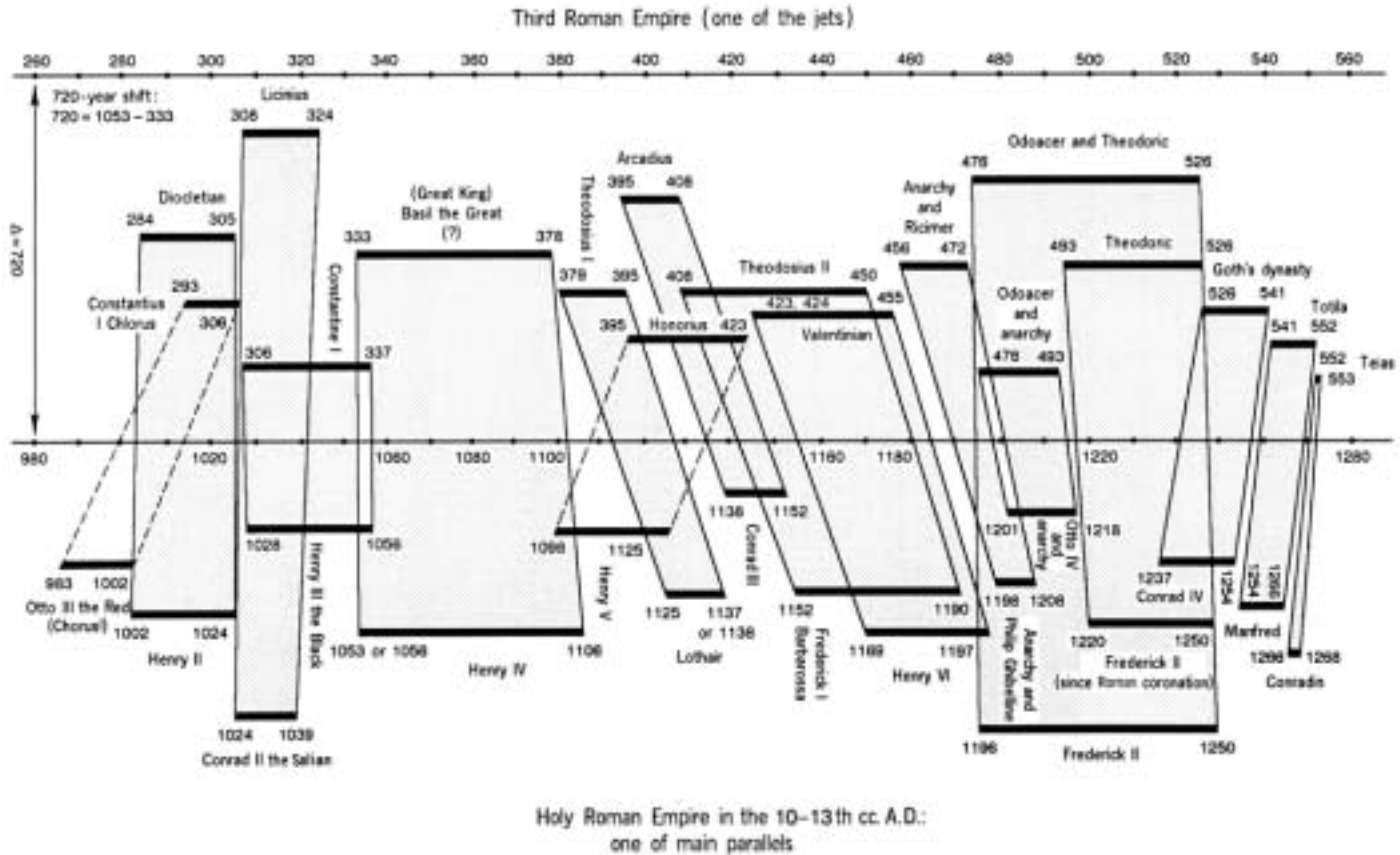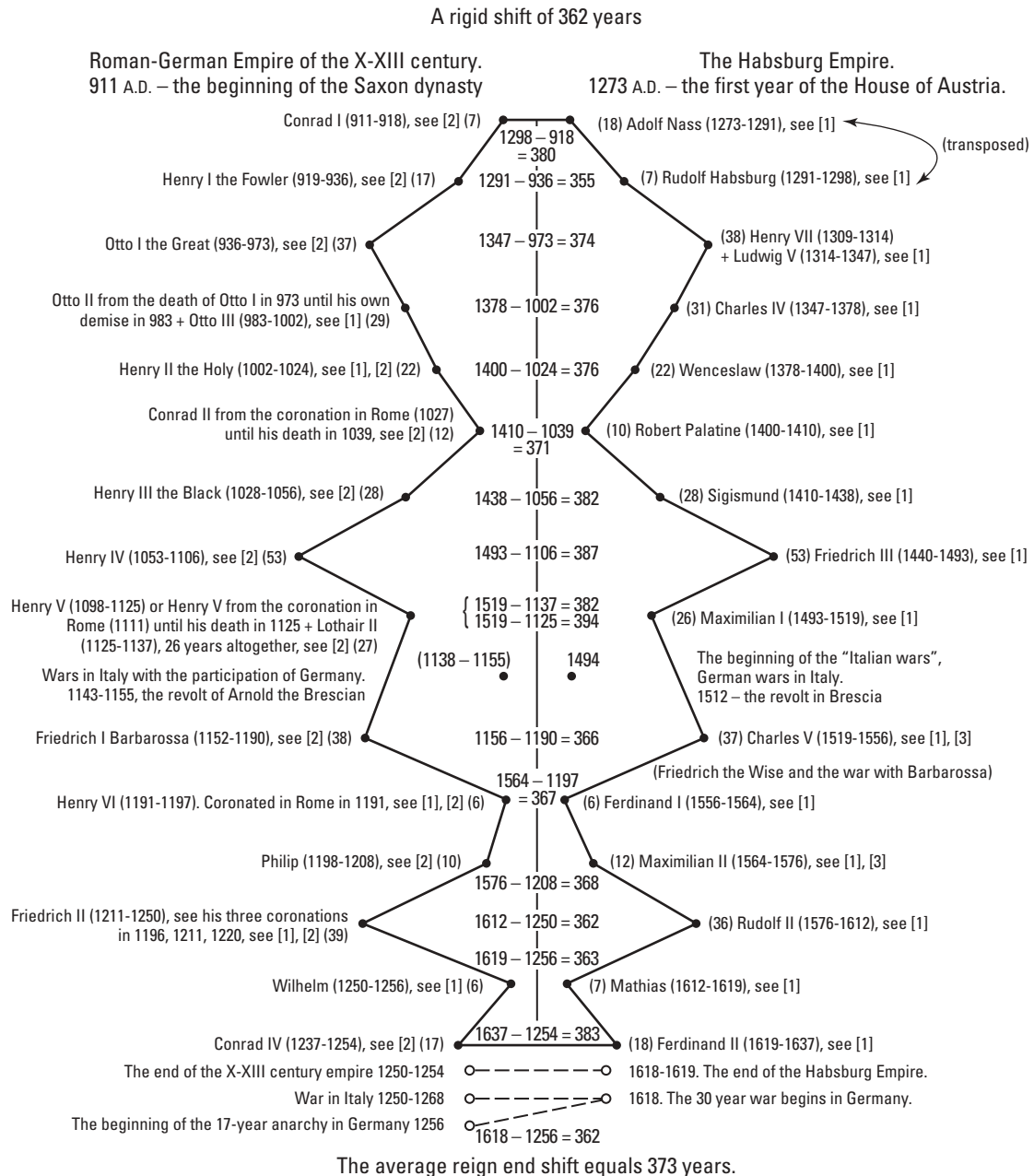
Holy Roman Empire in the
10–13th cc. A.D. (911 – 1307).
In 911, start of the Saxon Dynasty,
the whole jet lasting for 396 years

(Germanic reigns)

Kingdom of Judah.
Lasts 395 years (from the Bible)

Henry I (919 – 936) [2]   17

Lothair (947 – 950) [1]   3

Otto I the Great (936 – 973) [1]   37

Otto II (960 – 983) [1], [3]   23

Otto III the Red from the accession to the
throne in 983 A.D. till his Roman coronation   13
in 996 A.D. (983 – 996)

Otto III from the Roman coronation in 996 A.D.   6
till 1002 A.D. (996 – 1002) [1], [3]

Henry II (1002 – 1024) and Conrad II   37
(1024 – 1039) (1002 – 1039) [1]

Henry III (1028 – 1056) [1], [3]   28

Henry IV (1053 – 1106)   53
[1], [3]

Lothair (1125 – 1138) [1]   13

Conrad III (1138 – 1152) [1]   14

Henry VI (1169 – 1197) [3]   28

Frederick II (1196 – 1250)   54
[1], [3]

Conrad IV (1250 – 1254) [2]   4

Charles Anjou (1254 – 1285) [2], [5]   31

Confusion (1285 – 1307) ?   22

Adolf of Nassau (1291 – 1298) [1]   7

Albert I (1298 – 1308) [1]   10

Avignon Captivity (1305 – 1376)
70

According to [4], the kingdom of Judah
started in 928 B.C. Shift approximately
equals 928 + 910 = 1838 years,
because the start of the Judaean
stream corresponds to 910 A.D.,
which is close to the 1778 (1800)-
year shift on the GCD

One of the main parallels

17   [4], [B] (0 – 17) Rehoboam

3   [4], [B] (17 – 20) Abijah

35   [4], (20 – 55) Asa
(41)   [4], [B] (20 – 61)

24   [4] (55 – 79) Jehoshaphat
(25)   [B] (61 – 86)

9   Joram (8) [B], (6) [4], (86 – 94) and
Ahaziah (1) [B] and [4]; thus, (9), (7).

6 [B], [4] (95 – 101) Athaliah

38   [4] (92 – 130) Joash
(40)   [B], [4]

29   [4], [B] (130 – 159) Amaziah
159 ([B]) to 211 ([4])

52   [B] Uzziah
(43)   [4]   211 = 159 + 52 [B]

16   [B], (7) [4] Jotham (211 – 227) [4]

16   [B], (20) [4] Ahaz (227 – 243) [4]

29   [B] (256 – 285) Hezekiah

55   [B] Manasseh
(45) [4] (285 – 340) [B]

2   [B], [4] (340 – 342) Amon

31   [B], [4] (342 – 373) [B] Josiah

Jehoahaz (<1), Jehoiakim (11),
22 or 24   Jehoiachin (<1) and Zedekiah (11)
(373 – 397) [B]

11   [B], [4] (374 – 385) [B] Jehoiakim

11   [B], [4] Zedekiah (386 – 397) [B]

Babylonian Captivity [B] (397 – 467)
70

[1] Blair J. Chronological Tables. Volumes 1 and 2. Moscow, 1808-1809.
[2] Bemont C., Monod G. The Mediaeval History of Europe. Petrograd, 1915.
[3] Kohlrausch. History of Germany. Volume 2. Moscow, 1860.
[4] Bickerman E. Chronology of the Ancient World. Moscow, 1975.
[4] Gregorovius F. The History of the City of Athens in the Middle Ages. St. Petersburg, 1900.
[B] The Bible.

Fig. 6.25. Reign correlation of the "ancient" Judaic kingdom of the alleged years 928-587 B.C. and the mediaeval Holy Roman
Empire of the alleged X-XIII century A.D.

Holy Roman Empire in the 10–13th cc. A.D.

Fig. 6.26. A superposition of the "ancient" Judaic kingdom of the alleged years 928-587 B.C. and the mediaeval Holy Roman Empire of the alleged X-XIII century A.D. on the time axis with a rigid shift of about 1830 years.

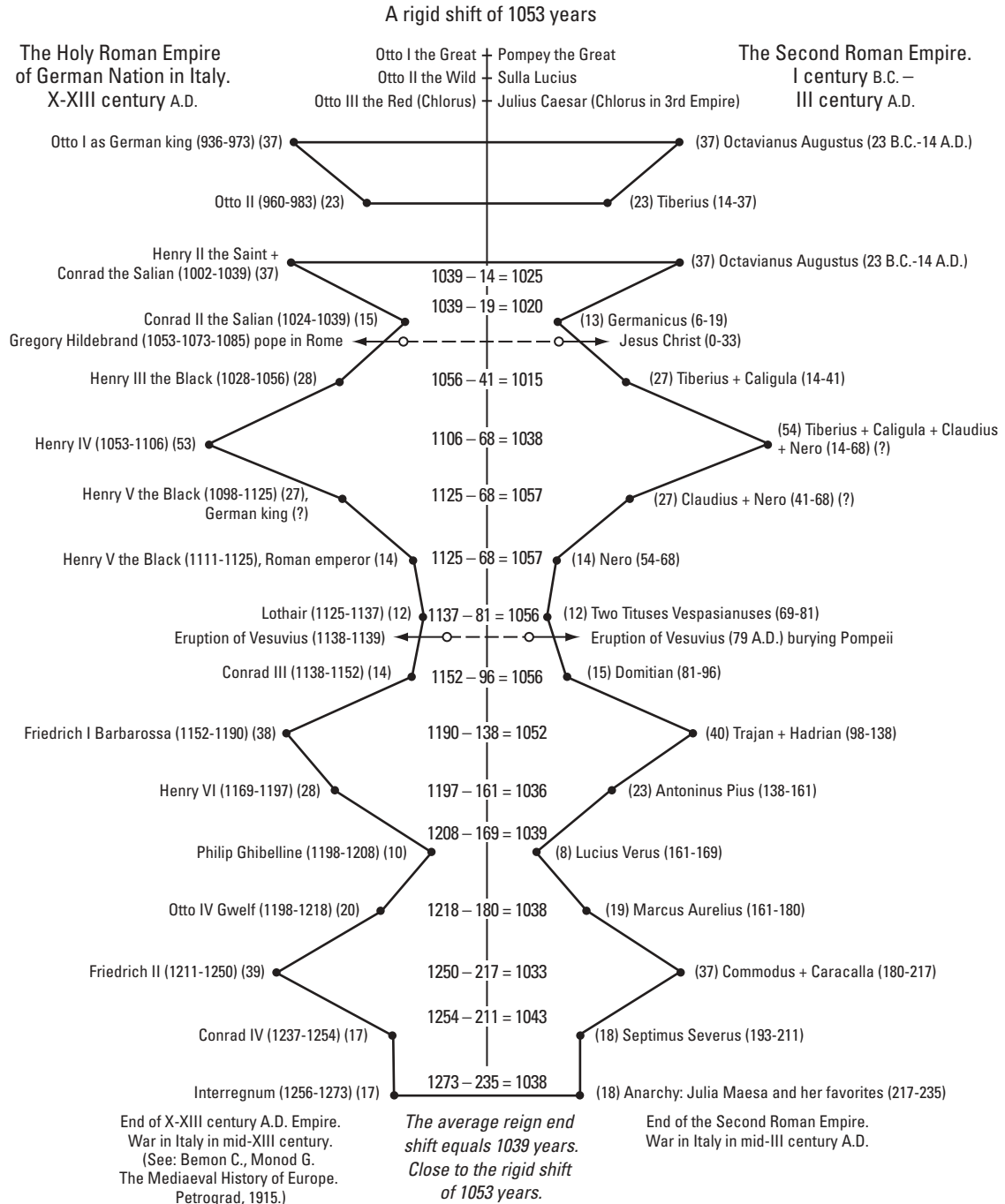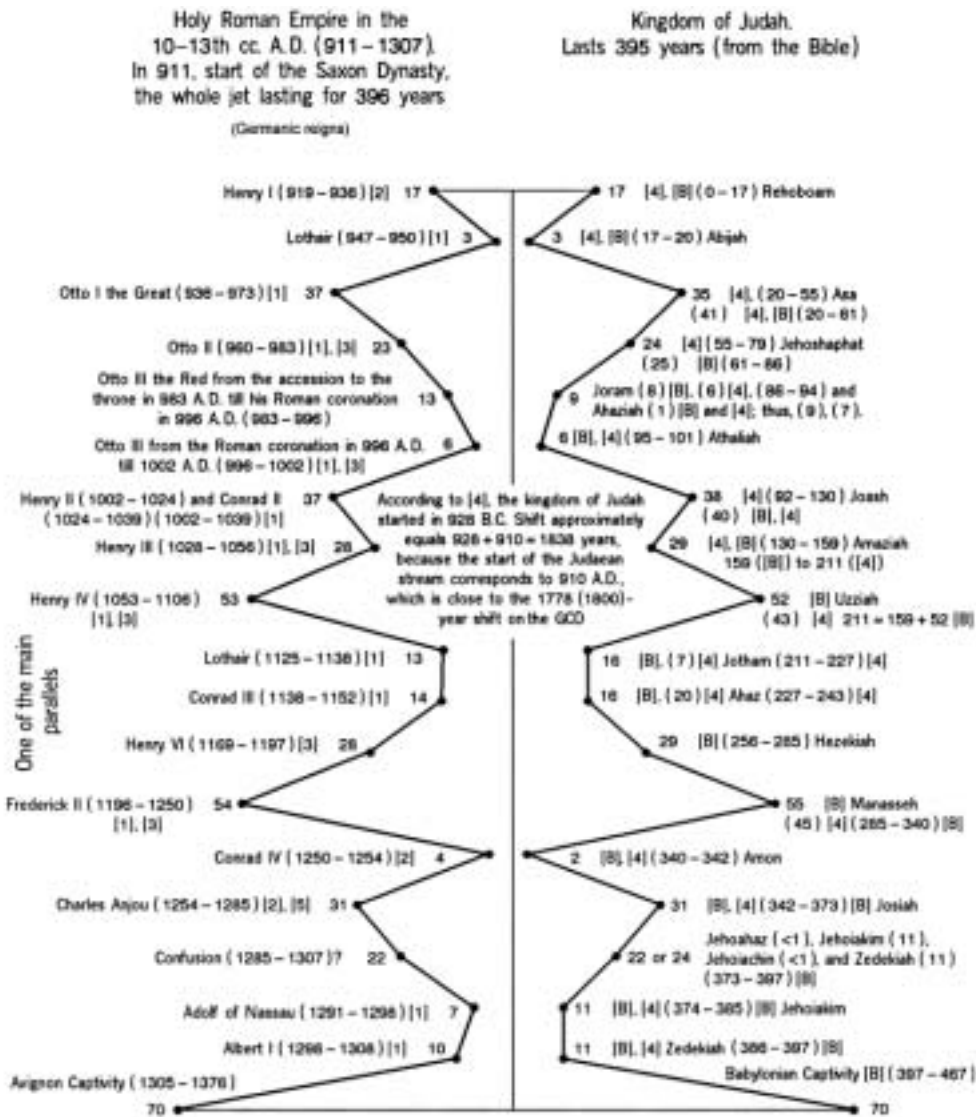A rigid shift of approximately 1840 years

Roman coronations of the emperors
of the Holy Roman Empire
in the X-XIII century A.D.

Kingdom of Israel started in 922 B.C.
(according to the Bible).
For simplicity, year count starts from zero.

Hugh of Arles (926-947) (21), king of Italy [1]

Jeroboam (0-22) (22) [B]

Lothair (947-950) (3), king of Italy [1]

Nadab (22-24) (2) [B]

Otto I the Great
(936, German coronation [1] - 960, start of Otto II [3]) (24), or
(936, German coronation [1] - 962, Roman coronation [3]) (26)

Baasha (24-48) (24) [B]

962, Roman coronation [3] - 973, German coronation (11)
(Death of Otto I in 973 and German coronation of Otto II)

Omri (Omrai) (51-63) (12) [B]

(973, German coronation [3] - 996,
Roman coronation [3]) (23)

Ahab (63-85) (22) [B]

(996, Roman coronation [3] - 1014, Roman coronation [3]) (18)

Ahaziah (2) + Jehoroam Israelian (12) (85-99) (14) [B]
1st version of Jehoroam (see [B])

(1014, Roman coronation [3] - 1027, Roman coronation [3]) (13)

Jehoroam Israelian (94-106) (12) [B]
2nd version of Jehoroam (see [B])

(1014, Roman coronation [3] - 1046,
Roman coronation [3]) (32)

(99-127-129), see [B]
Jehu (28) + gap (2) (30)
(2 year lacuna according to [B])

(1046, Roman coronation [3] - 1084,
Roman coronation [3]) (38)

(127-144-160), see [B]
Jehoahaz (17) + Joash (16) (33)

(1084, Roman coronation [3] - 1125)
1125 - death of Henry V,
end of Frankish dynasty,
beginning of Saxon dynasty (41)

(160-201), see [B]
Jeroboam II (41)

(1125 - 1134, Roman coronation [3]) (9)

(203-213), see [B]
Menahem (10)

(1134, Roman coronation [3]- 1155,
Roman coronation [3]) (21)

(215-235), see [B]
Pekah (20)

Pope Alexander III (1159, his election - 1167,
Friedrich I attack) (?) (8)
German wars in Italy 1143-1155. See Assyrian wars (right).
Capture of Rome by Friedrich I in 1154.

(235-243), see [B], Hoshea (8)
Attack of Shalmaneser.

According to [2], the kingdom of Israel started in 922 B.C.
Since year zero in the table was 920 B.C., the shift is
c. 920 + 922 = 1842 years, which is close to the shift of
1778 (1800) years on the Global Chronological Map.

This is one of the main parallels.

[1] Blair J. Chronological Tables. Moscow, 1808-1809.
[2] Bickerman E. Chronology of the Ancient World. Thames & Hudson, 1968.
[3] Bemont C., Monod G. The Mediaeval History of Europe. Petrograd, 1915.
[B] The Bible.

Fig. 6.27. Reign correlation of the "ancient" Israelite kingdom of the alleged years 922-724 B.C. and the mediaeval Holy Roman Empire of the alleged X-XIII century A.D.
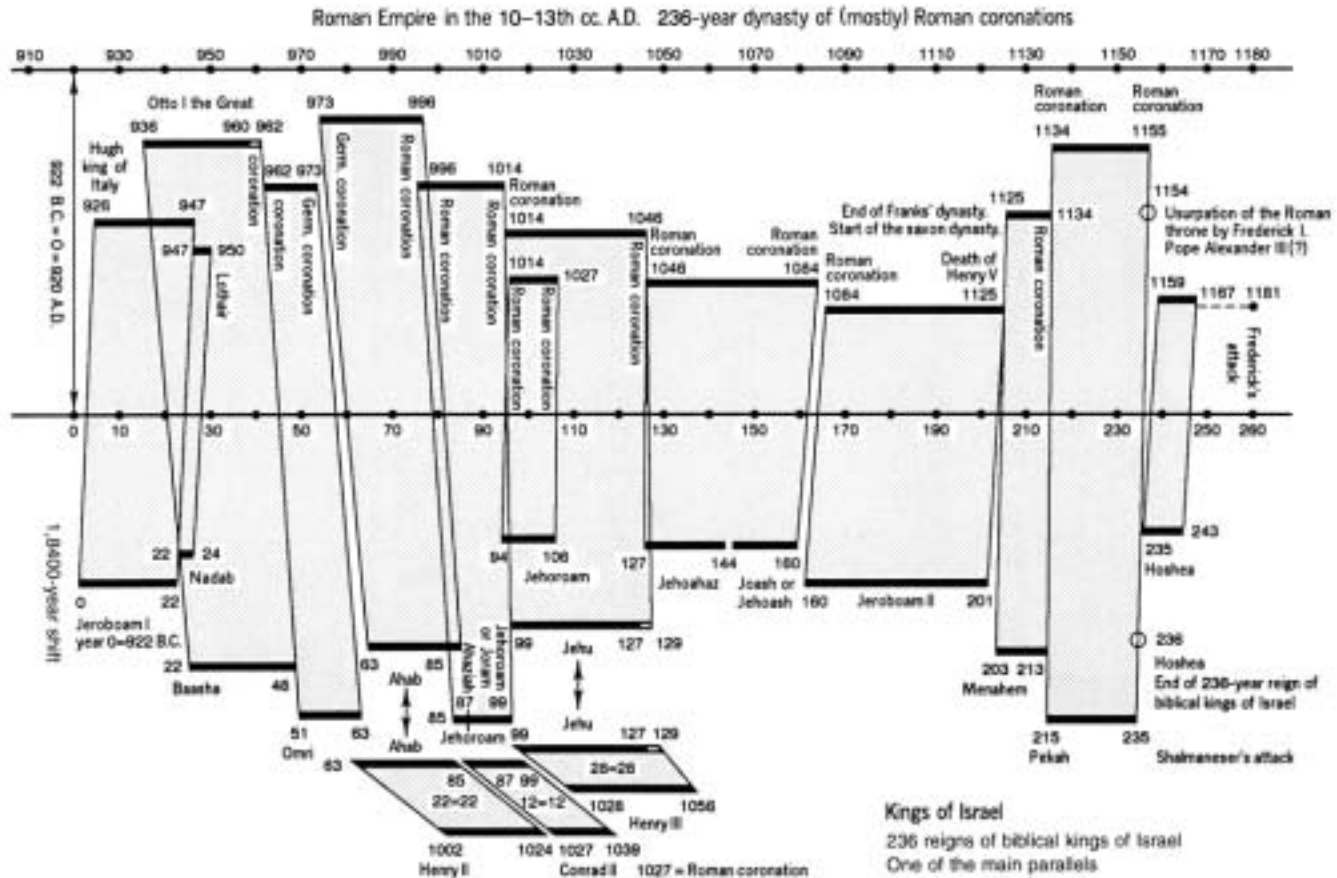
Fig. 6.28. A superposition of the "ancient" Israelite kingdom of the alleged years 922-724 B.C. and the mediaeval Holy Roman Empire of the alleged X-XIII century A.D. on the time axis with a rigid shift of about 1840 years.
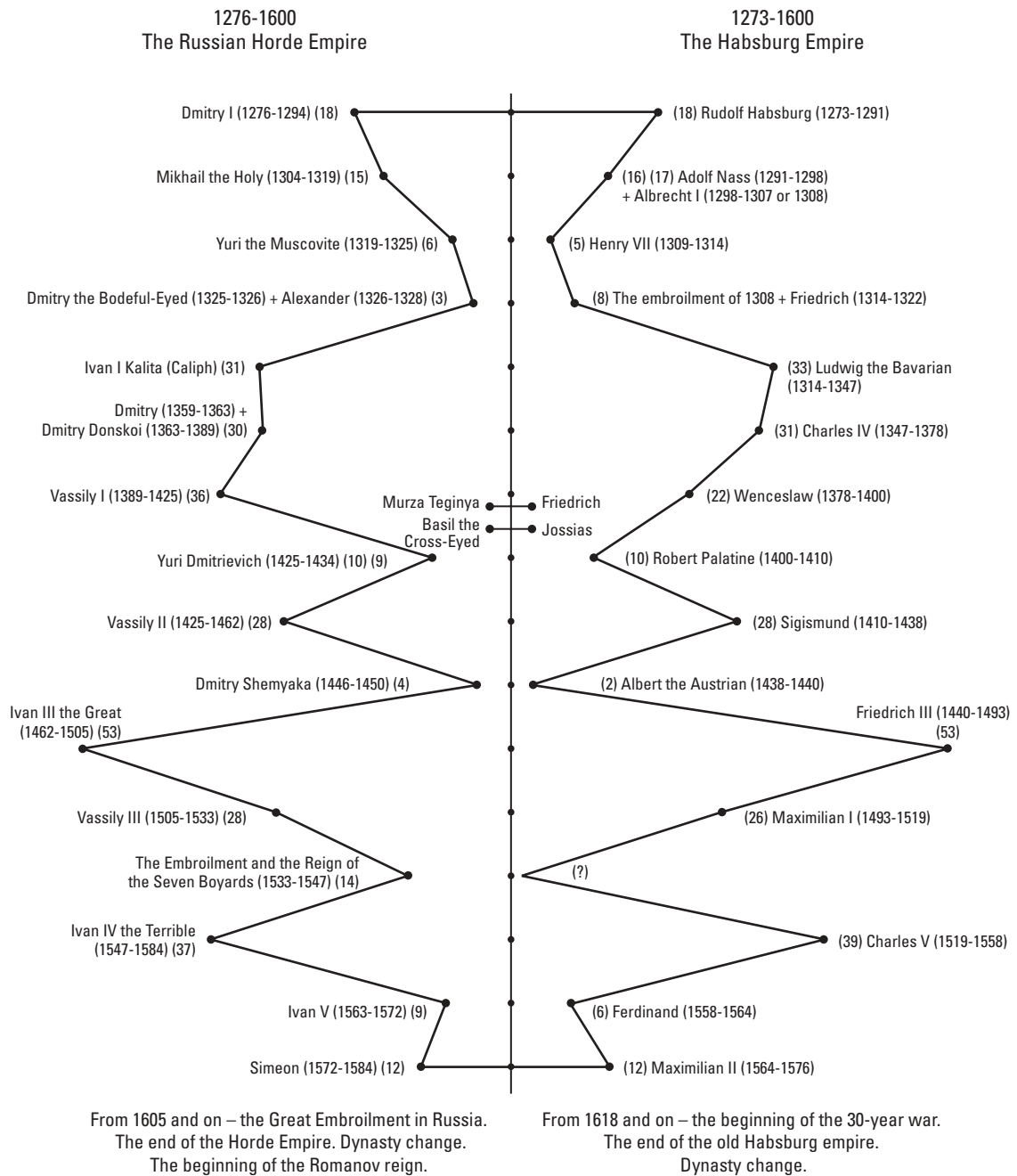
1276-1600
The Russian Horde Empire

1273-1600
The Habsburg Empire

Dmitry I (1276-1294) (18)

(18) Rudolf Habsburg (1273-1291)

Mikhail the Holy (1304-1319) (15)

(16) (17) Adolf Nass (1291-1298)
+ Albrecht I (1298-1307 or 1308)

Yuri the Muscovite (1319-1325) (6)

(5) Henry VII (1309-1314)

Dmitry the Bodeful-Eyed (1325-1326) + Alexander (1326-1328) (3)

(8) The embroilment of 1308 + Friedrich (1314-1322)

Ivan I Kalita (Caliph) (31)

(33) Ludwig the Bavarian
(1314-1347)

Dmitry (1359-1363) +
Dmitry Donskoi (1363-1389) (30)

(31) Charles IV (1347-1378)

Vassily I (1389-1425) (36)

Murza Teginya   Friedrich
Basil the   Jossias
Cross-Eyed

(22) Wenceslaw (1378-1400)

Yuri Dmitrievich (1425-1434) (10) (9)

(10) Robert Palatine (1400-1410)

Vassily II (1425-1462) (28)

(28) Sigismund (1410-1438)

Dmitry Shemyaka (1446-1450) (4)

(2) Albert the Austrian (1438-1440)

Ivan III the Great
(1462-1505) (53)

Friedrich III (1440-1493)
(53)

Vassily III (1505-1533) (28)

(26) Maximilian I (1493-1519)

The Embroilment and the Reign of
the Seven Boyards (1533-1547) (14)

(?)

Ivan IV the Terrible
(1547-1584) (37)

(39) Charles V (1519-1558)

Ivan V (1563-1572) (9)

(6) Ferdinand (1558-1564)

Simeon (1572-1584) (12)

(12) Maximilian II (1564-1576)

From 1605 and on – the Great Embroilment in Russia.
The end of the Horde Empire. Dynasty change.
The beginning of the Romanov reign.

From 1618 and on – the beginning of the 30-year war.
The end of the old Habsburg empire.
Dynasty change.

Fig. 6.29. Reign correlation of the Russian Czar-Khans of 1276-1600 A.D. and the rulers of the Habsburg Empire of 1273-1600 A.D.

Fig. 6.30. A superposition of the Russian Czar-Khans of 1276-1600 A.D. and the rulers of the Habsburg Empire of 1273-1600 A.D. on the time axis. There is no chronological shift here.

Fig. 6.31. A triple superposition of the early mediaeval Armenian Catholicoses, the mediaeval Holy Roman Empire of the alleged X-XIII century, and the "ancient" Biblical Judean kings.
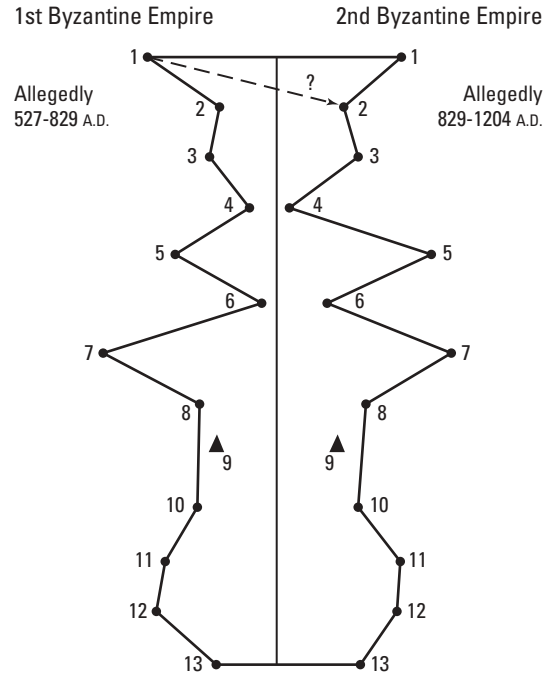
Fig. 6.32. Reign correlation of the First "early mediaeval" Byzantine Empire and the Second "mediaeval" Byzantine Empire (a rough scheme). The shift comprises about 340 years.

Fig. 6.33. Reign correlation of the Second "mediaeval" Byzantine Empire and the Third mediaeval Byzantine empire (a rough scheme). The shift comprises about 330 years.

Fig. 6.34. A triple superposition of the First, the Second and the Third Byzantine Empire on the time axis with rigid shifts of 340 and 330 years (rough scheme).

B.C. described in the Bible, 1-2 Samuel + 1-2 Kings and Chronicles. See also pair number 3 in fig. 6.13.

b = the dynastic jet of the mediaeval Holy Roman Empire of allegedly 911-1307 A.D. Here $c(a, b) = 10^{-12}$. Every Roman-German Emperor of 911-1307 A.D. is represented with the period of his German reign, i.e., from the moment of coronation by the German crown.

EXAMPLE 10 is shown in the fig. 6.27, fig. 6.28.

a = the "ancient" kings of Israel of allegedly 922-724 B.C. described in the Bible, 1-2 Samuel + 1-2 Kings and Chronicles, fig. 6.13.

b = the dynasty consisting of mediaeval Roman coronations of the alleged German emperors in Italy in allegedly 920-1170 A.D. Here $c(a, b) = 10^{-8}$. Here we are referring to the "dynasty" composed of intervals between adjacent Roman coronations of the emperors of the following, allegedly German, dynasties: Saxon, Salian or Franconian, the Schwabian House of Hohenstaufens.

The two last pairs signify an identification of an allegedly "very ancient" Biblical history from the Old Testament with the mediaeval history of Europe of the X–XIV century A.D., and partially, with the Eastern European history of the XIV-XVI century. This parallelism that we discovered differs from the identification proposed by N. A. Morozov in [544] by approximately *one thousand years*, and disagrees with the Scaligerian chronology by *two thousand years*.

Thus, the periods of German reign are superposed over the dynasty of Judah described in the Bible. The periods, mainly contained between adjacent Roman coronations of the same rulers of 920-1170 A.D., are identified with the dynasty of Israel as described in the Bible.

Running a few steps forward, may the reader be warned about a possible misunderstanding. The rulers of the Holy Roman Empire of the German nation of the X-XIII century, and the Habsburgs of the epoch of the XIV-XVI century, should not be thought to

have had their major residence in Germany or Italy. The centre (and the capital) of their empire must have been elsewhere – see Chron5 and Chron6. Let us note that the name itself, *Habsburg* or *Hapsburg*, might have initially consisted of two words: *Hab+Burg*, since *Burg* means "city". The Latin word *HAB* (or *HAP*) could appear as a result of reading the word *HAB*, i.e. *NEW*, in Latin. Latin H and Slavonic H (N) are written in a similar way, likewise Latin B and Slavonic B (V). Therefore, the name *Habsburgs* might have initially meant *New City* (*Новый Город, Novy Gorod*) or *New Citizens (Нов-Городцы, Nov-Gorodtsy)*. We will hereinafter keep the reader reminded about this possible origin of the name of the Habsburgs.

Let us briefly list other examples of duplicate dynasties. See details in [904], [908] and [909].

Example 11 is shown in fig. 6.29 and fig. 6.30.

Identification of Russian czar-khans of 1276-1600 A.D. with the Habsburg empire of 1273-1600 A.D. on the time axis. No chronological shift here. G. V. Nosovskiy and yours truly discovered this parallelism together; it is described in more detail in Chron7.

Example 12 is shown in fig. 6.31.

Triple identification of the mediaeval Armenian Catholicos "dynasty" with the mediaeval Holy Roman-German Empire of the alleged X-XIII century and with the "ancient" kings of Judah described in the Bible. This parallelism is described in more detail in Appendix 6.5 to Chron1.

Example 13 is shown in fig. 6.32.

The mediaeval First Byzantine Empire of allegedly 527-829 A.D. and the mediaeval Second Byzantine Empire of allegedly 829-1204 A.D. See details in [904], [908]. This parallelism is described in more detail later.

Example 14 is shown in fig. 6.33, fig. 6.34, fig. 6.35 and fig. 6.36.

The mediaeval Second Byzantine Empire of allegedly 867-1143 A.D. and the mediaeval Third Byzantine Empire of 1204-1453 A.D. Triple identification of all of these three empires is shown in fig. 6.34, in a brief diagram; a detailed diagram with indication of names is presented in fig. 6.35 and fig. 6.36.

Example 15 is shown in fig. 6.37, fig. 6.38 and fig. 6.39.

The 410 year shift in the mediaeval Russian history was first discovered by empirico-statistical methods described above, in Chron1, ch. 5:2.16. Russian history of 945-1174 A.D. turns out to be largely a phantom reflection, or a duplicate of a later epoch of 1363-1598 A.D. G. V. Nosovskiy and yours truly discovered this important dynastic parallelism together. This identification is discussed in Chron4 in more detail.

Example 16 is shown in fig. 6.40 and fig. 6.41.

Identification of the "ancient" Greek history and the mediaeval Greek history with a 1810 year shift. See details in the following chapters. An enlarged fragment of this parallelism is shown in fig. 6.41. This brightly eventful parallelism identifies the fragment of the history of mediaeval Greece of 1250-1460 A.D. with the fragment of the history of the "ancient" Greece of allegedly 510-300 B.C.

Example 17 is shown in fig. 6.42, fig. 6.43, fig. 6.44, fig. 6.45, fig. 6.46, and also in fig. 6.47 and 6.48.

Identification of the mediaeval history of England of 640-1330 A.D. with the mediaeval history of Byzantium of 380-1453 A.D. with a rigid shift of 210-270 years forwards and of 100-120 years backwards. In this case, the duplicates are three Byzantine dynasties: Byzantium-1, Byzantium-2 and Byzantium-3, fig. 6.42. See Chron4 for details. The list of mutually identified English and Byzantine rulers is shown in fig. 6.43. For the chronological identification of these rulers with each other, see fig. 6.44, fig. 6.45, fig. 6.46, fig. 6.47 and 6.48.

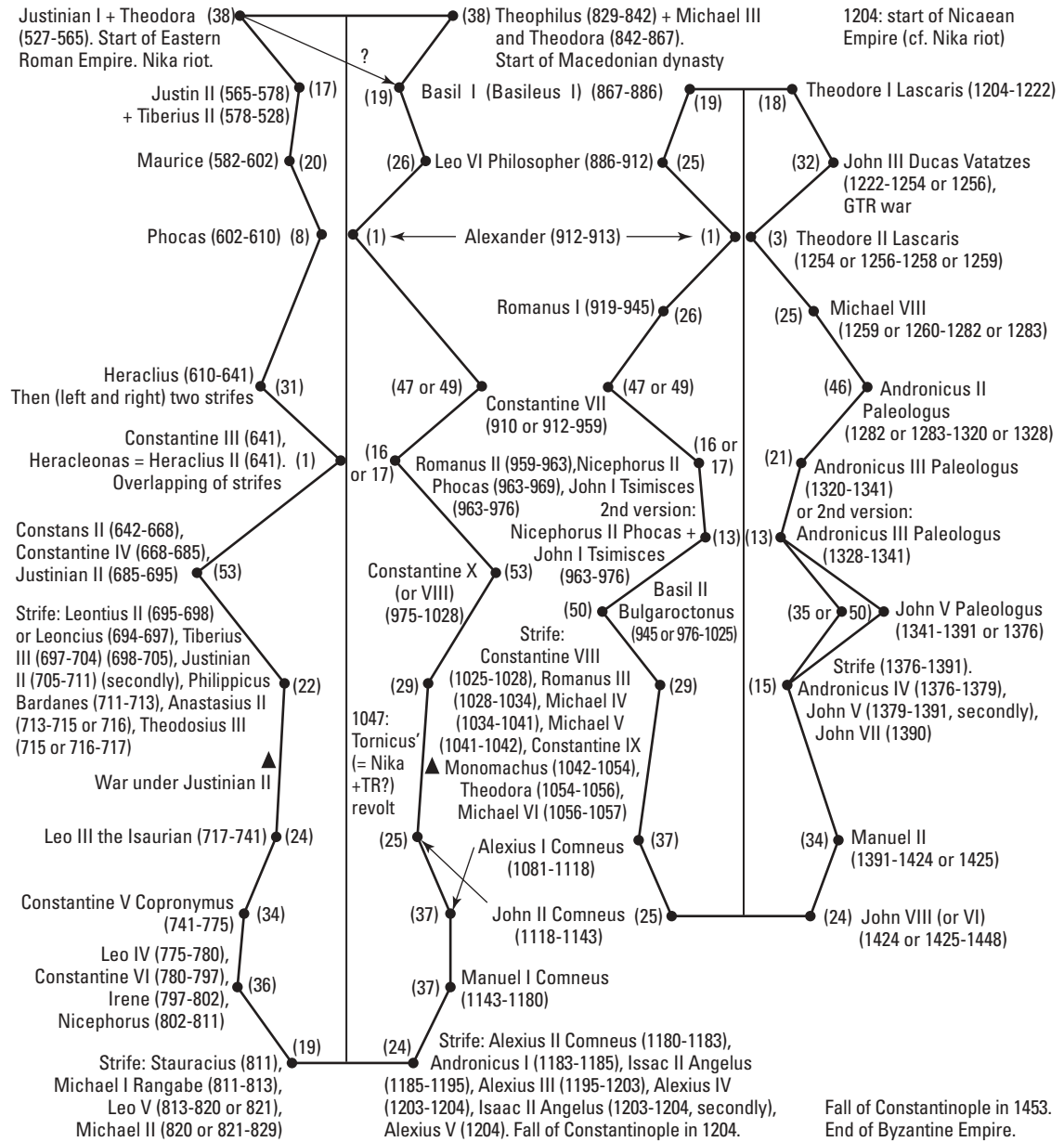**Example 18** is shown in fig. 6.49 and fig. 6.50.

Two more dynastic parallelisms between fragments of the "ancient" Greek history and that of mediaeval Greece and Byzantium.

Example 19 is shown in fig. 6.51 and fig. 6.52.

In the early mediaeval Roman Empire of allegedly 300-552 A.D. there is a dynastic jet parallel to "the Regal Rome" of Titus Livy, an "ancient" regal dynasty of seven kings. Here $c(a, b) = 10^{-4}$. This is the smallest possible value for a dynasty of seven kings.
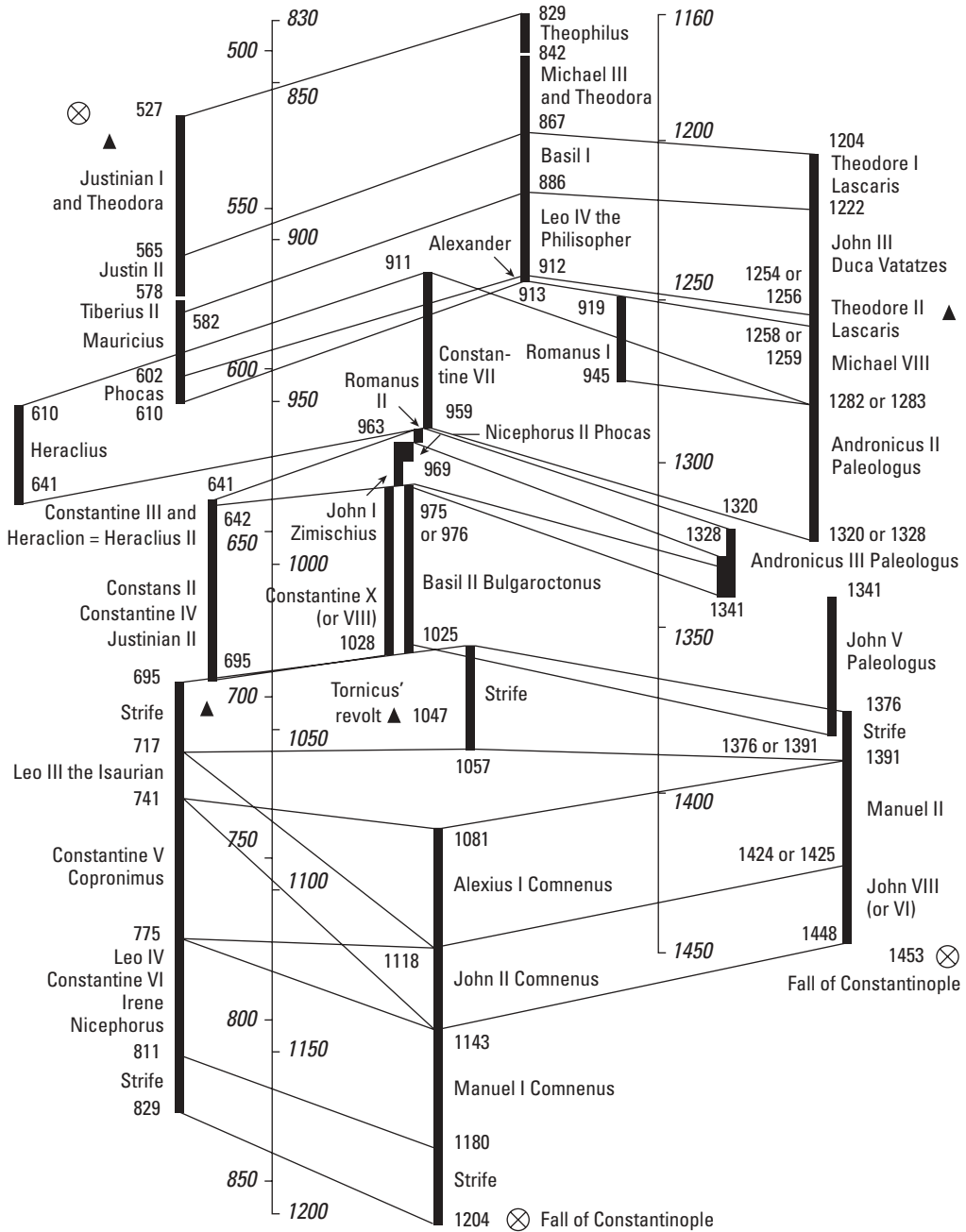
Example 20 is shown in fig. 6.52a.

Justinian I + Theodora (38)
(527-565). Start of Eastern
Roman Empire. Nika riot.   ?

(38) Theophilus (829-842) + Michael III
and Theodora (842-867).
Start of Macedonian dynasty

1204: start of Nicaean
Empire (cf. Nika riot)

Justin II (565-578) (17)
+ Tiberius II (578-528)   (19)   Basil I (Basileus I) (867-886)   (19)   (18)   Theodore I Lascaris (1204-1222)

Maurice (582-602) (20)   (26) Leo VI Philosopher (886-912) (25)   (32)   John III Ducas Vatatzes
(1222-1254 or 1256),
GTR war

Phocas (602-610) (8)   (1) ←—   Alexander (912-913)   —→ (1)   (3) Theodore II Lascaris
(1254 or 1256-1258 or 1259)

Romanus I (919-945) (26)   (25)   Michael VIII
(1259 or 1260-1282 or 1283)

Heraclius (610-641) (31)   (47 or 49)   (47 or 49)   (46) Andronicus II
Then (left and right) two strifes   Constantine VII   Paleologus
(910 or 912-959)   (1282 or 1283-1320 or 1328)

Constantine III (641),   (16   Romanus II (959-963),Nicephorus II   (16 or   (21) Andronicus III Paleologus
Heracleonas = Heraclius II (641). (1) or 17) Phocas (963-969), John I Tsimisces   17)   (1320-1341)
Overlapping of strifes   (963-976)   or 2nd version:
2nd version: Andronicus III Paleologus
Constans II (642-668),   Nicephorus II Phocas + (13)(13)   (1328-1341)
Constantine IV (668-685),   Constantine X (53) John I Tsimisces
Justinian II (685-695) (53)   (or VIII)   (963-976)   Basil II
(975-1028)   (50) Bulgaroctonus   (35 or (50) John V Paleologus
Strife: Leontius II (695-698)   Strife: (945 or 976-1025)   (1341-1391 or 1376)
or Leoncius (694-697), Tiberius   Constantine VIII
III (697-704) (698-705), Justinian   (1025-1028), Romanus III   (29) (15) Strife (1376-1391).
II (705-711) (secondly), Philippicus (22)   (29) (1028-1034), Michael IV   Andronicus IV (1376-1379),
Bardanes (711-713), Anastasius II   (1034-1041), Michael V   John V (1379-1391, secondly),
(713-715 or 716), Theodosius III   1047:   (1041-1042), Constantine IX   John VII (1390)
(715 or 716-717)   Tornicus' ▲ Monomachus (1042-1054),
▲   (= Nika   Theodora (1054-1056),
War under Justinian II   +TR?)   Michael VI (1056-1057)
revolt
Leo III the Isaurian (717-741) (24)   (25)   (37)   (34) Manuel II
Alexius I Comneus   (1391-1424 or 1425)
(1081-1118)

Constantine V Copronymus   (37) John II Comneus (25)   (24) John VIII (or VI)
(741-775) (34)   (1118-1143)   (1424 or 1425-1448)

Leo IV (775-780),
Constantine VI (780-797), (36)   (37) Manuel I Comneus
Irene (797-802),   (1143-1180)
Nicephorus (802-811)
(19)   (24) Strife: Alexius II Comneus (1180-1183),
Strife: Stauracius (811),   Andronicus I (1183-1185), Issac II Angelus
Michael I Rangabe (811-813),   (1185-1195), Alexius III (1195-1203), Alexius IV   Fall of Constantinople in 1453.
Leo V (813-820 or 821),   (1203-1204), Isaac II Angelus (1203-1204, secondly), End of Byzantine Empire.
Michael II (820 or 821-829)   Alexius V (1204). Fall of Constantinople in 1204.

On the left: a superposition of the First Bizantine Empire (527-829 A.D.) upon the Second Bizantine Empire (829-1204 A.D.)
by durations of reign with a rigid 340 year shift. *On the right:* a superposition of the 867-1143 A.D. dynasty jet from the
Second Byzantine Empire upon the Third Byzantine Empire (1204-1453 A.D.) by durations of reign with a rigid 330 year
shift. Datings of reign are taken from [76], [195].

Fig. 6.35. Triple reign correlation of the First, the Second and the Third Byzantine Empire with shifts of 340 and 330 years.
Detailed scheme giving names.

A triple superimposition of the 1st, the 2nd and the 3rd Byzantine empires with rigid shifts of 340 and 330 years. Black triangles mark the duplicates of the GTR war.

Fig. 6.36. A triple superposition of the First, the Second and the Third Byzantine Empire on the time axis with rigid shifts of 340 and 330 years. Detailed scheme giving names.

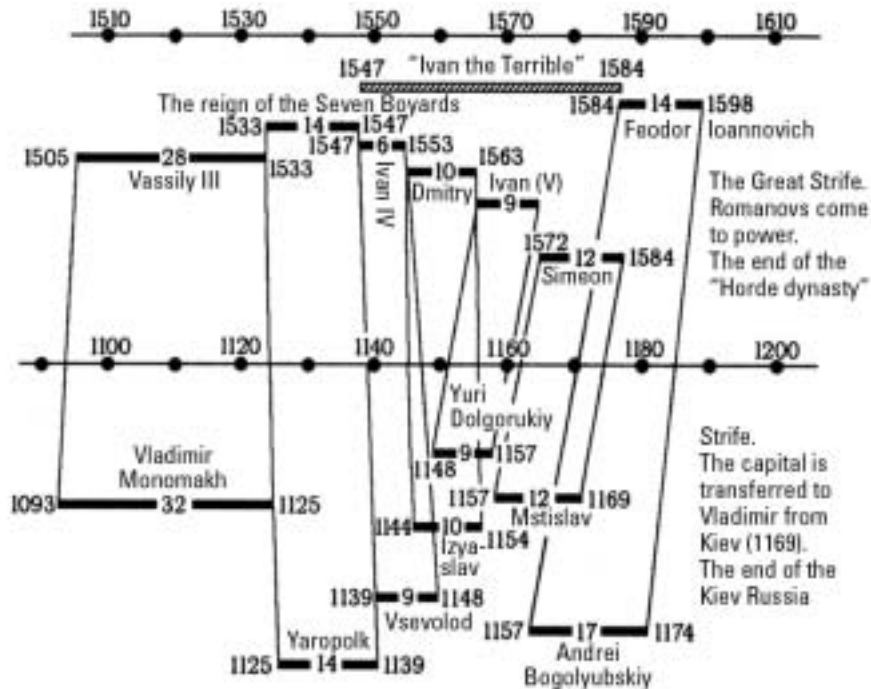Fig. 6.37. The shift of 410 years in Russian history. Part one.

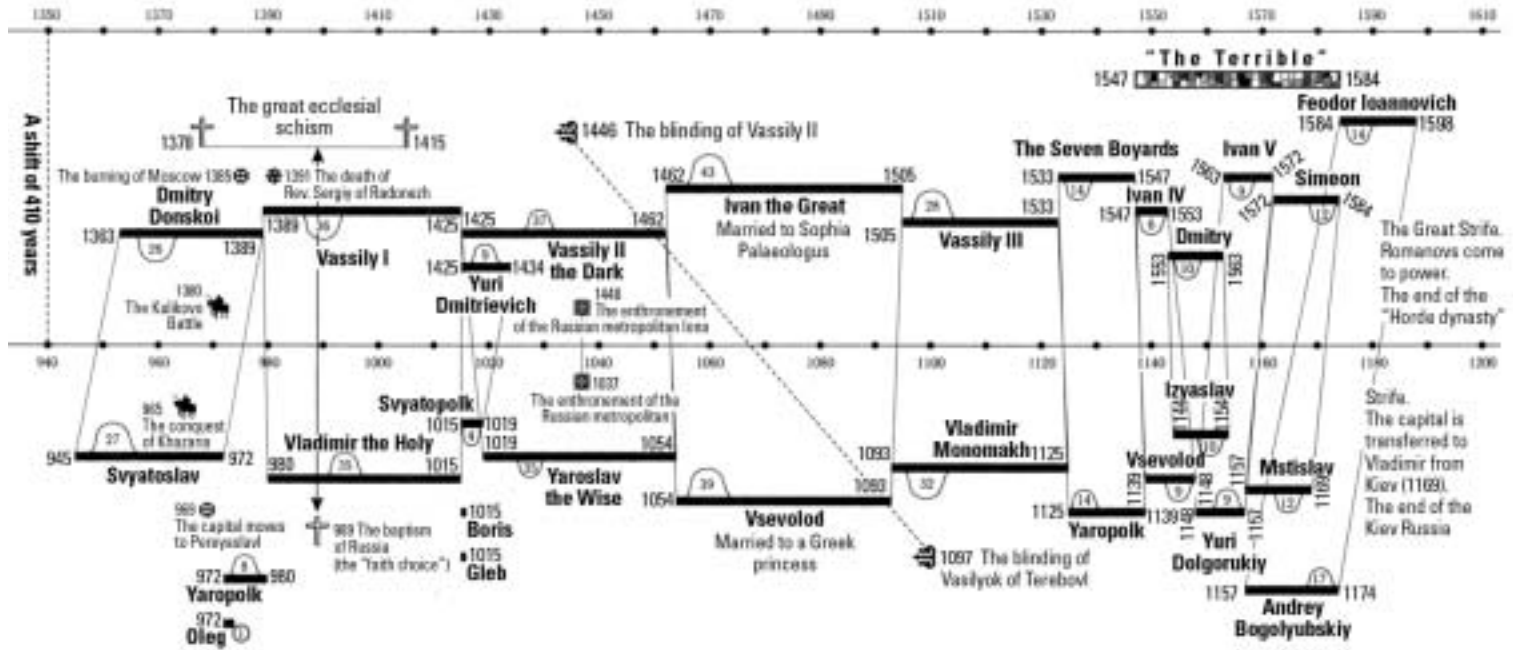Fig. 6.38. The shift of 410 years in Russian history (continued).

Fig. 6.39. A general view of the 410-year shift in Russian history.

Fig. 6.40. Superposition of the mediaeval and the "ancient" history of Greece with a rigid shift of about 1810 years.

4.
BRIEF TABLES OF SOME ASTONISHING DYNASTIC PARALLELISMS

The most fundamental statistical duplicates found by us are presented in the figures. The tables presented below list kings or actual rulers "identified" with each other, indicating the Scaligerian dates for their reign. The reign durations are presented in brackets. Horizontal fragments in relevant figures present reign periods of kings. Vertical lines connect beginnings and ends of reigns identified with each other.

TABLE 1. EXAMPLE 1, see fig. 6.11, fig. 6.12, fig. 6.12a.

a = the "ancient" Roman Empire, actually founded by Lucius Sulla allegedly in 82-83 B.C., ending with

Caracalla allegedly in 217 A.D. The Scaligerian dates of reign for the first eight rulers of these dynasties are a version of the dynastic jet. Periods of strife in the Empire are also indicated. We will conditionally call this Empire the Second Roman Empire.

■ *b* = the "ancient" Roman Empire, restored by Lucius Aurelian allegedly in 270 A.D., ending with Theodoric the Gothic allegedly in 526 A.D. Versions of reign of emperors are taken from [76], [1057], [72]. In some cases, count of years of reign of one or another emperor starts from the death of a co-ruler. We will conditionally call this empire the Third Roman Empire. Let us note that the Third Empire is richer in co-rulers than the Second Empire, therefore has more dynastic jets.

Dynasty *a* is obtained from dynasty *b* by shifting the latter by approximately 333 years downward.

Fig. 6.41. A close-in of the superposition of the mediaeval and the "ancient" history of Greece with a rigid shift of about 1810 years with more details.

1a. *Lucius Sulla* 82-78 B.C. (5 years).
  ■ 1b. Lucius Aurelian 270-275 A.D. (5 years).
2a. Strife of 78-77 B.C. (1 year).
  ■ 2b. Strife of 275-276 A.D. (1 year).
3a. *Certorius* 78-72 B.C. (6 years).
  ■ 3b. *Prob* 276-282 A.D. (6 years).
4a. Strife of 72-71 B.C. (2 years).
  ■ 4b. Strife of 282-284 A.D. (2 years).
5a. *Pompey the Great* 70-49 B.C. (21 years).
  ■ 5b. *Diocletian the Great* 284-305 A.D. (21 years).
6a. Joint rule of *Pompey* and *Caesar* 60-49 B.C. (11 years).
  ■ 6b. Joint rule of *Diocletian* and *Constantius Chlorus* 293-305 A.D. (12 years).
7a. Strife of 49-45 B.C. (4 years).
  ■ 7b. Strife of 305-309 A.D. (4 years).

8a. *Julius Caesar,* the conqueror of the first triumvirate in 45-44 B.C. (1 year).
  ■ 8b. *Constantius Chlorus,* the conqueror of the first tetrarchy in 305-306 A.D. (1 year), reign is counted from the end of Diocletian's reign.
9a. *Triumvirs* and *Octavian August* 44-27 B.C. (17 years).
  ■ 9b. *Tetrarchs* and *Constantine August* 306-324 A.D. (18 years).
10a. *Octavian August* 27 B.C. – 14 A.D. (41 years), or (37 years), if 23 B.C. is considered the beginning of the reign.
  ■ 10b. *Constantine August* 306-337 A.D. (31 years). Reign number 12 begins from the death of Constantine in 337.
11a. Nativity of *Jesus Christ* in the 27th year of *August Octavian* (27 years interval).

- 11b. Birth of *Basil the Great* in the 27th year of *August Octavian* (27 years interval).

12a. *Tiberius* 14-37 (23 years).
- 12b. *Constantius II* 337-361 (24 years).

13a. Joint rule of *Tiberius* and *Germanicus* 6-19 (13 years).
- 13b. Joint rule of *Constantius II* and *Constant* 337-359 (13 years). The beginning of the reign is counted from the end of that by *Constantine August*, see number 10.

14a. *Caligula* 37-41 (4 years).
- 14b. *Julian* 361-363 (2 years). The beginning of the reign is counted from the end of that by *Constantius II*, see number 12.

15a. Strife of 41 A.D. (1 year).
- 15b. Strife of 363 A.D.(1 year).

16a. *Claudius* 41-54 (13 years).
- 16b. *Valentinian I* 364-375 (11 years).

17a. Joint rule of *Claudius* and *Pallantius* 41-54 (13 years).
- 17b. Joint rule of *Valentinian* and *Valent* (duplicate of *Pallantius*?) 364-375 (11 years).

18a. *Nero* 54-68 (14 years).
- 18b. *Valent* 364-378 (14 years).

19a. Joint rule of *Nero, Burrus* and *Seneca* 54-62 (8 years).
- 19b. Joint rule of *Valent, Valentinian* and *Gratian* 364-375 (11 years).

20a. *Galba* 68-69 (1 year).
- 20b. *Jovian* 363-364 (1 year). Rearrangement of rulers.

21a. Strife of 69 A.D. (1 year).
- 21b. Strife of 378 A.D.(1 year).

22a. Two *Titus Vespasian's* 69-81 (12 years). Names of these two emperors coincide.
- 22b. *Gratian* and *Valentinian II* after the reign of *Valent* and strife of 379-392 (13 years).

23a. *Domitian* 81-96 (15 years).
- 23b. *Theodosius I* 379-395 (16 years).

24a. *Nerva* 96-98 (2 years).
- 24b. *Eugenius* 392-394 (2 years).

25a. Joint rule of *Nerva* 96-98 (2 years).
- 25b. Joint rule of *Eugenius* 392-394 (2 years).

26a. *Trajan* 98-117 (19 years).
- 26b. *Arcadius* 395-408 (13 years).

27a. *Adrian* 117-138 (21 years).
- 27b. *Honorius* 395-423 (28 years).

28a. *Titus Antoninus Pius* 138-161 (23 years).
- 28b. *Aetius* 423-444 or 423-438. I.e., (21 years) or (14 years). His reign is considered ended with the beginning of the reign of *Valentinian III*, see number 29.

29a. *Marcus Aurelius* 161-180 (19 years).
- 29b. *Valentinian III* 437-455 (18 years) or 444-455 (11 years).

30a. *Lucius Commodus* 176-192 (16 years).
- 30b. *Recimer* 456-472 (16 years).

31a. *Pertinax* 193 (1 year).
- 31b. *Olybrius* 472 (1 year).

32a. *Didius Julian* 193 (1 year).
- 32b. *Glicerius* 473, 474 (1 year).

33a. *Clodius Apophyllite* 193 (1 year).
- 33b. *Julias Nepos* 474 (1 year).

34a. *Pescennius Niger* 193-194 (1 year).
- 34b. *Romulus Augustulus* 475-476 (1 year).

35a. *Septimius Severus* 193-211 (18 years).
- 35b. *Odoacer* 476-493 (17 years).

36a. *Caracalla* 193-217 (24 years). Famous reforms in the Second Empire.
- 36b. *Theodoric* 493-526 or 497-526. I.e., (33 years) or (29 years). Well-known reforms in the Third Empire.

37a. The end of the Second Roman Empire. Crisis of the middle of the III century A.D. The Gothic war. Shift by approximately 333 years.
- 37b. The end of the Third Roman Empire in the West. Well-known Gothic war of allegedly the middle of the VI century A.D.

This parallelism is secondary, i.e., dynasties *a* and *b* themselves identified with each other are phantom reflections of a later original. We included in both dynastic jets some additional interesting data different from the reign durations, which of course were left behind while calculating dynasties proximity coefficient $c(a, b)$.

TABLE 2. **Example 2,** see the fig. 6.13, fig. 6.14.

a = the "ancient" kingdom of Israel of allegedly 922-724 B.C. described in the Bible, 1-2 Samuel + 1-2 Kings and Chronicles. Different versions of durations of reign, extracted from different chapters of the Bible, are presented in fig. 6.13 – the so-called "double entry". See details in Appendix 6.4.

■ *b* = the dynastic jet from the "ancient" Roman Empire, of allegedly 300-476 A.D., i.e., the Third Roman Empire. Chronological shift between these dynasties is approximately 1300 years.

1a. *Jeroboam I*, the founder of the well-known "Jeroboam's heresy". Break-up with *Rehoboam* and warfare against him (22 years).

    ■ 1*b*. *Constantine I* after the overthrow of *Maxentius*, i.e., 313-337 (24 years). Break-up with *Licinius*, his co-ruler, and war against him.

2a. *Nadab* (2 years).

    ■ 2*b*. *Constantine II* 337-340 (3 years). The beginning of reign is counted from the end of reign by the preceding emperor *Constantine I*.

3a. *Baasha* (24 years). He is identified with *Basil* from the Third Roman Empire.

    ■ 3*b*. *Constantius II* after death of *Constantine II* 340-361 (21 year).
    In his presence a well-known *Saint Basil the Great* lived. Pay attention to the similarity of the names: *Jesus – Asa – Baasha*.

4a. *Elah* (*Elih*?) (2 years).

    ■ 4*b*. *Julian* (*Elih*?) 361-363 (2 years).

5a. *Zimri* (1 year).

    ■ 5*b*. *Jovian* 363 (1 year).

6a. *Omri* (12 years).

    ■ 6*b*. *Valentinian I* 364-375 (11 years).

7a. *Ahab* (Wicked) (22 years). His struggle against *St. Elijah the Great* Prophet. Lethally wounded during the flight from battlefield.

    ■ 7*b*. *Valent* (Wicked) 364-378 (14 years). His struggle against *Saint Basil the Great*. Killed during the flight from battlefield.

8a. *Ahaziah* (2 years). He rules in Samaria. Samaria is identified with Rome in the Roman Empire, see point 8*b*.

    ■ 8*b*. *Gratian* after *Valent* and strife, 379-383 (4 years).

9a. *Joram* of Israel (12 years).

    ■ 9*b*. *Valentinian II* 379-392 (13 years). The beginning of reign is counted from the end of *Valent*, see number 7.

10a. *Jehu* and prophet *St. Elisha* (28 years). Seizure of power.

    ■ 10*b*. *Alaric* and *St. John Chrysostom* 378-403. Either (25 years?), or (32 years?).

11a. *Jehoahaz* (17 years).

    ■ 11*b*. *Theodosius I* 379-395 (16 years).

12a. *Jehoash* of Israel (16 years).

    ■ 12*b*. *Arcadius* 395-408 (13 years).

13a. *Jeroboam II* (41 years).

    ■ 13*b*. *Honorius* 395-423 (28 years).

14a. *Zechariah* (6 months).

    ■ 14*b*. *Constantius III* 421 (7 months).

15a. *Shallum* (1 month) or (1 year).

    ■ 15*b*. *John* 423 (2 months).

16a. Interregnum (24 years).

    ■ 16*b*. Interregnum-guardianship 423-444 (21 years).

17a. *Menahem* after interregnum (10 years). Comes king *Pul* or *Tul* (10 years).

    ■ 17*b*. *Valentinian III* after guardianship-interregnum 444-455 (11 years).
    Comes *Attila*. Pay attention to the identification of names *Tul* and *Attila*. Without vowels, TL – TTL.

18a. *Pekahiah* (2 years).

    ■ 18*b*. *Petronius Maximus* 455-456 (1 year).

19a. *Pekah* (20 years). Comes *Tiglath-Pileser*, whose name can be translated as "migrant" [544].

    ■ 19*b*. *Recimer* 456-472 (16 years). Comes *Genserich*, migration of peoples takes place.

20a. Anarchy (9 years) either (6 years) or (12 years).

    ■ 20*b*. Anarchy 472-475 (3 years).

21a. *Hoshea*, until captured (1 year). *Shalmanesser* comes and captures *Hoshea*.

    ■ 21*b*. *Romulus Augustulus* 475-476 (1 year). *Odoacer* comes and captures *Romulus*.

22a. The end of independent existence of the kingdom of Israel. *Hoshea* was the last independent king of Israel.

    ■ 22*b*. The end of independent existence of the Third Roman Empire as a purely Roman state. *Odoacer* was already a German Czar.

This parallelism is secondary. Both duplicate dynasties are phantom reflections of a later original. The kingdom of Israel is obtained from the Third Roman Empire by approximately 1300 years' chronological shift, which is the sum of two basic shifts by approximately 1000 and 300 years.
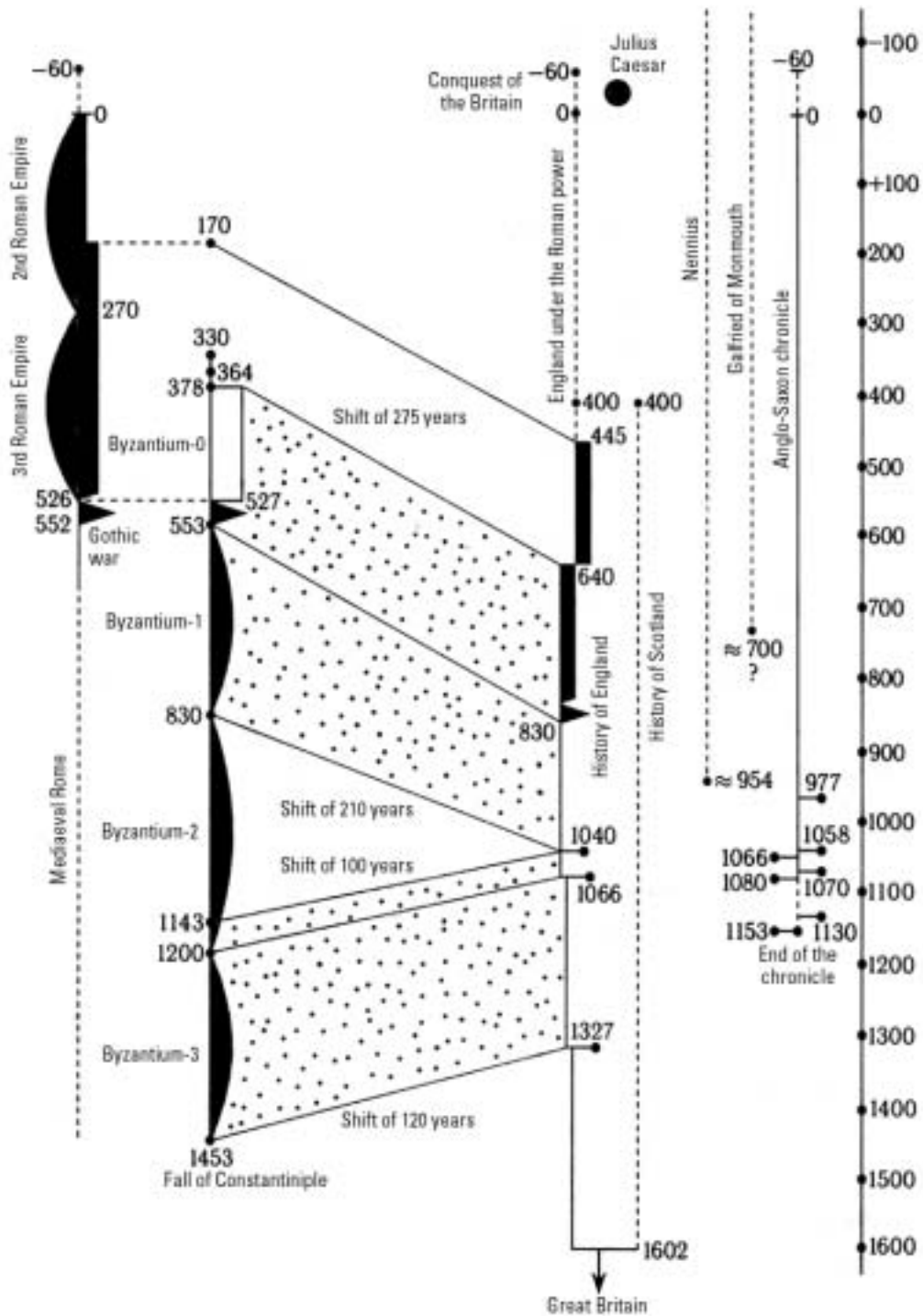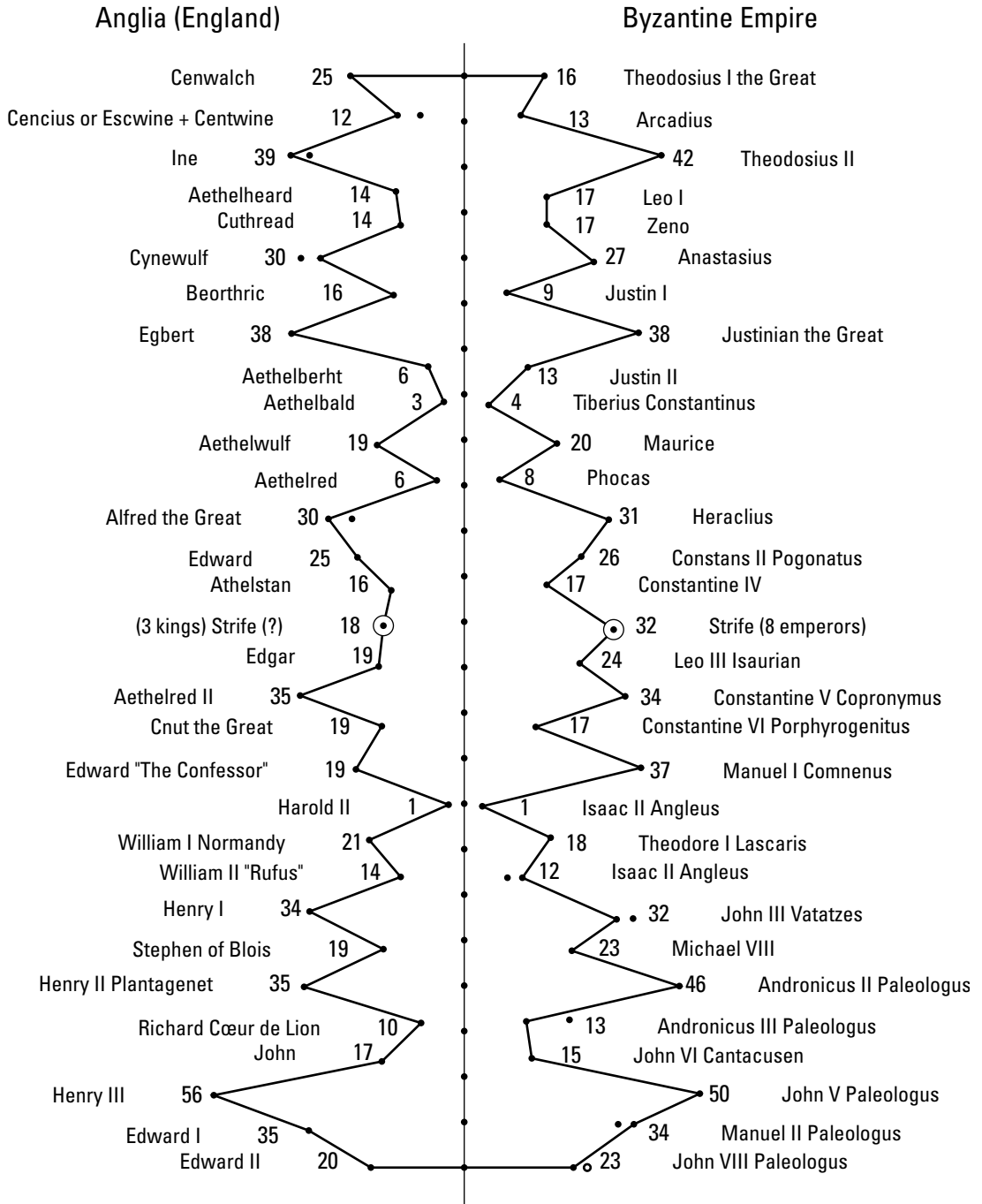
Fig. 6.42. General scheme of the superposition of the mediaeval English history with the mediaeval Byzantine history.

Anglia (England)			Byzantine Empire
Cenwalch	25	16	Theodosius I the Great
Cencius or Escwine + Centwine	12	13	Arcadius
Ine	39	42	Theodosius II
Aethelheard	14	17	Leo I
Cuthread	14	17	Zeno
Cynewulf	30	27	Anastasius
Beorthric	16	9	Justin I
Egbert	38	38	Justinian the Great
Aethelberht	6	13	Justin II
Aethelbald	3	4	Tiberius Constantinus
Aethelwulf	19	20	Maurice
Aethelred	6	8	Phocas
Alfred the Great	30	31	Heraclius
Edward	25	26	Constans II Pogonatus
Athelstan	16	17	Constantine IV
(3 kings) Strife (?)	18	32	Strife (8 emperors)
Edgar	19	24	Leo III Isaurian
Aethelred II	35	34	Constantine V Copronymus
Cnut the Great	19	17	Constantine VI Porphyrogenitus
Edward "The Confessor"	19	37	Manuel I Comnenus
Harold II	1	1	Isaac II Angleus
William I Normandy	21	18	Theodore I Lascaris
William II "Rufus"	14	12	Isaac II Angleus
Henry I	34	32	John III Vatatzes
Stephen of Blois	19	23	Michael VIII
Henry II Plantagenet	35	46	Andronicus II Paleologus
Richard Cœur de Lion	10	13	Andronicus III Paleologus
John	17	15	John VI Cantacusen
Henry III	56	50	John V Paleologus
Edward I	35	34	Manuel II Paleologus
Edward II	20	23	John VIII Paleologus

An identification of the English dynastic jet of 643-1327 A.D. with the Byzantine dynastic jet of 378-1453 A.D. by durations of reign. See more details in CHRON4, Part 2.

Fig. 6.43. Reign correlation of the English kings and the Byzantine emperors.

Fig. 6.44. A superposition of the mediaeval English history and the mediaeval Byzantine history with a rigid shift. Part one.

Fig. 6.45. A superposition of the mediaeval English history and the mediaeval Byzantine history with a rigid shift. Part two.

Fig. 6.46. A superposition of the mediaeval English history and the mediaeval Byzantine history with a rigid shift. Part three.

TABLE 3. Example 3, see fig. 6.13, fig. 6.15.

a = "ancient" kingdom of Judah, allegedly 928-587 B.C. ([72], page 192), described in the Bible, 1-2 Samuel + 1-2 Kings and Chronicles. Different versions of durations of reigns extracted from different chapters of the Bible are given in fig. 6.13. *Jerusalem* is considered to be the capital of Judah.

■ *b* = dynastic jet from the early mediaeval Eastern Roman Empire of allegedly 300-552 A.D. *New Rome* i.e., *Constantinople* is considered to be the capital.

1a. *Rehoboam* (17 years).
   ■ 1b. *Licinius* 308-324 (16 years).
2a. *Abijah* (3 years). His name means "the father of God" [544].
   ■ 2b. *Arius* 330-333 (3 years) or (5 years) or (8 years), several versions. The founder of a well-known religious trend – Arianism.
3a. *Asa* (*Jesus*?) (46 years) or (41 years).
   ■ 3b. The well-known *Saint Basil the Great* 333-378 (45 years). The name *Basil*, i.e., *Bazileus*, means simply *King*.
4a. *Jehoshaphat* (25 years).
   ■ 4b. *Theodosius I* 379-395 (16 years).

5a. *Jehoram of Judah* (8 years). Separation of Edom occurs in his time. Then follows a 76 years' inset. See details below.
   ■ 5b. *Arcadius* 395-408 (13 years). Separation of the Western Roman Empire from the Eastern one occurs in his time.
6a. *Uzziah* (52 years). He participates in a church dispute, is cursed and "afflicted with leprosy".
   ■ 6b. *Theodosius II* 408-450 + *Marcian* 450-457 (in total 49 years). The well-known church dispute in the Ephesian council.
7a. Interregnum (2 years). In 2 Chronicles, there is a lacuna here.
   ■ 7b. *Attila*'s invasion to the Roman Empire, and anarchy 451-453 (2 years).
8a. *Jotham* (16 years).
   ■ 8b. *Leo I* 457-474 (17 years).
9a. *Ahaz* (16 years). *Rezin* king of Aram and *Pekah* attack Jerusalem. *Ahaz* turns for help to *Tiglath-Pileser*, duplicate of *Theodoric*, see below.
   ■ 9b. *Zenon* 474-491 (17 years). German leader *Odoacer* attacks Rome. *Recimer*, the Western Roman ruler, 456-472, is a probable duplicate of Biblical *Rezin*, see above. *Zenon* turns for help to *Theodoric the Gothic*.

An identification of the English dynastic jet of 643-1036 A.D. with the Byzantine dynastic jet of 378-797 A.D. with a rigid shift of about 275 years.

Fig. 6.47. A general correlation scheme for the comparative history of England and Byzantium. Part one.

An identification of the English dynastic jet of 1041-1327 A.D. with the Byzantine dynastic jet of 1143-1453 A.D. with a rigid shift of about 120 years.

Fig. 6.48. A general correlation scheme for the comparative history of England and Byzantium. Part two.

Fig. 6.49. Parallelism between the "ancient" Greek kings and the mediaeval Byzantine emperors.

Fig. 6.50. Parallelism between the "ancient" kings of Lacaedemon and the mediaeval Greek despots of Mistras.

Fig. 6.51. Parallelism between the "ancient" First Roman Empire (royal Rome as described by Titus Livy) and the "ancient" Third Roman Empire.

Fig. 6.52. The superposition of the "ancient" First Roman Empire and the "ancient" Third Roman Empire with a rigid shift of about 1050 years.

Fig. 6.52a. The dynastic parallelism between the "ancient" royal Rome as described by Titus Livy, the Holy Roman Empire of the alleged X-XIII centuries, as well as Byzantium of the alleged X-XIII century.

10*a*. *Hezekiah* (29 years).
- 10*b*. *Anastasius* 491-518 (27 years).

11*a*. *Manasseh* (55 years) or (50 years). The famous king of Judah, blamed for a mass slaughter in Jerusalem – suppression of a revolt?
Let us note another identification of the capital of Judah with the New Rome, i.e., Constantinople.
- 11*b*. Two *Justins*, namely, *Justin I* 518-527 + *Justinian I* 527-565 or 518-565 (the total of 47 years). *Justinian I* suppresses the well-known Nika revolution in New Rome. Mass slaughter occurs.

12*a*. Inset of 76 years, consisting of four kings of Judah + *Amon* (means "they", 2 years).
The total of five rulers, 78 years, as 76 + 2 = 78 years.
- 12*b*. Five emperors: *Justin II + Tiberius II + Maurice + Phoca + Heraclius*, altogether 565-641 (76 years).

13*a*. *Josiah* (31 year). The kingdom of Judah attacked by the pharaoh.
- 13*b*. *Constans II* 642-668 (26 years). The Roman Empire attacked by the Arabs.

14*a*. *Jehoahaz* (1 year).
- 14*b*. *Constantine III* 641-642 (1 year).

15*a*. *Jehoiakim* (11 years).
- 15*b*. *Constantine IV* 668-685 (17 years).

16*a*. *Jehoiachin* (1 year).
- 16*b*. *Heracleon* 641-642 (1 year).

17*a*. *Zedekiah* (11 years). King *Nebuchadnezzar* "takes the Jews captive".
- 17*b*. *Justinian II*, his first reign 685-695 (10 years). Wars of the Roman Empire, attack of the Arabs.

18*a*. *The end* of the kingdom of Judah. The famous Babylonian captivity of the Jews.
- 18*b*. The well-known crisis of the Roman Empire in the end of the allegedly VII century A.D. The disintegration of the Eastern Empire.

This parallelism is secondary as well. Both duplicate kingdoms are phantom reflections of a later original. The chronological shift between the duplicates is approximately 1300 years, the sum of two basic shifts by approximately 1000 years and 300 years.

TABLE 4. EXAMPLE 4, see fig. 6.16.

a = the early mediaeval Popes of allegedly 140-314 A.D.
- *b* = the early mediaeval Popes of allegedly 324-532 A.D.

Both versions of pastorate are taken from [76], [492].

1*a*. *St. Pius* 141-157 (16 years).
- 1*b*. *Sylvester* 314-336 (22 years).

2*a*. *St. Anicetus* 157-168 (11 years).
- 2*b*. *Julius I* 336-353 (17 years).

3*a*. *St. Soter*, meaning "rescuer", 168-177 (9 years).
- 3*b*. *Liberius*, meaning "liberator", 352-367 (15 years).

4*a*. *St. Eleutherius* 177-192 (15 years).
- 4*b*. *Damasus* 367-385 (18 years).

5*a*. *St. Victor* 192-201 (9 years).
- 5*b*. *Siricius* 385-398 (13 years).

6*a*. *Zephyrinus* 201-219 (18 years).
- 6*b*. *Anastasius, Innocent* 398-417 (19 years).

7*a*. *Calixstus* 219-224 (5 years).
- 7*b*. *Boniface* 418-423 (5 years).

8*a*. *Urban I* 224-231 (7 years).
- 8*b*. *Celestine* 423-432 (9 years).

9*a*. *Pontianus* 231-236 (5 years).
- 9*b*. *Sixtus III* 432-440 (8 years).

10*a*. *Fabian* 236-251 (15 years).
- 10*b*. *St. Leon = Leo I* 440-461 (21 year).

11*a*. Strife 251-259 (8 years).
- 11*b*. Strife and *Hilarius* 461-467 (6 years).

12*a*. *Dionysus* 259-271 (12 years).
- 12*b*. *Simplicius* 467-483 (16 years).

13*a*. *Felix I* 275-284 (9 years) or *Eutychianus*?
- 13*b*. *Felix II* 483-492 (9 years).
  Names of these duplicates just coincided.

14*a*. *Eutychianus* 271-275 (4 years), or *Felix I*?
- 14*b*. *Gelasius* 492-496 (4 years).

15*a*. *Caius* 283-296 (13 years).
- 15*b*. *Symmachus* 498-514 (16 years).

16*a*. *Marcellinus* 296-304 (8 years).
- 16*b*. *Hormisdas* 514-523 (9 years).

17*a*. *Marcellus* 304-309 (5 years).
- 17*b*. *John I* 523-526 (3 years).

18*a*. *Eusebius* 309-312 (3 years).
- 18*b*. *Felix III* 526-530 (4 years).

19*a. Meltiades* 311-314 (3 years).
   ■ 19*b. Boniface III* 530-532 (2 years).

This parallelism is secondary as well. Both duplicate dynasties are phantom reflections of a later original.

TABLE 5. EXAMPLE 5, see fig. 6.17, fig. 6.18.

a = the Carolingians, i.e., the mediaeval empire of *Charles the Great* from *Pepin* (*Pipin*) *of Heristal* to *Charles the Fat*, of allegedly 681-887 A.D. Versions of reigns are taken from [76], [64].
   ■ *b* = the dynastic jet from the early-mediaeval Eastern Roman Empire of allegedly 324-527 A.D. Versions of reigns are taken from [76], [1057], [323], [333].
The chronological shift between these duplicate dynasties is approximately 360 years.

1*a.   Pipin of Heristal* 681-714 (33 years).
   ■ 1*b. Constantius II* 324-361 (37 years).
2*a.   Charles Martel* 721-741 (20 years).
   ■ 2*b. Theodosius I* 379-395 (16 years).
3*a.   Pipin the Short* 754-768 (14 years).
   ■ 3*b. Arcadius* 395-408 (13 years).
4*a.   Charles the Great* 768-814 (46 years).
   ■ 4*b. Theodosius II* 408-450 (42 years).
5*a.   Carloman* 768-771 or 772 (3 years) or (4 years). The famous "gift of Charles the Great" allegedly in 774. *Charles* gives the lands of Italy to the Pope.
   ■ 5*b. Constantine III* 407-411 (4 years). The famous "gift of Constantine I the Great" allegedly in the IV century A.D. The emperor gives Rome to the Pope.
6*a.   Louis I the Pious* 814-833 (19 years). Abdication. This is the epoch when "the antiquity revives".
   ■ 6*b. Leo I* 457-474 (17 years).
7*a.   Lothair the Western* 840-855 (15 years).
   ■ 7*b. Zenon* 474-491 (17 years).
8*a.   Charles the Bald* 840-875 (35 years).
   ■ 8*b. Theodoric the Gothic* 493-526 (33 years).
9*a.   Louis the German* 843-875 (32 years).
   ■ 9*b. Anastasius* 491-518 (27 years).
10*a.Louis II the Western* 855-875 (20 years).
   ■ 10*b. Odoacer* 476-493 (17 years).

11*a. Charles the Fat* 880-888 (8 years). Disintegration of the Carolingians' Empire in the West. The war.
   ■ 11*b. Justin I* 518-527 (9 years). Disintegration of the "official" Third Roman Empire in the West. The well-known Gothic war allegedly in the VI century A.D.

This parallelism is secondary as well. Both duplicate dynasties are phantom reflections of a later original. According to the time of reigns ending, an average shift is 359.6 years, which coincides with the first basic rigid shift in chronology by 360 years.

TABLE 6. EXAMPLE 6, see fig. 6.19, fig. 6.20.

a = the mediaeval Holy Roman Empire of allegedly 983-1266 A.D. Versions of reigns are taken from [76], [64], [196].
   ■ *b* = the dynastic jet of the "ancient" Third Roman Empire of allegedly 270-553 A.D. Versions of reigns are taken from [72], [76], [1057], [196].
The chronological shift between these duplicate dynasties is approximately 720 years.

1*a.   Otto III the Red*, means *Chlorus*, 983-1002 (19 years). A duplicate of *Julius Caesar* who lived allegedly in the Ist century B.C.
   ■ 1*b. Constantius I Chlorus* 293-306 (13 years). Another duplicate of *Julius Caesar* with a 340 years' shift.
2*a.   Henry II* 1002-1024 (22 years).
   ■ 2*b. Diocletian* 284-304 or 284-305 (21 years).
3*a.   Conrad II* 1024-1039 (15 years).
   ■ 3*b. Licinius* 308-324 (16 years).
4*a.   Henry III* 1028-1056 (28 years).
   ■ 4*b. Constantine I* 306-337 (31 year).
5*a.   Henry IV* 1053-1106 (53 years). "The Pope *Hildebrand*" acts in his time. In 1049, *Hildebrand* begins his activity in Rome; dies in 1085. He "reigns" for 36 years. In 1053, the famous church reform of *Hildebrand* begins. Then there is his well-known struggle with the emperor *Henry IV* in Canossa.
   ■ 5*b. St. Basil the Great* (?) 333-378 (45 years). The chronological "distance" between *Henry IV* and *St. Basil the Great* is 728 years, since

1106 – 378 = 728 years. The chronological "distance" between the "birth" of *Hildebrand* and *St. Basil the Great* is 720 years, since 1053 – 333 = 720 years. The well-known church reform of *St. Basil the Great*, or simply Basileus the Great, i.e. the Great king. The struggle between *St. Basil the Great* and emperor *Valent* (Evangelical *Herod*?).

6*a. Henry V* 1098-1125 (27 years).
- 6*b. Honorius* 395-423 (28 years).

7*a. Lothair* 1125-1138 (13 years).
- 7*b. Theodosius I* 379-395 (16 years).

8*a. Conrad III* 1138-1152 (14 years).
- 8*b. Arcadius* 395-408 (13 years).

9*a. Frederick I* 1152-1190 (38 years).
- 9*b. Theodosius II* 408-450 (42 years).

10*a. Henry VI* 1169-1197 (28 years).
- 10*b. Valentinian III* 425-455 (30 years).

11*a.* Anarchy and *Philip Ghibelline* 1198-1208 (10 years). Influential favourites: *Subur, Petrus, Rainerius*.
- 11*b.* Anarchy and *Recimer* 456-472 (16 years). Influential favourites: *Severus, Petronius, Recimer*. The names of the duplicates *Subur* and *Severus* are very similar. The names of the duplicates *Petronius* and *Petrus* are virtually the same. The names of the duplicates *Rainerius* and *Recimer* are possibly two versions of the same name as well.

12*a. Otto IV* 1201-1217 (16 years) or (17 years), or 1197-1218 (21 years). Seizure of Rome and the coronation of *Otto IV*. Let us note that *Otto IV* is believed to have been a German.
- 12*b.* Anarchy and *Odoacer* 476-493 (17 years). Seizure of Rome and the coronation of *Odoacer*. *Odoacer* is considered to have been the leader of the German Geruls.

13*a. Frederick II* as king of Rome since 1220 (year of the final coronation) until 1250 (30 years). Execution of *Vineis*. Cf. *Boethius*.
- 13*b. Theodoric* 497-526 (29 years). The version of reign is taken from [196]. Execution of *Boethius*. The names of the duplicates *Vineis* (*Bineis*) and *Boetius* are similar. The name *Theodoric*, i.e., *Feodoric*, is close to the name *Frederick*.

14*a. Frederick II* 1196-1250 (54 years) and the co-ruler *Otto* IV up to 1218. The death of *Frederick* – the beginning of a well-known war allegedly in Italy in the XIII century A.D.
- 14*b.* Or: *Theodoric + Odoacer*, his co-ruler, 476-526 (50 years). The death of *Theodoric* – the beginning of a well-known Gothic war allegedly in Italy allegedly in the VI century A.D.

15*a. Conrad IV* 1237-1254 (17 years). His enemy – *Charles of Anjou*.
- 15*b. The Dynasty of the Goths*, several Gothic kings, 526-542 (15 years). Roman commanders *Velizarius* and *Narses* were the enemies of the Goths.

16*a. Manfred* 1254-1266 (12 years).
- 16*b. Totila* 541-552 (11 years).

17*a. Conradin* 1266-1268 (2 years). Very young. His death in Naples. Defeated in a battle against *Charles of Anjou* near the city of Troy in Italy, not far from Naples. The end of the Holy Roman Empire of the X-XIII centuries A.D. Crush and fall of the dynasty of Hohenstaufens.
- 17*b. Tejas* 552-553 (1 year) or (2 years). Very young. His death in Naples. Defeated in a battle against *Narses* near the city of Troy in Italy, not far from Naples. See below an identification of this war with the famous Trojan war. The end of the Holy Roman Empire allegedly in Italy. Crush and fall of the dynasty of Goths.

According to the time of reigns ending, an average shift is 723 years, which virtually coincides with the rigid shift by 720 years identifying these two phantom dynasties with each other. *This is one of the basic parallelisms*, although the Holy Roman Empire of the X-XIII century A.D. is a partial phantom in itself, a reflection of a later dynasty of the epoch of Habsburgs (Nov-gorod?) of the XIV-XVII century.

NOTE. Let us recall again that the name of this dynasty is written in the West nowadays as *Habsburg* or *Hapsburg* ([1447], page 363). It could originate from the word *Hab-Burg*, where *Burg* is city, and *Hab* could mean "main".

Alternatively, since they write the Latin H and the Slavic H (N) the same way, and likewise the Latin B and the Slavic B (V), the Latin word HAB could be derived from the Slavic "*Нав*" (*Nav*), i.e. *New*. Thus, *Hab-Burg* could have meant *New City*.

TABLE 7. EXAMPLE 7, see fig. 6.21, fig. 6.22.

a = the mediaeval Holy Roman Empire of allegedly 911-1254 A.D. Here, year 911 is the beginning of the Saxon dynasty. Versions of reigns for both dynasties are taken from [76], [64], [415], [196].

■ *b* = the mediaeval, allegedly German-Roman Empire of Habsburgs (Nov-gorod?) of 1273-1637 A.D. Here, year 1273 is the beginning of the Austrian house. The dynasty *a* comes from the dynasty *b* by shifting the latter by 362 years downward as a rigid whole.

1*a*. *Conrad I* 911-918 (7 years).
　■ 1*b*. *Adolf of Nassau* 1291-1298 (7 years).
2*a*. *Henry I the Fowler* 919-936 (17 years).
　■ 2*b*. *Rudolf Habsburg* 1273-1291 (18 years). Let us note that, in the beginning of this dynasty, *Conrad I* and *Henry I* correspond to the rearranged *Adolf of Nassau* and *Rudolf Habsburg*. There are no further rearrangements in the dynasties.
3*a*. *Otto I the Great* 936-973 (37 years). Here we see an identification: *Alberic II = Albrecht I*.
　■ 3*b*. *Henry VII* 1309-1314 (5 years) and *Ludwig V* 1314-1347 (33 years). In total it is (38 years).
4*a*. *Otto II* from the death of *Otto I* in 973 until his death in 983. Then + *Otto III* 983-1002. The total of (29 years).
　■ 4*b*. *Charles IV* 1347-1378 (31 year). Running ahead (for more detail see point 10), let us note that in the epoch of Habsburgs (Novgorodians?) only three eruptions of Vesuvius were registered, namely, in 1306, 1500 and 1631.
5*a*. *Henry II* 1002-1024 (22 years).
　■ 5*b*. *Wenceslav* 1378-1400 (22 years).
6*a*. *Conrad II* from his coronation in Rome in 1027 to his death in 1039 (12 years).
　■ 6*b*. *Robert of Palatin* 1400-1410 (10 years).
7*a*. *Henry III the Black* 1028-1056 (28 years). The great schism of churches at the time of "Pope *Hildebrand*" in 1054 A.D.
　■ 7*b*. *Sigismund* 1410-1438 (28 years). The great schism of the churches in 1378-1417.
8*a*. *Henry IV* 1053-1106 (53 years).
　■ 8*b*. *Frederick III* 1440-1493 (53 years).

9*a*. *Henry V* 1098-1125 (27 years) or *Henry V* from his coronation in Rome in 1111 to his death in 1125. Further + *Lothair II* 1125-1137. The total of (27 years) or (26 years).
　■ 9*b*. *Maximilian I Pius* 1493-1519 (26 years). In his time, the first versions of *Almagest* by Ptolemy are published. Scaliger's version reflects this fact by stating that *Almagest* was allegedly written in the time of Roman Emperor *Antoninus Pius*, who reigned allegedly in 131-161 A.D.
10*a*. The well-known eruption of Vesuvius in 1138-1139. The wars in Germany in 1143-1155. The revolt of *Arnold of Brescia*.
　■ 10*b*. The well-known eruption of Vesuvius in 1500. The beginning of the Italian wars of Germany in Italy in 1494-1527. In 1512, there was a revolt in Brescia.
11*a*. *Frederick I Barbarossa* 1152-1190 (38 years), the famous emperor. Seizure of Rome by *Frederick* in 1154. The Pope *Adrian IV*. The foundation of the Franciscan and Dominican orders, in 1223 and 1220.
　■ 11*b*. *Charles V* 1519-1556 (37 years), the famous emperor. *Frederick the Wise* and the war against *Barbarossa* were under him. Seizure of Rome by Charles V in 1527. The shift of dates between the two "seizures of Rome", see 11*a*, is 373 years. The Pope *Adrian VI*. Foundation and official approval of the order of Jesuits in 1540.
12*a*. *Henry VI* since 1191, from his coronation in Rome until 1197 (6 years).
　■ 12*b*. *Ferdinand* 1556-1564 (6 years).
13*a*. *Philip* 1198-1208 (10 years).
　■ 13*b*. *Maximilian II* 1564-1576 (12 years).
14*a*. *Frederick II* 1211-1250 (39 years). Three of his coronations are known: in 1196, in 1211 and in 1220.
　■ 14*b*. *Rudolf II* 1576-1612 (36 years).
15*a*. *Wilhelm* 1250-1256 (6 years).
　■ 15*b*. *Mathias = Matthew* 1612-1619 (7 years)
16*a*. *Conrad IV* 1237-1254 (17 years).
　■ 16*b*. *Ferdinand II* 1619-1637 (18 years).
17*a*. The end of the Empire 1250-1254 (4 years).
　■ 17*b*. The end of the Empire 1618-1619 (1 year).

18*a*. The war in Italy 1250-1268. The beginning of the 17-year anarchy in Germany, in 1256.

■ 18*b*. In 1618 the well-known 30-year war starts in Germany.

The chronological shift between these two duplicate dynasties is 360 years. This is the first basic shift. The indicated parallelism is one of the basic ones. The dynasty of Habsburgs (Nov-gorodians?) is the original dynasty here. However, the Habsburgs of the XIII-XVI century should not be thought to have had their residence in the Western Europe, as it is believed nowadays. The parent state of the empire of Habsburgs of this period was in a completely different place. See more detail in Chron7.

TABLE 8. Example 8, see fig. 6.23, fig. 6.24.

a = the mediaeval Holy Roman Empire of allegedly 936-1273 a.d. The duration of this empire is 292 years, from 962 or 964 up to 1254. Versions of reigns for both duplicate dynasties are taken from [76], [1057], [196], [415], [72].

■ *b* = the "ancient" Second Roman Empire allegedly from 82 to 217 a.d. This empire lasts for 299 years, 82 to 217 year a.d. The chronological "distance" between the duplicate empires is approximately 1053 years.

1*a*. The beginning of the Empire, three great emperors allegedly of the Xth century a.d. These are:
- *Otto I the Great* (the anarchy and the war),
- *Otto II the Wild*,
- *Otto III the Red*, i.e., "*Chlorus*".

■ 1*b*. The beginning of the Empire, three great emperors allegedly of the I century b.c.:
- *Pompey the Great* (anarchy and war),
- *Sulla Lucius* (rearranged here with the first ruler),
- *Julius Caesar*, a duplicate of *Chlorus* from the Third Roman Empire.

2*a*. *Otto I* as the German king 936-973 (37 years). In his time – *Octavianus*, son of *Alberic*. Let us recall that *Julius Caesar* from the Second Roman Empire, is a duplicate of *Alberic*. *Octavianus* is very young and comes to power at the age of 16.

■ 2*b*. *Octavianus Augustus* since 23 or 27 b.c. until 14 a.d. (37 years). *Octavianus* is consid-

ered to be a foster son of *Julius Caesar*, very young, and comes to power at the age of 19.

3*a*. *Otto II* 960 (the German coronation) – 983 (23 years).

■ 3*b*. *Tiberius* 14-37 (23 years).

4*a*. The Emperors are Roman kaisers, or caesars. The Empire is officially called *Holy*. There are virtually no gold coins of the Empire of the X-XIII century. They may have "traveled downward" during Scaliger's chronological shift by 1053 years.

■ 4*b*. The emperors are Roman caesars, i.e., kaisers; moreover, often with the additional name Germanicus. The emperors are called *Augustusus*'s, i.e., *Sacred*. A sufficient number of gold coins of the "ancient" Rome of this Scaliger's epoch is available.

5*a*. *Henry II the Saint + Conrad the Salian* 1002-1039 (37 years). Let us note that the large number of "Henries" in this empire is probably explained by a simple circumstance that *Henry* is not a name in the contemporary sense but a title. *Henry* is most likely *Khan-Reich*, i.e., *Khan-Kingdom*, meaning Khan-Sovereign. Besides, the large number of "Conrads" in the same empire is also probably explained by the fact that the name *Con-Rad* is something like *Khan-Horde*, i.e., not a name in the contemporary sense but a title – King, Khan of the Horde.

■ 5*b*. *Octavianus Augustus*, i.e., *Sacred*, *Saint*, 23 b.c. until 14 a.d. (37 years).

6*a*. *Conrad II the Salian* 1024-1039 (15 years). In his time, "Pope *Hildebrand*" 1053-1073-1085. The well-known church reform, the treachery of Cencius, "the passions of Hildebrand" ([196]). Probably, "the history of Pope Hildebrand" is a reflection of the actual biography of *Jesus Christ*, living in the same XI century a.d., though not in the Italian Rome, but in the New Rome, Constantinople. See details below.

■ 6*b*. *Germanicus* 6-19 (13 years). In his time, *Jesus Christ* who lived allegedly in 1-33 a.d. The church reform, the treachery of Judas, "the Passions of Christ" described in the Gospel. When shifted by 1053 years upward, these events fall into the XI century a.d., traced in the form of the "history of

Hildebrand the Pope of Rome". The name *Hildebrand* or *Hild-Brand* may have simply meant *Gold-Blazing*, or *With Gold Ablaze*.

7*a*. *Henry III the Black* 1028-1056 (28 years).
- 7*b*. *Tiberius + Caligula* 14-41 (27 years).

8*a*. *Henry IV* 1053-1106 (53 years).
- 8*b*. *Tiberius + Caligula + Claudius + Nero* 14-68 (54 years). This joint of four rulers could also have occurred in the chronicles, in particular because their full names contain repeating short names. Indeed:
  - *Tiberius* = Tiberius Claudius Nero Julius Caesar Augustusus,
  - *Caligula* = Gaius Julius Caesar Augustusus Germanicus,
  - *Claudius* = Tiberius Claudius Nero Drusus Germanicus Caesar Augustusus,
  - *Nero* = Lucius Domitius Ahenobarbus Tiberius Claudius Drusus Germanicus Caesar [72], p.236.

9*a*. (?) *Henry V the Black* 1098-1125 as the German king (27 years). Or, more suitable here is the reign indicated in the next point 10.
- 9*b*. (?) *Claudius + Nero* 41-68 (27 years). Or, see the next point 10.

10*a*. *Henry V the Black* 1111-1125 as the Roman emperor (14 years).
- 10*b*. *Nero* 54-86 (14 years). This version does not contain any joints.

11*a*. *Lothair* 1125-1137 (12 years).
- 11*b*. Two *Titus Vespasian's* 69-81 (12 years), i.e., *Titus Vespasian + Titus Vespasian*. It is clear why the chronicle could have joined them as one ruler – because their names coincide.

12*a*. The well-known eruption of Vesuvius 1138-1139, a duplicate of the eruption of 1500, see above.
- 12*b*. The famous eruption of Vesuvius of allegedly 79 A.D., which ruined the "ancient" cities of Pompei and Herculanum.

13*a*. *Conrad III* 1138-1152 (14 years).
- 13*b*. *Domitianus* 81-96 (15 years).

14*a*. *Frederick I Barbarossa* 1152-1190 (38 years). Mediaeval chronicles would sometimes confuse him with *Frederick II* [196].
- 14*b*. *Trajan + Adrian* 98-138 (40 years). Both emperors are named *Trajan*. The joint

could have occurred due to proximity of their full names.

15*a*. *Henry VI* 1169-1197 (28 years).
- 15*b*. *Antoninus Pius* 138-161 (23 years).

16*a*. *Philip Ghibelline* 1198-1208 (10 years).
- 16*b*. *Lucius Verus* 161-169 (8 years).

17*a*. *Otto IV* 1198-1218 (20 years). The famous equestrian statue of "ancient" *Marcus Aurelius* is erected in his time ([196]), v. 4, p. 568, commentary 74. This equestrian statue is considered nowadays to be a famous relic of the "ancient Rome" ([196]), v. 4.
- 17*b*. *Mark Aurelius* 161-180 (19 years).

18*a*. *Frederick II* 1211-1250 (39 years). His title contains the name *Gattin*, which can mean *Gothic*.
- 18*b*. *Commodus + Caracalla* 180-217 (37 years). This is duplicate of *Theodoric the Gothic* from the Third Roman Empire, allegedly the VI century A.D.

19*a*. *Conrad V* 1237-1254 (17 years).
- 19*b*. *Septimius Severus* 193-211 (18 years).

20*a*. Interregnum 1256-1273 (17 years). The end of the Holy Roman Empire of the X-XIII century A.D. The war in Italy in the middle of the XIII century A.D. To a considerable degree, this is the original of the Gothic war of allegedly the VI century A.D. and the "ancient" Trojan war of allegedly the XIII century B.C.
- 20*b*. Anarchy, *Julia Maesa* and her protégés 217-235 (18 years). The end of the Second Roman Empire. The war in Italy of allegedly the middle of the IIIrd century A.D. Wars against the Goths.

This is one of the basic parallelisms, although the Holy Roman Empire of the X-XIII centuries itself is largely a mere phantom reflection of a later dynasty of Habsburgs (Nov-gorodians?) of the XIII-XVII century A.D. According to the ends of the reigns, the average shift equals 1039 years, which is very close to the second basic chronological shift by 1053 years.

TABLE 9, EXAMPLE 9, see fig. 6.25, fig. 6.26.

a = the "ancient" kings of Judah of allegedly 928-587 B.C. They are described in the Bible, 1-2 Samuel, 1-2 Kings, and Chronicles. According to Scaliger's

chronology, this kingdom began in 928 b.c. ([72]). According to the Bible, it lasted for 395 years. We will count the dates in the "Biblical part" of our table "from zero", i.e., we will conditionally accept year 928 b.c. as "year zero". Versions of reigns are taken from the Bible and [72]. References to the Bible are indicated in the figure as [B]. With the parallelism we discovered, Scaliger's year 928 b.c. is identified with the year 911 a.d.

■ *b* = the dynastic jet of the mediaeval Holy Roman Empire of German nation, allegedly of 911-1307 a.d. The majority of Roman-German emperors is represented here by periods of their *German* reigns, i.e., from the coronation with the *German* crown. The duration of the Empire is 396 years, which virtually coincides with the duration of kingdom of Judah. In 911, the beginning of the Saxon dynasty. These two dynasties appear to be perfectly identified with each other when year 911 a.d. is identified with year 928 b.c. Versions of reigns are taken from [76], [196], [64], [415]. The rigid chronological shift by approximately 1838 years identifies dynasties *a* and *b* perfectly. It is clear that 1838 = 928 + 911.

1*a*. *Rehoboam* 0-17 (17 years).
   ■ 1*b*. *Henry I* 919-936 (17 years).
2*a*. *Abijah* 17-20 (3 years).
   ■ 2*b*. *Lothair* 947-950 (3 years).
3*a*. *Asa* 20-55 (35 years) or 20-61 (42 years).
   ■ 3*b*. *Otto I the Great* 936-973 (37 years).
4*a*. *Jehoshaphat* 55-79 (24 years) or 61-86 (25 years).
   ■ 4*b*. *Otto II* 960-983 (23 years).
5*a*. *Jehoram of Judah* (8 years) according to the Bible or (6 years) according to [72] + *Ahaziah* (*Ohoziah*) *of Judah* (1 year). The total of (9 years) or (7 years), i.e., years 86-94 according to the Bible.
   ■ 5*b*. *Otto III the Red* 983-996 (13 years), i.e., from his accession to the throne in 983 until his Roman coronation in 996. To be continued below.
6*a*. *Athaliah = Hotholiah* 95-101 (6 years). See the dates in 2 Chronicles and 1-2 Kings.
   ■ 6*b*. *Otto III* from his Roman coronation in 996 until 1002, i.e. 996-1002 (6 years).
7*a*. *Joash of Judah* 92-130 (38 years) according to [72] or (40 years) according to the Bible.

   ■ 7*b*. *Henry II* 1002-1024 + *Conrad II* 1024-1039 (the total of 37 years).
8*a*. *Amaziah* 130-159 (29 years).
   ■ 8*b*. *Henry III* 1028-1056 (28 years).
9*a*. *Uzziah* since 159 according to [72] until 211, since he reigns 52 years according to the Bible, or 43 years according to [72], i.e., 211 = 159 + 52 according to the Bible. His struggle with *Azariah* the chief priest. Thus, *Uzziah* reigns for (52 years) or (43 years). Excommunication of *Uzziah*. *Uzziah* ascended the throne at the age of 16. In the end of his life he was "afflicted with leprosy", lived "in a separate house". His son actually rules instead of him. See 2 Chronicles 26:21-23.
   ■ 9*b*. *Henry IV* 1053-1106 (53 years). His struggle against "Pope *Hildebrand*". Let us recall that "*Hildebrand*" is a reflection of *Jesus Christ* from the XI century a.d. Another reflection is *St. Basil the Great*, i.e., the Great King (duplicate of *Uzziah*), allegedly from the IV century a.d. The name *Uzziah*, most likely, simply means *Zar* or *Czar* (*King*). The well-known excommunication of *Henry* in Canossa. *Henry* ascended the throne at the age of 6. In the end of the life he departed into a secluded castle. Treachery and coronation of his son *Conrad* in the lifetime of *Henry*. Son rules instead of his father ([196], v. 5, p. 233-235).
10*a*. *Jotham* 211-227 (16 years), according to the Bible, or (7 years), according to [72].
   ■ 10*b*. *Lothair II* 1125-1138 (13 years).
11*a*. *Ahaz* 227-243 (16 years), according to the Bible, or (20 years), according to [72].
   ■ 11*b*. *Conrad III* 1138-1152 (14 years).
12*a*. *Hezekiah* 256-285 (29 years). The attack of *Sennaherib* king of Assyria and his retreat. See 2 Kings 19:35-36. Cf. *Theodorich the Gothic* in allegedly of the VI century a.d.
   ■ 12*b*. *Henry* VI 1169-1197 (28 years). The attack of *Frederick I* on Rome in 1167. "Pestilence" in the German troops, their retreat. *Hezekiah* is probably identified in part with the well-known *Frederick I Barbarossa*, a contemporary of *Henry VI*.
13*a*. *Manasseh* 285-340 (55 years) according to the

Bible, or (45 years), according to [72]. He was one of the best-known Biblical kings.

- ■ *13b. Frederick II* 1196-1250 (54 years). One of the most famous emperors of the Middle Ages.

14a. Amon 340-342 (2 years).

- ■ *14b. Conrad IV* 1250-1254 (4 years).

15a. Josiah 342-373 (31 years).

- ■ *15b. Charles of Anjou* 1254-1285 (31 years).

16a. Jehoahaz (less than 1 year) + *Jehoiakim* (11 years) + *Jehoiachin* (less than 1 year) + *Zedekiah* (11 years), which makes 373-397 (22 years) or (24 years). The actual end of the Kingdom of Judah.

- ■ *16b.* Strife of 1285-1307 (22 years) in Italy (?). The end of the Holy Empire of the Xth-XIII centuries A.D.

17a. Jehoiakim 374-385 (11 years).

- ■ *17b. Adolf of Nassau* 1291-1298 (7 years).

18a. Zedekiah 386-397 (11 years).

- ■ *18b. Albrecht I* 1298-1308 (10 years).

19a. The well-known *Babylon Captivity* of the Jews in Babylon under the power of Persia, 397-467 (70 years). Identification of "Persia" either with *P-Russia*, Prussia, or with *B-Russia*, i.e., Belaya (White) Russia, or with France (Paris) = *PRS* without vowels.

- ■ *19b.* The well-known *Avignon Captivity* of "the Popes of Rome" and the Holy Throne in France, 1305 till January 1376, i.e., 70 years. The second set of events described in the Bible as "the Babylonian captivity", see in CHRON6.

Since year zero of the kingdom of Judah falls in the table on year 910 A.D., the chronological shift is approximately 928 + 910 = 1838 years, which is close to the value of the third basic chronological shift by 1800 years. Although this parallelism is a basic one, however, the mediaeval dynasty of the Holy Roman Empire of X-XIII century in itself is largely a mere reflection of a later dynasty of XIV-XVII century. That is why, to a considerable degree, the epoch of the kingdom of Judah is actually XIV-XVI century A.D., though certain events might have taken place in an earlier epoch of XI-XIII century. For more details, see CHRON7.

TABLE 10. EXAMPLE 10, see fig. 6.27, fig. 6.28.

a = the "ancient" kings of Israel of allegedly 922-724 B.C. described in the Bible, 1-2 Samuel + 1-2 Kings and in the books of Chronicles, fig. 6.13. In the Scaligerian history, the kingdom of Israel begins in 922 B.C. ([72]). The dates in the "Biblical part" of our table will be counted "from zero", i.e., we will conditionally consider year 922 B.C. "year zero". Versions of reigns are taken from the Bible, 2 Chronicles and 1-2 Samuel + 1-2 Kings, and from [72]. References to the Bible are indicated in the figure through [B]. With the parallelism we discovered, Scaliger's year 922 B.C. is identified with year 920 A.D.

- ■ *b* = the dynasty consisting of mediaeval *Roman reigns* of allegedly German emperors in Italy allegedly between 920-1170 A.D. I.e., "the dynasty" of the Holy Roman Empire of German nation in the X-XIII century, mostly assembled of intervals between *neighbouring Roman coronations* of the emperors from the following, allegedly German, dynasties: Saxon, Salian or Franconian, Schwabian House – Hohenstaufens. With the rigid chronological shift by approximately 1840 years, dynasties *a* and *b* are identified. It is clear that 1842 = 922 + 920. Versions of reigns are taken from [76], [196], [64].

1a. Jeroboam 0-22 (22 years). The beginning of the "ancient" kingdom of Israel.

- ■ *1b. Hugh of Arles* 926-947 (21 years), king of Italy. The beginning of the empire X-XIII centuries A.D.

2a. Nadab 22-24 (2 years).

- ■ *2b. Lothair* 947-950 (3 years), king.

3a. Baasha 24-48 (24 years). See the table 9, point 3. Let us recall that *Asa of Judah* is the duplicate of *Otto I*. Mind the explicit similarity of the names *Asa* and *Baasha* – probably versions of the name *Jesus*. Let us also recall the parallelism between *Jesus Christ* and his "Roman reflection" – *Gregory Hildebrand*. See the details below. In the "ancient" history, Jesus is considered born under the Roman Emperor *Octavianus* in the beginning of allegedly the Ist century A.D.

- ■ *3b. Otto I the Great*, since year 936 (the German coronation) until 960 (the beginning of the reign of *Otto II*), or since 936 (the

German coronation) until 962 (the Roman coronation). Thus, the duration of the reign is available in two versions: (24 years) or (26 years). In his time, Pope *John XII* under the name of *Octavianus*. See parallel with *Octavianus Augustus*. "Augustus" is translated as "sacred", which corresponds to *John Octavianus* being considered the Pope of Roman.

4*a*. *Omri = Omvri* 51-63 (12 years).
  ■ 4*b*. The period from the *Roman coronation* of 962 to the *German coronation* of 973 (11 years). Note that the death of *Otto I* and the German coronation of *Otto II* occur in 973.

5*a*. *Ahab* 63-85 (22 years). "Double entry" kept in the Bible makes it possible to reveal lacunas in the dynastic stream of Israel, which we shall naturally note ([544], v. 5).
  ■ 5*b*. The period from the *German coronation* of 973 to the *Roman coronation* of 996 (23 years).

6*a*. *Ahaziah* (2 years) + *Joram of Israel* (12 years), i.e., 85-99 (in total sum 14 years). This is the first version for the reign of *Joram* according to the Bible. The complete list of all possible versions for *Joram* see e.g. in [544], v. 5.
  ■ 6*b*. The period from the *Roman coronation* of 996 to the *Roman coronation* of 1014 (18 years).

7*a*. *Joram of Israel* 94-106 (12 years). This is the second version for *Joram* in the Bible.
  ■ 7*b*. The period from the *Roman coronation* of 1014 to the *Roman coronation* of 1027 (13 years).

8*a*. *Jehu* (28 years) + lacuna, strife (2 years), i.e., 99-127-129 (the total of 30 years).
  ■ 8*b*. The period from *the Roman coronation* of 1014 to the *Roman coronation* of 1046 (32 years).

9*a*. *Jehoahaz* (17 years) + *Jehoash* (16 years), i.e., 127 – 144 – 160 (in total 33 years).
  ■ 9*b*. The period from the *Roman coronation* of 1046 to the *Roman coronation* of 1084 (38 years).

10*a*. *Jeroboam II* 160-201 (41 year). Note the appearing secondary identifications: Assyria = P-Russia, the Hittites = the Goths, Persia = P-Russia or France, Babylon = Rome or Avignon.

  ■ 10*b*. The period from the *Roman coronation* of 1084 to the *Roman coronation* of 1125 (41 years). In 1125 *Henry V* dies, the Franconian dynasty ends and the new one begins – the Saxon dynasty.

11*a*. *Menahem* 203-213 (10 years).
  ■ 11*b*. The period from the *Roman coronation* of 1125 to the *Roman coronation* of 1134 (9 years).

12*a*. *Fakh* 215-235 (20 years).
  ■ 12*b*. The period from the *Roman coronation* of 1134 to the *Roman coronation* of 1155 (21 year).

13*a*. *Hoshea* 235-243 (8 years). The wars with Assyria, the attack of Shalmaneser. The identification of Assyria with P-Russia. The identification of "pharaohs", described in the Bible, with the Goths, the Turks, the Francs. Without vowels, the names TRK and TRNK are evidently similar.
  ■ 13*b*. Pope *Alexander III* from his accession to the throne in 1159 until the attack of *Frederick I* in 1167, i.e., the period of 1159-1167 (8 years). In 1143-1155, the Italian wars of Germany. In 1154, Rome is seized by *Frederick I*.

Although this parallelism is a basic one, the mediaeval dynasty of "Roman coronations" in the Holy Roman Empire of the X-XIII century is in itself a mere reflection of a later dynasty of the XIV-XVII century. Details see in CHRON7. Therefore, the actual epoch of the Kingdom of Israel is largely the XIV-XVI centuries A.D., although certain events may have actually taken place in the deep antiquity, i.e., the epoch of XI-XIII century.

TABLE 11. EXAMPLE 11, see fig. 6.29 and fig. 6.30.

G. V. Nosovskiy and yours truly discovered this parallelism together. More detail on this exceptionally important identification in CHRON7.

a = dynasty of Russian czars-khans of 1276-1600 A.D. The data on durations of reigns are taken from [775], [794], [161], [36], [362], [145]. This period in the Russian history is identified, without any chronological shift, with the history of Habsburgs, i.e., both empires are considered simultaneous in the Scaliger-

ian version. A detailed table of reigns of great Russian princes and czar-khans, with detailed references, is presented in CHRON4.

■ *b* = the empire of Habsburgs (Nov-gorod?) in 1273-1600 A.D. The data on durations of reigns are taken from the chronological tables by Blair ([76]) and the work by Oscar Jaeger ([304]).

1a. *Vassili I of Kostroma* 1272-1277 (5 years). The beginning of the dynasty.

    ■ 1b. The beginning of the empire of Habsburgs (Nov-gorod?). 1256-1273, anarchy and a 17 years' war. The first emperor, *Rudolf Habsburg*, begins to reign in 1272, simultaneously with the Russian ruler *Vassily I of Kostroma*. I.e., both empires start virtually at the same time – 1272-1273 A.D.

2a. *Dmitriy I of Pereyaslavl* 1276-1294 (18 years) up to [362]. In [145] he is named *Pereyaslavskiy* (of Pereyaslavl), and also *Nevskiy* (of Neva)! See [145], p. 165.

    ■ 2b. *Rudolf Habsburg* 1273-1291 (18 years) after [76] and [304], v. 2. The name *Rudolf* may once have sounded as *Rudo-Lt*, due to a frequent transition of F to T and vice versa. I.e., *Horde-Lt* or *Horde Latin* or *Orda Lyudei* (Slav. 'horde of people')?

3a. *Andrew of Gorodets* or *Novgorod* 1294-1304, then 1304-1328. A major confusion here, though. According to [145], he first reigned one year only: 1293-1294. Then the source [145] again mentions Andrew of Gorodets, Suzdal and Novgorod, but this time 1302 to 1304, i.e., only two years of reign. In [36] the end of Andrew's reign is not mentioned at all, and in [36] *Ivan Kalita* is first called great prince after Andrew. I.e., Andrew reigned either (1 year), or (2 years), or (10 years), or (34 years). A certain strife here.

    ■ 3b. No duplicate Habsburg emperor here.

4a. *Michael the Saint*, the prince of Tver and Vladimir 1304-1319 (15 years) according to [362], v. 4.

    ■ 4b. *Adolf I of Nassau* 1291-1298 (7 years) (or 1292-1298 according to [304], v. 2, p. 395, i.e., 6 years) + *Alber I* or *Albrecht I* 1298-1307 according to [76] or 1298-1308 according to

[304], v. 2, p. 398 (i.e., 9 or 10 years). Thus, we have the total of (15 years), or (16 years) or (17 years) of reign. Durations of reigns of *Michael the Saint* and *Adolf + Albrecht* virtually coincide.

5a. *George (Yuri, Gyurgi, Gyurgiy) Danilovich "of Moscow"*, a son-in-law of khan Uzbek, 1319-1325 (6 years) according to [362]. In [145] he is named the great prince, but indirectly, at the reference to the death of his son.

    ■ 5b. *Henry VII of Luxemburg* 1309-1314 (5 years) according to [76] or 1308-1313 (5 years) according to [304], v. 2, p. 406. Thus, we have three versions for the duration of reign: (4 years) or (5 years) or (6 years: 1308-1314). Durations of reigns of *George* (6 years) and *Henry VII* (5-6 years) virtually coincide.

    The name *Henry* = Hein-Rich could have meant Khan-Reich, i.e., Khan-Kingdom (Rich = Reich), or Khan-King (Rich = Rex). Thus, the name "Henry of Lux-Burg" could have meant *Khan-Czar of the Excellent City*. Durations of reigns of *George* (6 years) and *Henry VII* virtually coincide.

6a. Strife. Two short-term Russian rulers: *Dmitriy of Vladimir the Bodeful-eyed* 1325-1326 (1 year), according to [362], and *Alexander* 1326-1328 (2 years) according to [362]. Neither one is mentioned in [145] at all. After them, the great principality passes to princes allegedly *of Moscow* (in fact, apparently, to those of Vladimir-Suzdal so far), starting from *Ivan I Kalita*, see the following point.

    ■ 6b. The strife of 1308 (1 year) and *Frederick of Austria* 1314-1322 (8 years) according to [76]. Besides, a short period of strife occurred in 1313-1314, immediately after *Henry VII*. Here, the parallelism is blurred because of the strife.

7a. *Ivan I Danilovich Kalita* (let us note that "Kalita" is simply the title of *Caliph* or *Khaliph*!) 1328-1340 (12 years) according to [362] + son *Simeon the Proud* ('gordy' in Slavic – from *Horde*?) 1340-1353 (13 years) + son *Ivan II the Meek Red* 1353-1359 (6 years) according to [36], [362]. The total: (31 years) of reign.

    ■ 7b. *Ludwig of Bavaria* 1314-1347 (33 years)

according to [76] or 1313-1347 (34 year) according to [304], v.2, p.414. The name *Ludwig* may have meant "ludovy", from the word *Lyudi* (people). The name *Bavaria* could have been a way to pronunciation the name *Barbarian*, *Barbarous*. In this case, the name *Ludwig of Bavaria* could have initially meant "*the People Barbarous*", then was slightly "dignified" by West European chronicles.

8*a*. *Dmitri of Suzdal* 1359-1363 (4 years), according to [362] (or 1360-1363, i.e. 2 years) + *Dmitriy Ivanovich Donskoy* 1363-1389 (26 years), acc. to [362]. The total of (30 years) of reign. Chroniclers might easily unite them in one ruler, since they had the same name – *Dmitriy*.

  ■ 8*b*. *Charles IV* 1347-1378 (31 year) according to [76]. Let us recall that the name of *Charles (Karl)* is simply the title of *King (Korol)*. I.e., "the Fourth King".

9*a*. *Vassili I Dmitriyevich* 1389-1425 (36 years) according to all of the above mentioned sources.

  ■ 9*b*. *Wenceslav* 1378-1400 (22 years) on [76]. The name *Wenceslav* could have meant either *the Crown of Glory (Venets Slavy)* or *the Glorious Crown (Slavny Venets)*, or it could come from the name of the *Slavic Wends*, i.e., *Wends the Glorious (Wendy Slavnye)*. Hence probably the name of the city of *Venice*.

10*a*. *Murza Teginya* in 1425 ([362]).

  ■ 10*b*. *Frederick, the Prince of Brunswick* in 1400 ([940]).

11*a*. *Yuri Dmitriyevich* 1425-1434 (9 years) according to [362], or 1425-1435 (10 years) according to [36].

  ■ 11*b*. *Robert (or Ruprecht) of Palatinum* 1400-1410 (10 years) according to [76]. Note that the name *Palatinum* may have originated from the Slavic word *palaty*, or royal chambers, palace.

12*a*. *Vassili the Cross-Eyed*, reigned in 1434 for several months only ([362], v. 5, chapter 3, and column 154).

  ■ 12*b*. *Jobst* or *Jodocus*, *Margrave of Moravia* in 1410. Reigned approximately 4 months. The name of *Jodocus the Margrave* is listed in the **Lutheran Chronograph** of the XVII century ([940], sheet 340 reverse).

13*a*. *Vassili II the Dark*, or blinded, 1425-1462 (37 years) according to [36], [362], or, counting from the end of the reign of his predecessor *Yuri Dmitriyevich*, 1434-1462 (28 years). He is sometimes assigned 14 or 12 years of reign ([362] and [145]). The duration of his reign of 28 years is in perfect conformity with the duration of his double *Sigismund*, see the next point.

  ■ 13*b*. *Sigismund* 1410-1438 (28 years) according to [76].

14*a*. *Dmitri Shemyaka* 1446-1450 (4 years) according to [362].

  ■ 14*b*. *Albert of Austria* 1438-1440 (2 years). Speaking of *Austria*, see CHRON5. That's how they called *the Eastern Realm*, i.e., *Ost+Riki* or *Ost+Reich* = the Eastern state. The name *Albert* may have originated from *Alba = White*. In that case, "Albert of Austria" is "The White Eastern Realm".

15*a*. *Ivan III Vasilyevich the Great* 1462-1505 (53 years) ([362]). Sometimes he is assigned 43 or 24 years of reign, if counted since the formal independence from the Horde. See details in CHRON4.

  ■ 15*b*. *Frederick III* 1440-1493 (53 years) according to [76].

16*a*. *Vassili III*, he is also *Ivan = Varlaam = Gabriel*, 1505-1533 (28 years) on [362].

  ■ 16*b*. *Maximilian I* 1493-1519 (26 years) according to [76].

17*a*. Strife = *Elena Glinskaya* and *Ivan Ovchina* 1533-1538, then Strife = *the Time of Seven Boyars*, the guardianship council, 1538-1547 (the total of 14 years).

  ■ 17*b*. In the empire of the Habsburgs this strife is formally not marked. There is no gap between reigns of *Maximilian I* and *Charles V* here; therefore, formally we should enter a "zero value" – i.e., no omission or gap – in the reign duration table.

18*a*. *Ivan IV Vasilyevich the Terrible* 1533-1547-1584 (51 years or 37 years). 37 years, if 1547 is assumed as the beginning of the actual individual reign of *the Terrible*, i.e., the end of the strife – *the Time of Seven Boyars*. See previous point.

■ 18*b*. *Charles V* 1519-1556 according to [304], v. 3, p. 27, or 1519-1558 (39 years) according to [76]. Durations of reigns of the duplicate rulers coincide precisely: 37 years = 37 years. Parallelism between the "biographies" of *Charles V* and *Ivan "the Terrible"* see in Chron6.

19*a*. According to our studies presented in Chron4, four czar-khans have actually been united under one name "*the Terrible*". These are: *Ivan IV* 1547-1553, then *Dmitriy* 1553-1563, then *Ivan V* 1563-1572 and finally *Simeon* 1572-1584. Therefore, after *Ivan IV* and *Dmitriy* we should proceed to *Ivan V* 1563-1572 (9 years).

■ 19*b*. *Ferdinand* 1558-1564 (6 years) according to [76].

20*a*. *Simeon* 1572-1584 (12 years).

■ 20*b*. *Maximilian II* 1564-1576 (12 years) according to [76].

21*a*. The end of the parallelism and the end of the old Empire. Here we have the beginning of a "stormy" period in the history of Russia. The following czars are *Feodor Ioannovich* 1584-1598, after him *Boris Godunov* 1598-1605; then, the Great Strife in Russia. The end of the czar dynasty that had reigned for a long time. After the Strife, a different dynasty comes to power – the *Romanovs*.

■ 21*b*. The end of the parallelism and the end of the old Empire.
Rudolf II 1576-1612, the next emperor, "repeats" *Rudolf I Habsburg* from the very beginning of the Habsburg Empire. We approach the end of the old empire. In 1618-1619 the 30-year wars start in Germany ([76]). The first, old empire of the Habsburgs ends here. The second, new dynasty of the Habsburgs, which came to replace it, is of an entirely different origin, q.v. in Chron7.

At this point we will interrupt the enumeration of concise tables of dynastic parallelisms that we have discovered. The remaining parallelisms 12-19, indicated above, and also some others, will be described in more detail in subsequent books of our seven-volume work.

5.
CONFORMITY OF RESULTS OBTAINED BY DIFFERENT METHODS

5.1. General assertion

The following fact is of exceptional importance. Applying all the dating methods we developed to the Scaligerian *Textbook of the ancient history*, or to the global chronological map, we obtain *the same results every time*. This implies that our *new dates* are in good conformity, although obtained by essentially different methods. In particular, the historical "Scaligerian epochs", close in the sense of the coefficient $p(X, Y)$, also prove to be close in the sense of the coefficient $c(a, b)$, as well as the coefficient measuring proximity of forms-codes of dynasties. Moreover, the results obtained conform with *astronomical* datings – in particular, with the effect of the "ancient" eclipses' dates shifted upward, discovered in [544]. See the end of this chapter for more detail on this.

5.2. The agreement of the different methods on the example of the identification of the Biblical Judaic reign with the Holy Roman Empire of allegedly X-XIII century A.D.

A vivid example of conformity between the method of dynastic parallelisms and that based on correlation between volume function maxima. Let us recall this principle.

1) If two chronicles *X* and *Y* are *dependent*, or, describe approximately the same events in the same time interval in the history of the same region, then the local maxima points on their volume graphs must correlate.

2) If two chronicles *X* and *Y* are *independent*, i.e., describe substantially different historical epochs or different regions, then local maxima points on their volume graphs do not correlate.

Let us apply this principle to the "biographies" of the kings of Judah described in the Bible, and the "biographies" of the Roman-German emperors of the Holy Roman empire of the alleged X-XIII century A.D. We have already seen *the Kingdom of Judah* and *the Holy Roman Empire* of the alleged X-XIII century to be *duplicates*, that is, nothing but different reflections of the same original, see table 9 in Chron1, ch. 6.
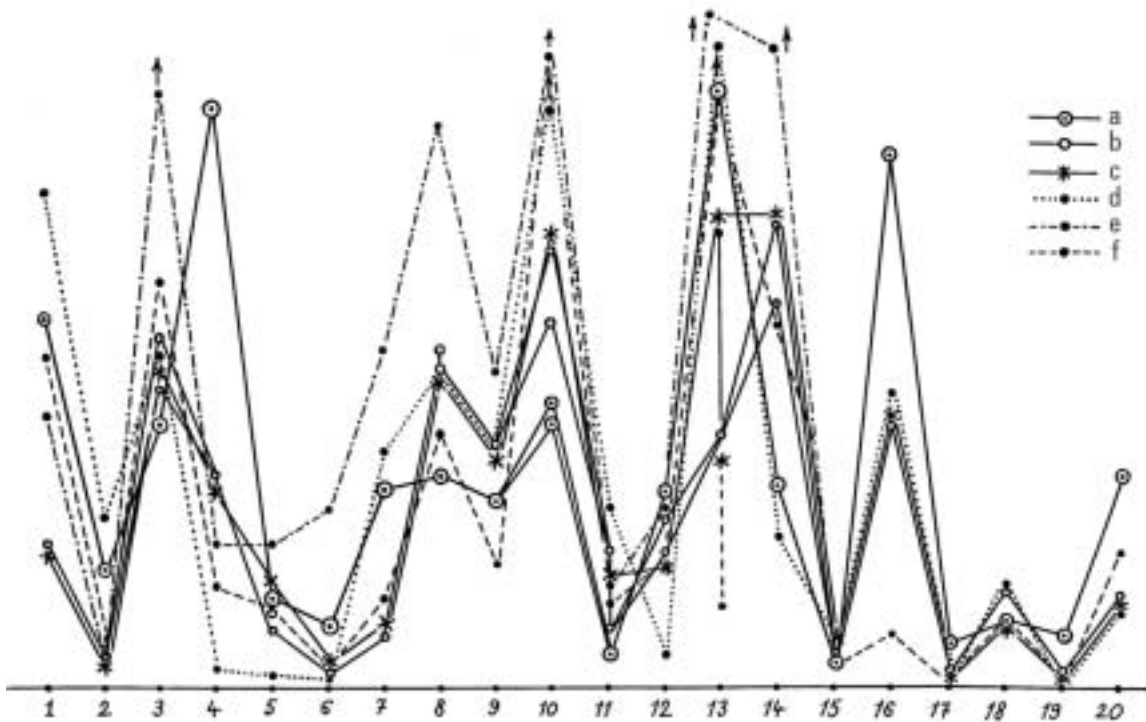
Fig. 6.53. Reign duration and royal biography volume superposition of the Biblical Judaic kingdom of the alleged years 928-587 B.C. and the Holy Roman Empire of the alleged X-XIII century A.D.

Let us verify this dynastic identification in a different way – compare the volumes of "biographies" of kings of both dynasties. If the dynasties are dependent, then the peaks on their volume graphs are expected to be virtually simultaneous.

We understand "the biography of a king" as part of a text related to the events occurring during the reign of this king. If the text does not determine "the biographical boundaries" with sufficient clarity, we assume *the first mention of the ruler in connection with the events of his epoch* to be the beginning of the biography, the way we determined the end of the biography. However, the overwhelming majority of the cases presented no difficulty, as the texts we used would outline the boundaries of biographies with sufficient clarity.

a) The kings of Judah are described in the Bible, in 1-2 Samuel + 1-2 Kings and 1-2 Chronicles. V. P. Fomenko and T. G. Fomenko have counted the number of lines in the Bible for each kings of Judah. The results are assembled in Appendix 6.6 in the end of

CHRON1. The obtained graph – a continuous line and white dotted circles – is depicted in fig. 6.53, with ordinal numbers of the kings of Judah plotted along the horizontal axis in the same order as listed in the Bible.

b) For each king of Judah, the Bible indicates the number of years he reigned. Intermittent disagreements between different indications of the Bible are thoroughly discussed in [544] and Appendix 6.4 to CHRON1. Plotting durations of reigns of the kings of Judah along the vertical axis, we obtain the second curve shown in fig. 6.53 as a continuous line with white dots.

We use the same ordinal numbers along the horizontal axis indicating the kings of Judah for their duplicates, i.e., Roman-German emperors, see the table 9 in CHRON1, ch. 6. For example, dot #1 on the horizontal axis depicts both Rehoboam and his double, emperor Henry I, etc.

c) Along the vertical axis, we plot the duration of reign for each Roman-German emperor. The result

is presented in fig. 6.53 by a continuous line with asterisks.

d) The volume of "biography" for each Roman-German emperor was calculated on the basis of several different but *a priori* dependent sources, the first one being **Rome, Florence, Venice. Monuments of History and Culture** by Y. V. Fedorova ([875]). The volume of each "biography" was measured in centimetres. Text page in the book is 17 centimetres high. The text describing emperor Lothair I, for instance, is 20 centimetres high. We emphasize that measurement units are of no importance, since we are only after the coincidence or difference *of local peaks* of the volume graphs. The resulting curve (volumes according to Fedorova) is presented in fig. 6.53 as a line of dots.

e) The volume of "biography" for each Roman-German emperor was calculated after the well-known book by C. Bemont and G. Monod **The History of Europe in the Middle Ages** ([64]), measured in lines. The resulting curve is shown in fig. 6.53 as a dotted line with points.

f) Finally, the volume of "biography" for each Roman-German emperor was calculated by **The History of Germany** by Kohlrausch ([415]). The resulting curve is shown in fig. 6.53 as a dotted line, scaling along the vertical axis compressed 10-fold.

The result is as follows: six graphs in one figure.

One glance is sufficient for one to be convinced of a vivid correlation between the peaks of all the six curves. The peaks evidently occur virtually simultaneously.

This proves the dependence between the dynasty of kings of Judah and the dynasty of Roman-German emperors. In other words, the Holy Empire of the alleged X-XIII century A.D. in the secular chronicles and the kingdom of Judah of allegedly 928-587 B.C. in the Bible are reflections of the same dynasty.

By the way, we saw something new in this example. The graphs of durations of reigns and the graphs of biographical volumes turn out to satisfy the maxima correlation principle. In other words, this example revealed that *the longer the king reigns, the more detail he is described in by a chronicle.* Vice versa, *if his reign is brief, the chronicle saves little space for him.* A model like that is certainly accurate "on the average"; however, this dependence looks quite natural and is helpful for the exposure of new dependent historical dynasties.

6.
THE GENERAL LAYOUT OF DUPLICATES IN "THE TEXTBOOK BY SCALIGER-PETAVIUS"
The discovery of the three basic chronological shifts

The main result that the author obtained in 1977-1979 is that *the "Scaligerian textbook" on ancient and mediaeval history is the result of joining four virtually identical shorter chronicles, shifted by approximately 333, 1050, and 1800 years versus their mediaeval original.*

As an example, we shall describe part *E* of the global chronological map – i.e., the "Scaligerian textbook" – on the time segment from 1600 B.C. until 1800 A.D. in the history of Europe, including Italy, Germany,
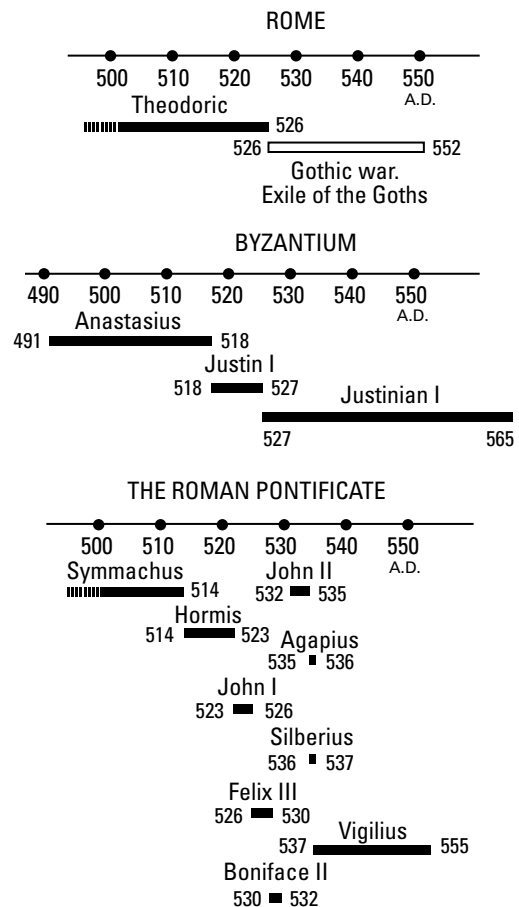

Fig. 6.54. A fragment of the global chronological map (or the Scaligerian history textbook). One sees the mechanism of the construction of the entire chronological map.

and Greece. The result is presented as line *E*, on which "the Scaligerian historical epochs" are conditionally indicated by letters. In doing so, we denoted the discovered duplicates, – or epochs duplicating each other, proven close from the point of view of the methods described above – by identical letters. Such duplicates can also be conditionally named "repetitions". Due to the enormous amount of material, we shall present a rough diagram here. Boundaries of time intervals are approximate. The letters in the numerator are identical epochs, kind of "co-rulers". To assemble the information traditionally referring to a certain year on the global chronological map, one should draw a vertical segment through this year on line *E* and assemble the fragments of epochs and events it carves on the numerator and denominator of the fraction. Fig. 6.54 presents a fragment of the global chronological map showing the principles of its projection on the plane. Thus:

$$E = T\,K\,T\,N\,T\,T\,\overline{K}\,T\,N\,T\,\overline{K}\,T\,T\,\overline{K}\,T\,N\,T\,T\,\overline{(K,R,P)}\,T\,(S,N)$$
$$\overline{R}\quad\overline{S}\quad\overline{R}\quad\frac{\overline{P}}{\overline{S}}\quad\frac{\overline{P}}{\overline{P}}\quad\overline{S}$$
$$\frac{}{\overline{P}}$$

Fig. 6.55 maintains the time scale. This chronicle line *E* is the most important part of the "Scaligerian textbook". We see that it contains repetitions of duplicate epochs. Moreover, it is decomposed into a simple composition, or the "sum" of the following three chronological shifts. We will represent this decomposition in the form of four lines – the chronicles S_1, S_2, S_3, S_4, shown in the following table:

K TN T TR TS			S_4
shift by 1778 years K TN TRT S			S_3
shift by 1053 years K TP TRT			S_2
shift by 333 years $\dfrac{K\ \ TNT\ (K,R,P)\,T(S,N)}{\overline{R}\qquad\overline{P}}$			S_1
(K,R,P) T(S,N)			S_0

The same decomposition of chronicle *E* considering the time scale can be seen in fig. 6.55. The short chronicle S_0, describing the epoch of Xth-XVII centuries A.D., is *the original*. Moreover, *very little information* is available nowadays about the epoch of XI-XIII century A.D.

7.
THE SCALIGERIAN TEXTBOOK OF THE ANCIENT HISTORY GLUED TOGETHER FOUR DUPLICATES OF THE SHORT ORIGINAL CHRONICLE

By adding up all these "short chronicles" on the vertical axis, identifying and collating the identical letters positioned above each other, we obviously obtain "the long chronicle" *E*. Thus, we can record that

$$E = S_1 + S_2 + S_3 + S_4.$$

It is important that all four lines, each depicting a certain short chronicle assembled from fragments of the "Scaligerian textbook", are virtually identical.

Morever, chronicle S_2 is attached to chronicle S_1 with a 333 years' shift downward. Chronicle S_3 is attached to chronicle $S_1 + S_2$ with a 1053 year shift. Finally, chronicle S_4 is attached to chronicle $S_1 + S_2 + S_3$ with a 1778 year shift.

All the three shifts are counted off the same point. These results completely conform to the independent conclusions obtained in [904] and [908] from the *astronomical* datings of eclipses and horoscopes.

This basic result of ours can possibly be explained by stating that the "Scaligerian textbook" of ancient and mediaeval history of Europe and Asia is a laminated chronicle obtained by the collation of four virtually identical copies of the short chronicle S_1. The remaining three chronicles S_2, S_3, S_4 are derived from chronicle S_1 by shifting it downward in time as a rigid whole by 333, 1053, and 1778 years accordingly. The indicated values of shifts are of course approximate.

In other words, the "Scaligerian textbook", – and therefore contemporary textbooks of history as well, – can be completely restored from their smaller part S_0, all of which lies to the right of year 960 A.D. In other words, each "Scaligerian historical epoch" located further to the left, i.e., below 960 year A.D., is only a phantom reflection of a certain later historical epoch, all of which lies to the right of year 960 A.D. It is the "original" of all phantom duplicates generated therein. Fragments (*K*), (*R*) and (*P*) of the original chronicle S_0 contain very little data. The principal part of the chronicle S_0 is concentrated in its fragments (*T*), (*S*), (*N*) located to the right of 1250 A.D., that is, closer to us.

The above-said means that each "Scaligerian epoch" placed further right of 1000 A.D. is a reflec-
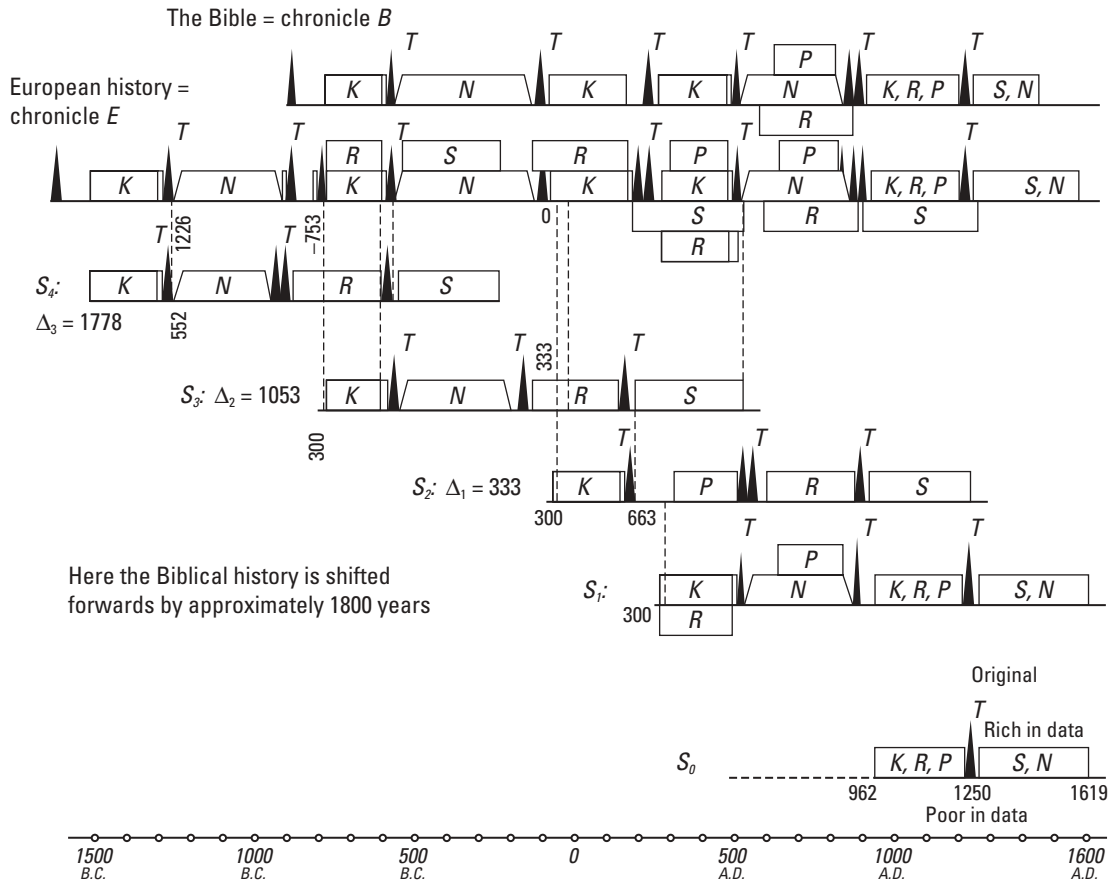
Fig. 6.55. The global chronological map. The "Scaligerian history textbook" is presented as a compilation of four practically identical short chronicles.

tion, or a duplicate of a certain later actual historical epoch from the XI-XVII century A.D. This latter epoch is actually the prototype of all the duplicates (reflections) generated thereby.

The period of the XVII-XX century A.D. contains no major statistical phantom duplicates. The interval of the X-XIII century appears to be the "sum" of two chronicles: a real one, describing certain events of the X-XIII century, and a phantom duplicate, introduced from the period of XIV-XVII century A.D. with a chronological shift by approximately 300 years backwards.

One of the last events that the chronological shift has shifted backwards from its actual epoch of XIV-XVIII century was probably the result of the activity of a well-known mediaeval chronologist Dionysius

Petavius (1583-1652). He is "reflected in the past", in particular, as Dionysius the Little, in the alleged VI century A.D. It is interesting that our empirico-statistical methods had not revealed any statistical duplicates for the events which occurred after Dionysius Petavius. One may state that after the death of Dionysius Petavius, there were no further chronological shifts in history. Most likely, this indicates that Scaliger and Petavius invented these shifts themselves and "multiplied history" in several copies. In the following chapters we shall discuss our hypothesis concerning their motivations.

The assertion that the stratification of the Scaligerian textbook is exposed not only for the history of Europe and the Mediterranean, but for the entire global

chronological map as well, in Scaligerian datings, including Asia, Egypt, etc. is the main result of the first stage of our studies in 1974-1980.

8.
THE LIST OF PHANTOM "ANCIENT" EVENTS WHICH ARE PHANTOM DUPLICATES, OR REFLECTIONS OF THE MEDIAEVAL ORIGINALS

Let us describe the phantom epoch blocks in the Scaligerian chronicle *E* in greater detail, moving from left to right along the time axis. Let us also point out appropriate chronological milestones, or the Scaligerian dates, which characterize each fragment of the chronicle *E*. Let us explain that historical events, or even entire epochs, indicated with the same symbol, e.g. *N*, in fig. 6.55, appear to be chronological duplicates, or reflections of the same mediaeval original. The same information is shown in more detail in fig. 6.56, fig. 6.57 and fig. 6.58.

Thus: chronicle *E* =

(*T*) = ancient Greek legends of Dardanus and "the Dardanus' flood".

(*K*) = the legendary Trojan kingdom of seven kings, allegedly in 1460-1240 B.C.

(*T*) = the famous Trojan War and the fall of Troy, allegedly in 1236-1226 B.C.

(*N*) = dynasties of kings of the "ancient" Greece from the fall of Troy to the foundation of Rome.

(*T*) = the second variant of dating for the fall of Troy, approximately 1-2 generations prior to the foundation of Rome, allegedly about 850-830 B.C. Such was the opinion of the "ancient" authors Hellanic and Damastus ([579], pages 23-25, who lived in the alleged IV century B.C. This opinion was later supported by Aristotle. Then follows the flight of Aeneas and Trojan survivors after the fall of Troy. The history of their descendants and landing in Italy.

(*T*) = legends about Romulus and Remus, the foundation of Rome, the rape of the Sabines, allegedly about 760-753 B.C.

(*K/R*) = the Regal Rome of seven kings, allegedly about 753-523 B.C. The Regal Rome is described by Titus Livy. We will sometimes refer to this kingdom as the First Roman Empire.

(*T*) = expatriation of kings from Rome, the revolt in Rome, the war against the Tarquinians, the fall of the Regal Rome, the foundation of the "ancient" Roman republic, allegedly 522-509 B.C.

(*N/S*) = "ancient" republican Rome and "ancient" Greece, the Greco-Persian wars, the Peloponnes war, the Carthaginian (Punic) wars of Rome, the empire of Alexander of Macedonia, allegedly 509-82 B.C.

(*T*) = the fall of republic in Rome, Sulla, Pompey, Caesar, Octavianus, civil wars in Italy, allegedly 82-23 B.C.

(*K/R*) = the Roman Empire allegedly from 82-27 years to 217 A.D. Near the beginning of A.D., the activity of Jesus Christ starts. We will sometimes refer to this Empire as the Second Roman Empire.

(*T*) = wars and crises in Italy allegedly in the middle of the III century A.D.(235-251), wars against the Goths, the so-called "soldier emperors" in Rome, the period of anarchy allegedly in 217-251 A.D.

(*T*) = restoration of the Roman Empire under Aurelian and civil wars of this period, allegedly 270-306 A.D.

(*K/P/S/R*) = the Roman Empire allegedly from 306 to 526 A.D. Sometimes we will call this kingdom the Third Roman Empire.

(*T*) = the well-known Gothic war in Italy, allegedly in the middle of the VI century A.D., the collapse of the Western Empire of Rome, Justinian, Velizarius, Narses, allegedly 535-552 A.D.

(*N/P/R*) = mediaeval Papal Rome of allegedly 553-900 A.D. and the Carolingians, the Empire of Charles the Great from Pepin of Heristal to Charles the Fat, allegedly 681-887 A.D.

(*T*) = the epoch of Alberic I and Theodora I in Rome, allegedly 901-924 A.D.

(*T*) = the epoch of Alberic II and Theodora II in Italy, allegedly 931-954 A.D.

((*K, R, P*)/*S*) = the Holy Roman Empire, allegedly 962-1250 A.D.

(*T*) = the well-known war in Italy in the middle of the XIII century A.D., the fall of the Hohenstaufen dynasty, establishment of the House of Anjou, Conrad, Manfred, Charles of Anjou, 1250-1268 A.D.

(*S, N*) = The Roman-German Empire of the Habsburgs (Nov-gorod?), 1273-1619 A.D., in the same period – the bloom of mediaeval Greece, the crusader states on the territory of Greece, then the Ottoman = Ataman invasion, the fall of Constantinople and the Byzantine Empire, formation of the Ottoman = Ataman Empire.
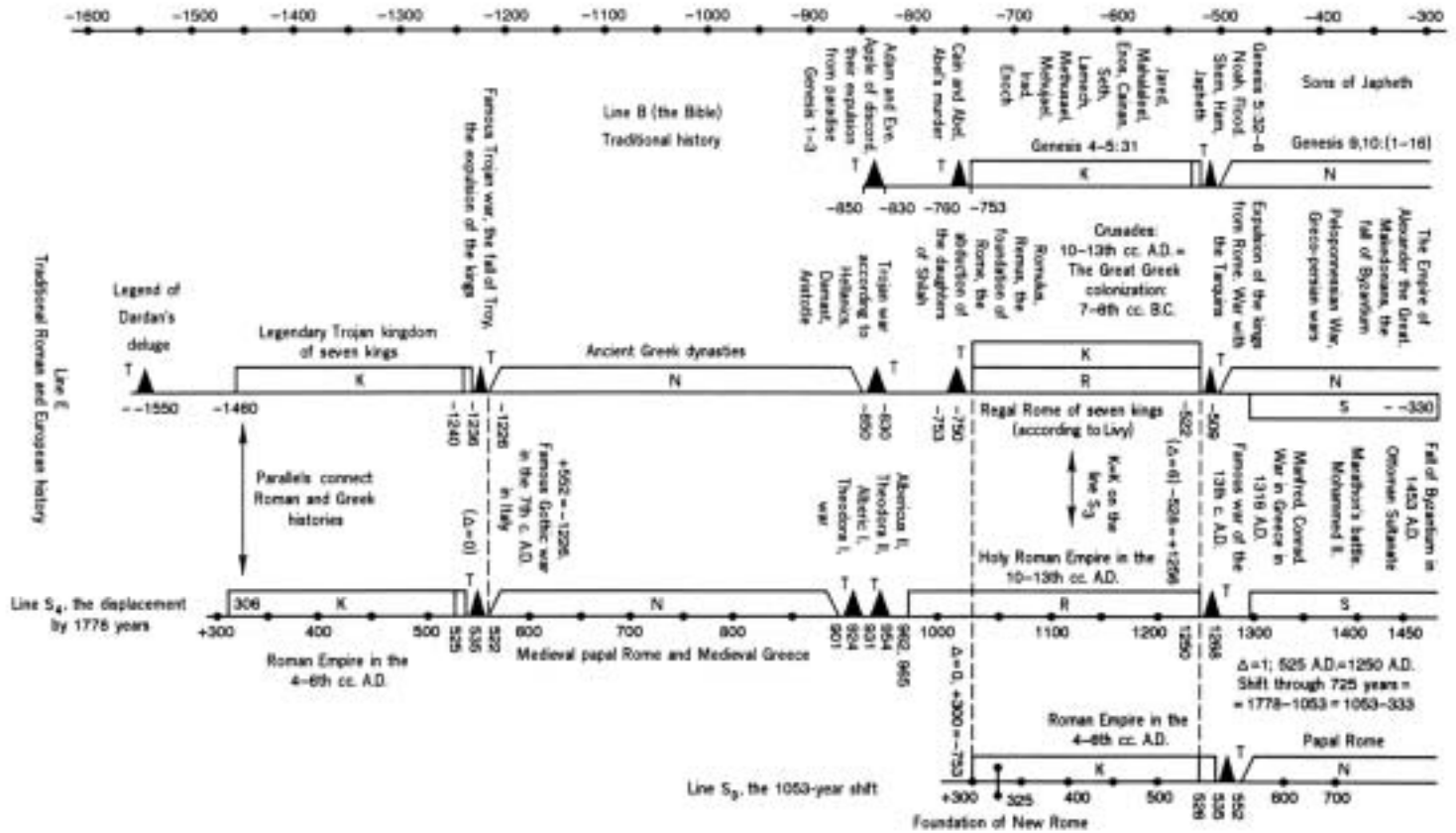
Fig. 6.56. A more detailed representation of the global chronological map and the system of chronological shifts. Part one.
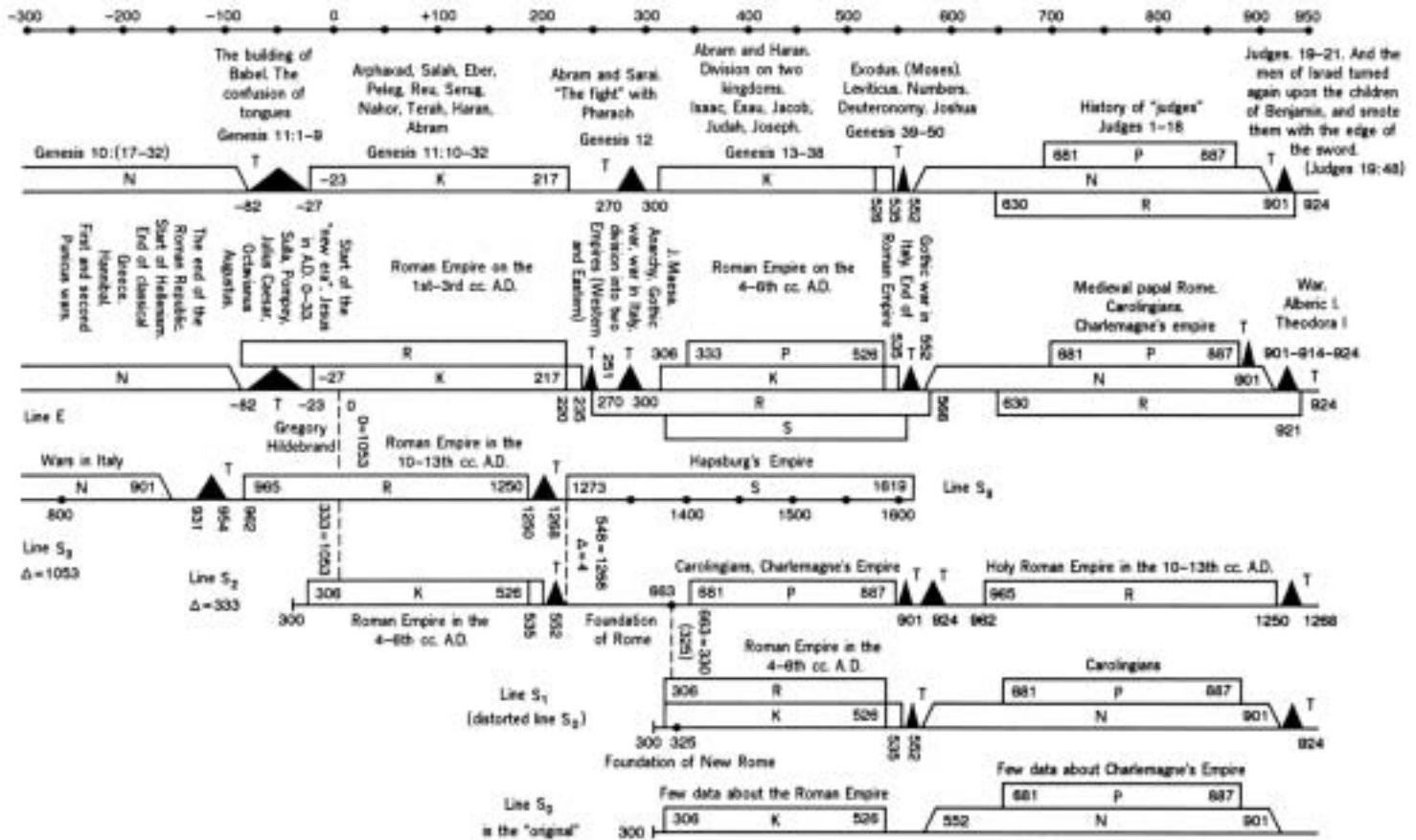
Fig. 6.57. A more detailed representation of the global chronological map and the system of chronological shifts. Part two.
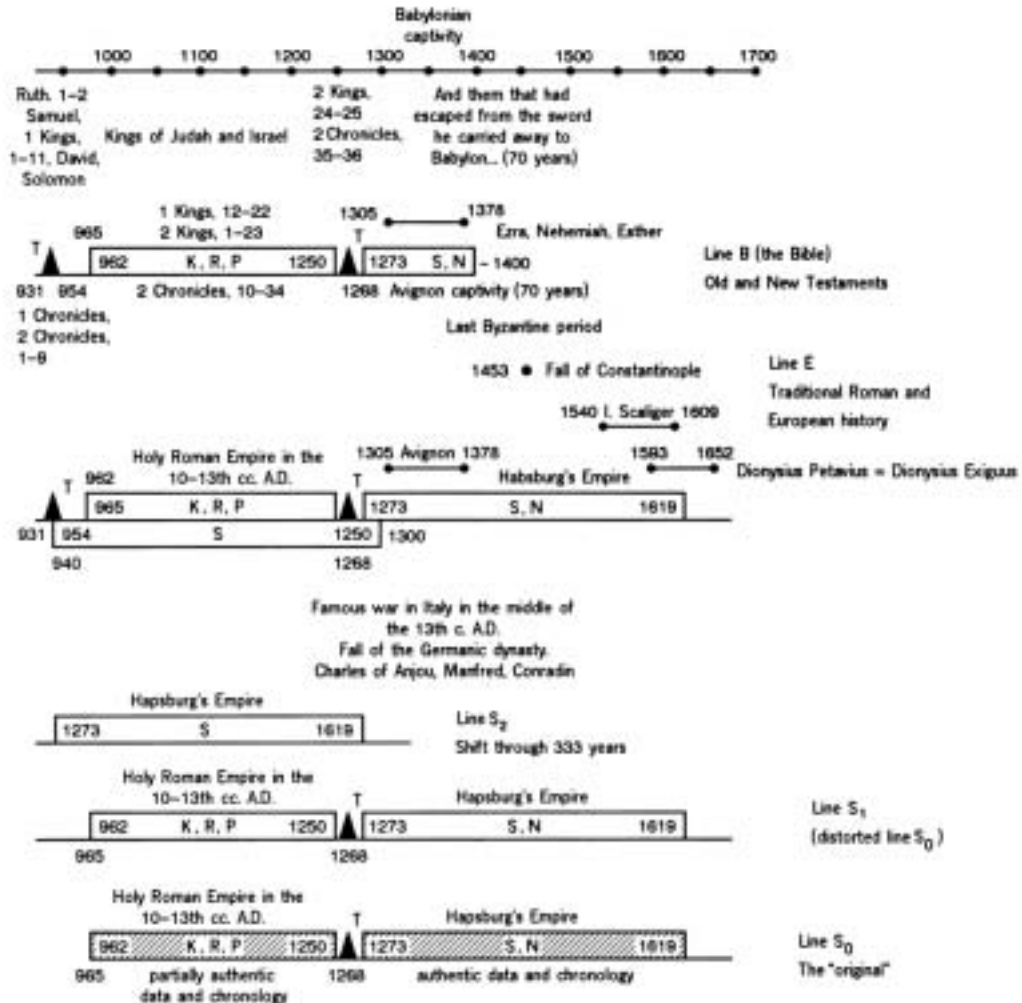
Fig. 6.58. A more detailed representation of the global chronological map and the system of chronological shifts. Part three.

Furthermore, the "Scaligerian textbook" *E* presents the dynasties of Byzantium beginning from allegedly 330 A.D., the list of which is omitted here. Let us recall that epochs designated in fig. 6.55 with identical symbols are duplicates, consisting of "the same events". For example, this is relevant for the following famous wars:

1) The Trojan war of the alleged XIII century B.C.

2) The war against the Tarquinians in Rome allegedly of VI century B.C.

3) The civil war between Sulla, Pompey and Julius Caesar in Italy in the alleged I century B.C.

4) The civil war of the alleged III century A.D. in Rome.

5) The Gothic war of the middle of the alleged VI century A.D. in Italy.

6) The civil war of allegedly 901-924 A.D. in Rome.

7) The civil war of allegedly 931-954 A.D. in Rome.

8) The war in the beginning of the Holy Roman Empire of the X-XIII century A.D.

9) The war in Europe and, in particular, in Italy of the middle of the XIII century A.D. Seizure of Constantinople, the fall of the Hohenstaufens, establishment of the House of Anjou.

This last war of the XIII century A.D. is probably the mediaeval original of all other "ancient" wars noted in the Scaligerian chronicle *E* with the conditional symbol *T* in fig. 6.55. Let us present a curious table we composed using our methods. It lists the main characters of the indicated nine duplicate wars superposed over one other.

In other words, all the characters indicated in the table with the letter "*a*" are each other's duplicates.

Likewise, all the characters marked in the table with the letter "*b*" are also duplicates.

All the characters of the series "*c*" are duplicates as well, or the phantom reflections of the same mediaeval character.

Finally, all the characters indicated with the letter "*d*" appear to be duplicates as well.

The details of identification of these "ancient" and mediaeval characters and their form-codes are related in the following chapters and in Chron2.

1. The Trojan war of the alleged XIII century B.C.
- ■ 1-*a. Odysseus* = Ulysses or Ullyses, possibly a.k.a. Achilles.
- ■ ■ 1-*b. Agamemnon.*
- ■ ■ ■ 1-*c. Achilles.*
- ■ ■ ■ ■ 1-*d. Patroclus.*

2. The Tarquinian war of the alleged VI century B.C. in Rome.
- ■ 2-*a. Lartius + Martius Coriolanus.*
- ■ ■ 2-*b. Tarquin the Proud.*
- ■ ■ ■ 2-*c. Valerius.*
- ■ ■ ■ ■ 2-*d. Junius, son of Marcus Brutus.*

3. The Civil war of the alleged I century B.C. in Rome.
- ■ 3-*a. Lucius Sulla* and *Cicero(n)* (*NRCC*, if read in reverse).
- ■ ■ 3-*b. Pompey the Great.*
- ■ ■ ■ 3-*c. Julius Caesar.*
- ■ ■ ■ ■ 3-*d. Marcus Brutus.*

4. The civil war in Rome of the alleged III century A.D.
- ■ 4-*a. Lucius Aurelianus.*
- ■ ■ 4-*b. Diocletian the Great.*
- ■ ■ ■ 4-*c. Constantius Chlorus.*
- ■ ■ ■ ■ 4-*d.* ?

5. The Gothic war of the alleged VI century A.D. in Rome.
- ■ 5-*a. Narses*, Narcius.
- ■ ■ 5-*b. Justinian* and *Theodora.*
- ■ ■ ■ 5-*c. Velizarius.*
- ■ ■ ■ ■ 5-*d. John II.*

6. The civil war in Rome, allegedly in 901-924 A.D.
- ■ 6-*a. Alberic I* (?) and *Marocius* (?).
- ■ ■ 6-*b. Theophilactus* and *Theodora I.*
- ■ ■ ■ 6-*c. Alberic I.*
- ■ ■ ■ ■ 6-*d. John X.*

7. The civil war in Rome allegedly in 931-954 A.D.
- ■ 7-*a.* ?
- ■ ■ 7-*b. Hugo* and *Theodora II.*
- ■ ■ ■ 7-*c. Alberic II.*
- ■ ■ ■ ■ 7-*d. John XI.*

8. The beginning of the Holy Roman Empire of German nation of the X-XIII century A.D.
- ■ 8-*a. Otto I, Otto II, Octavian Augustus.*
- ■ ■ 8-*b. Otto III.*
- ■ ■ ■ 8-*c. Alberic II.*
- ■ ■ ■ ■ 8-*d.* ?

9. The war in Europe and Italy of the XIII century A.D. The fall of the mediaeval city of Troy in Italy.
- ■ 9-*a. Charles of Anjou, NRCC,* see below.
- ■ ■ 9-*b. Innocent IV.*
- ■ ■ ■ 9-*c. Charles of Anjou* (?).
- ■ ■ ■ ■ 9-*d. John XXI.*

The same table is conveniently represented in a somewhat different way. We list the four groups of duplicate characters, assigning numbers 1 through 9 to the wars they are described in by the "Scaligerian textbook". Roughly speaking, each of the four characters was "multiplied" as a result of the chronologists' errors – but only on the paper! – in approximately nine copies.

- ■ a-1. *Odysseus* = Ulysses or Ullyses, possibly a.k.a. Achilles.
- ■ ■ a-2. *Lartius + Martius Coriolanus.*
- ■ ■ ■ a-3. *Lucius Sulla* and *Cicero(N) (NRCC,* if read in reverse).
- ■ ■ ■ ■ a-4. *Lucius Aurelianus.*

■ ■ ■ ■ ■ a-5. *Narses*, Narcius, i.e. *NRCS* without vowels.

■ ■ ■ ■ ■ ■ a-6. *Alberic I* (?) and *Marocius* (?).

■ ■ ■ ■ ■ ■ ■ a-7. ?

■ ■ ■ ■ ■ ■ ■ ■ a-8. *Otto I, Otto II, Octavianus Augustus.*

■ ■ ■ ■ ■ ■ ■ ■ ■ a-9. *Charles of Anjou, NRCC*, see below.

■ b-1. *Agamemnon.*

■ ■ b-2. *Tarquin the Proud.*

■ ■ ■ b-3. *Pompey the Great.*

■ ■ ■ ■ b-4 *Diocletian the Great.*

■ ■ ■ ■ ■ b-5. *Justinian* and *Theodora.*

■ ■ ■ ■ ■ ■ b-6. *Theophilactus* and *Theodora I.*

■ ■ ■ ■ ■ ■ ■ b-7. *Hugo* and *Theodora II.*

■ ■ ■ ■ ■ ■ ■ ■ b-8. *Otto III.*

■ ■ ■ ■ ■ ■ ■ ■ ■ b-9. *Innocent IV.*

■ c-1. *Achilles.*

■ ■ c-2. *Valerius.*

■ ■ ■ c-3. *Julius Caesar.*

■ ■ ■ ■ c-4. *Constantius Chlorus.*

■ ■ ■ ■ ■ c-5. *Velizarius.*

■ ■ ■ ■ ■ ■ c-6. *Alberic I.*

■ ■ ■ ■ ■ ■ ■ c-7. *Alberic II.*

■ ■ ■ ■ ■ ■ ■ ■ c-8. *Alberic II.*

■ ■ ■ ■ ■ ■ ■ ■ ■ c-9. *Charles of Anjou* (?).

■ d-1. *Patroclus.*

■ ■ d-2. *Valerius.*

■ ■ ■ d-3. *Junius, son of Marcus Brutus.*

■ ■ ■ ■ d-4. ?

■ ■ ■ ■ ■ d-5. *John II.*

■ ■ ■ ■ ■ ■ d-6. *John X.*

■ ■ ■ ■ ■ ■ ■ d-7. *John XI.*

■ ■ ■ ■ ■ ■ ■ ■ d-8. ?

■ ■ ■ ■ ■ ■ ■ ■ ■ d-9. *John XXI.*

In our opinion, the discovered decomposition of the "Scaligerian textbook" into a sum of the three indicated shifts is naturally explained by the inevitable process of creating a global chronology and the history of antiquity, which started in late Middle Ages of the XVI-XVII century. Moreover, it was for the first time that the historical material accumulated by that time – separate texts, chronicles, etc. – was put in order.

However, as all these pieces were collated into one diagram, a serious error occurred. The four copies of the same short chronicle S_1 or S_0 (q.v. above) actually describing the same history of Europe and Mediterranean, were perceived as different chronicles describing different events. Because of this, four almost identical chronicles were collated not *in parallel* as they should have been, but rather *in succession*, with shifts by 333, 1053, and 1778 years, on the average. As a result, from the "short chronicle" S_1 they obtained the artificial "extended Scaligerian chronicle" E. This was actually how the contemporary textbook on the ancient and mediaeval history appeared. We tried to fathom the reasons that could have lead to such confusion and generate such shifts. Since the analysis of this material requires significant historical digressions, we will discuss it in the subsequent volumes of the present edition.

9.
IDENTIFICATION OF THE "ANCIENT" BIBLICAL HISTORY WITH THE MEDIAEVAL EUROPEAN HISTORY

The "Scaligerian textbook" features other pieces, differing from the European-Asian chronicle E, which contain phantom duplicates and are also a sum, or a collation of several "shifted chronicles". This, for example, is pertinent to the history described in the Bible. We have already reported many phantom duplicates revealed in the Bible. See the linear chronicle B in fig. 6.55. In the description of this chronicle we intentionally used the same letter symbols as in that of the "European" chronicle E. The thing is that the Biblical chronicle B proves to be virtually identical with the part of European chronicle E describing the European-Asian mediaeval history of the XI-XVI century. In a more accurate presentation it looks like this:

the chronicle E = T K T N T (the chronicle B)

$$\overline{\text{R S R P S}}$$
$$\overline{\text{S}}$$
$$\overline{\text{R}}$$

Fig. 6.55 shows the identification of the Biblical chronicle B with the part of the Scaligerian European chronicle E with regard to the time scale.

It is evident that the so-called historical part of the Bible, the Old Testament, is identified with a part of the Scaligerian "European textbook" E in the range from 850 B.C. to 1400 A.D. However, since the Bible appeared to contain many phantom duplicates, then the Old Testament, likewise "Scaliger's textbook" E, can be completely restored from its smaller part – namely, the part to the right of 900 A.D. on the time axis. Furthermore, the entire Old Testament, as well as the entire Bible and the entire "chronicle E", can actually be restored from the part describing the mediaeval events of 1000-1600 A.D. Moreover, the New Testament probably describes events occurring in the XI century A.D. in the New Rome, Constantinople.

In particular, the structure of discovered duplicates leads to the conclusion that the epoch of Christ, or the XI century A.D. according to the new chronology, was reflected in the religious history of Italy of the XI century as "the epoch of Pope Gregory Hildebrand". As we have already noted, the name *Hild-Brand* could mean *Ablaze With Gold*. In the Scaligerian interpretation of the world history, it is the epoch of Hildebrand, or Pope Gregory VII, who instigated the era of crusades, is marked by the well-known schism of churches around 1054 A.D., and gives birth to the new reformist "church of Hildebrand" in Europe. However, the actual Pope Gregory Hildebrand should not be thought to have been the Christ of the Gospel. Rather on the contrary, the story about the activity of "Pope Hildebrand" in the Scaligerian version of the history of Italy was only a reflection of the actual Evangelical events of the XI century A.D. – though not in Italy, but most likely in the New Rome, or Constantinople = Jerusalem of that time. For more detail, see CHRON5 and CHRON6.

We discovered the identification of the Biblical chronicle B with a part of the Scaligerian European chronicle E as a result of applying the empirico-statistical procedures as described above. Let us demonstrate this identification on the example of the volume graphs compared with the help of the coefficient $p(X, Y)$. Let us examine the period from 800 B.C. until 1300 A.D. in the Scaligerian history of Italy and Europe as a whole.

We assumed the sum of two fundamental monographs, based on the "ancient" and mediaeval documents streamlined according to the Scaligerian chronology, to be the "chronicle" X describing the flow of events in the range from 800 B.C. until 1300 A.D. These are *The Description of the Roman History and the Source Study* by B. Niese ([579]), and *The History of the City of Rome in the Middle Ages,* a multi-volume work by F. Gregorovius ([196]). In doing so, the book by Niese covers an epoch from allegedly 800 B.C. to 552 A.D., and the book by Gregorovius – 300 A.D. up to 1300 A.D. By joining and collating these two books in their common interval of 300-552 A.D., we obtain the final "chronicle" X covering the total of 2100 years, from 800 B.C. to 1300 A.D.

This summary text X contains a fairly detailed chronological scale – of course, a Scaligerian one – which makes it possible to calculate the volume function *vol* $X(T)$. For the calculation of the volume function on the overall interval of 300-552 A.D. in which the books by Niese and Gregorovius are identified with each other, we took the arithmetical value of their per annum volumes, so that none of the books would stand out, both being equally correct.

This "chronicle X" was then broken up into the separate fragments $X(T)$, which made it possible to plot the volume graph of "chapters" $X(T)$ along the entire 2100 year range from 800 B.C. until 1300 A.D.

Let us now examine the Old Testament in order to plot a volume graph of "chapters" for it and compare this graph to the appropriate graph for the Scaligerian European chronicle X. The problem is that the Bible doesn't contain a detailed enough timescale. However, as we have already mentioned, it is possible to break up the Bible into virtually unambiguous "generation chapters" $B(T)$, where the ordinal number T varies from 1 to 218. Let us examine the first 137 "generation chapters", from the Genesis up to 2 Kings. As 1-2 Samuel + 1-2 Kings actually duplicate 1-2 Chronicles, then "chapters" 138-167 duplicate "chapters" 98-137, therefore are of no interest to us now. "Chapters" 103-137 are described in 1-2 Samuel + 1-2 Kings with detailed chronological indications, making it possible to quite accurately determine the length of the time interval described therein – 341 year. See a more detailed definition of this interval in [904] and [908]. The same duration of this period is indicated in [72].

For the remaining Biblical generation chapters numbered 1-102, there are no such detailed chronological indications in the Bible. Therefore, to determine the length of time interval described therein, we had

to act without sufficient precision. The analysis of "chapters" 1-102 showed that virtually each of them, while describing events of one generation, connects it with some central character – "ruler". Duration of his "reign" can be accepted as the "duration of generation". We have already noted that an average duration of ancient and mediaeval reigns as calculated by us on the basis of chronological tables ([76]), is 17.1 years, or 17 years if rounded.

This average value makes it possible to approximately estimate the period "covered" by 102 Biblical generations: $102 \times 17 = 1734$.

Thus, the Biblical generation chapters 1-137, or the historical part of the Old Testament minus the books with moralistic content, can be considered to describe a historical period of approximately 2075 years long, since $1734 + 341 = 2075$ years. This figure, as we see, appears to be very close to 2100, or the length of the Scaligerian European period as described in "chronicle" X.

Therefore, the epochs of an approximately identical length can assumed to be described in "chronicles" X and the Bible B. That is why, while comparing their volume functions, one can simply identify these time intervals with each other sans compressions or stretches. In other words, both of these "chronicles" can be attributed to the same time scale.

Now let us compare the volume functions $vol\,X(T)$ and $vol\,B(T)$ calculated for "the Roman chronicle" X and the Bible B. Let us assume the fragmentation of the entire range from 800 B.C. until 1300 A.D. into 19 fragments as the simplest time scale common for both texts. These fragments naturally appear on the time axis if we mark the locations of all duplicates of series $\{T\}$ that we discovered earlier during the statistical analysis of the Bible. Duplicates of the type $\{T\}$ are fragments of the Bible, each one covering a relatively small time interval. By indicating them on the time axis we obtain a set of "points $\{T\}$", which can be used as boundaries of 19 fragments. The boundaries of the obtained fragments appear to be approximately set by the following Scaligerian dates:

800 B.C., 770, 750, 520, 509, 380, 100 B.C., 14 A.D., 98, 235, 305, 493, 552, 715, 901, 1002, 1054, 1250, 1263, 1300 A.D.

The "points $\{T\}$", or the duplicates of the series $\{T\}$, divide the Bible – more precisely, the historical part of the Old Testament – into 19 blocks. The volume of each one was calculated.

We have thus obtained an appropriate fragmentation of the sequence of "generation chapters" composing the chronicle B, into the following 19 groups:

1) the period of the alleged years 800-770 B.C. is not described in the Bible;

2) the period of the alleged years 770-750 B.C. corresponds to "generation chapter" number 1;

3) the period of the alleged years 750-520 B.C. corresponds to "chapters" 2-14;

4) the period of the alleged years 520-509 B.C. corresponds to "chapter" 15;

5) the period of the alleged years 509-380 B.C. corresponds to "chapters" 16-23;

6) the period of the alleged years 380-100 B.C. corresponds to "chapters" 24-39;

7) the period the alleged years from 100 B.C. to 14 A.D. corresponds to "chapters" 40-46;

8) the period of the alleged years 14-98 A.D. corresponds to "chapters" 47-50;

9) the period of the alleged years 98-235 A.D. corresponds to "chapters" 51-59;

10) the period of the alleged years 235-305 A.D. corresponds to "chapters" 60-62;

11) the period of the alleged years 305-493 A.D. corresponds to "chapters" 63-73;

12) the period of the alleged years 493-552 A.D. corresponds to "chapters" 74-78;

13) the period of the alleged years 552-715 A.D. corresponds to "chapters" 79-88;

14) the period of the alleged years 715-901 A.D. corresponds to "chapters" 89-97;

15) the period of the alleged years 901-1002 A.D. corresponds to "chapters" 98-102, 141, 142;

16) the period of the alleged years 1002-1054 A.D. corresponds to "chapters" 143-147;

17) the period of the alleged years 1054-1250 A.D. corresponds to "chapters" 148-162;

18) the period of the alleged years 1250-1268 A.D. corresponds to "chapter" 163;

19) the period of the alleged years 1268-1300 A.D. corresponds to "chapters" 164-167.

At the end of the list we made use of the fact that Biblical "chapters" 141-167 duplicate "chapters" 103-137. Thus, we introduced the same time scale in both "chronicles": $X =$ the Scaligerian textbook and $B =$
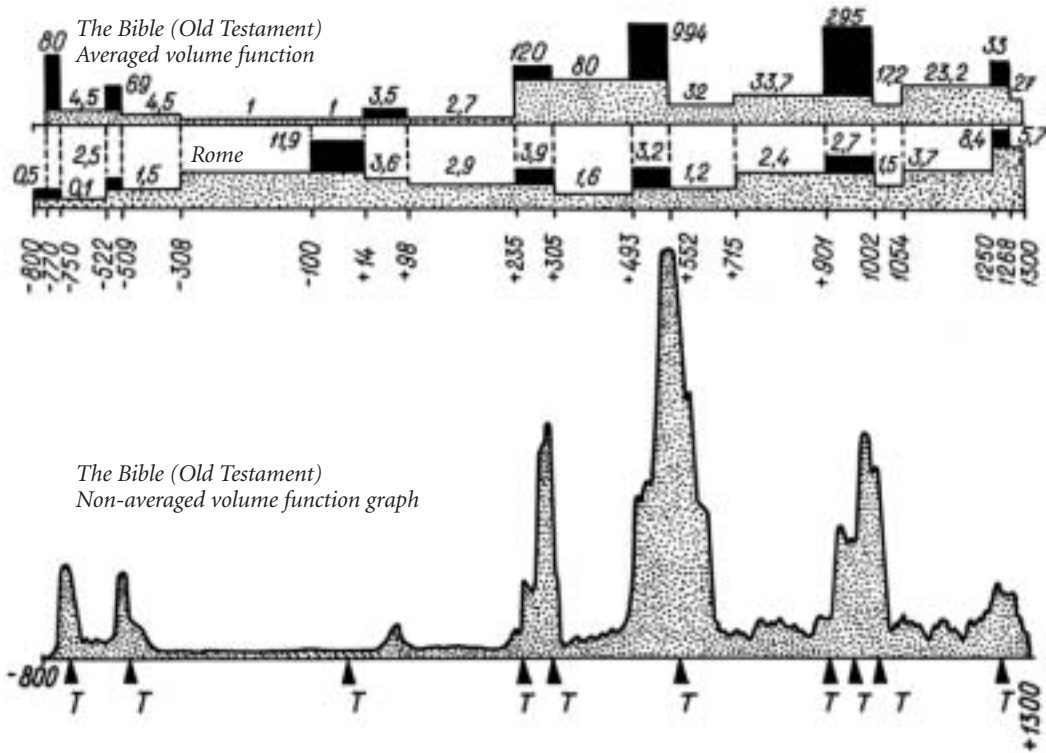
Fig. 6.59. The superposition of the "ancient" Biblical history of the mediaeval Eurasia. The volume function correlation is shown.

the Bible. After this, volumes of fragments describing each of the 19 listed fragments were calculated. The volume of each fragment was averaged, or divided into the length of the described time period measured in generations. For example, the volume of the Biblical generation chapters 2-14, describing the time interval number 1, equals 59 verses. The length of this interval is 13 generations. Consequently, the average value of volume per one generation equals 59/13 = 4.54. See the graphs in fig. 6.59. All local maxima, or the peaks of both volume graphs, are marked in black.

Let us recall that in order to apply the principle of correlation of maxima, we need not worry about the value of the volume function amplitude. Only the *peak* distribution is of importance – that of the points of local maxima. Therefore, it does not matter in what units the volume should be measured. In the Bible, for example, we measured the volume in verses, while in the books by Niese and Gregorovius – in pages and fractions of a page.

It is amazing that *all the peaks, except for one, occur in the same points*. It is also important that all the du-

plicate epochs (*T*) indicated in fig. 6.59 by triangles virtually coincide with the peaks of the non-averaged volume graph for the "chapters" of the Bible, calculated for the "generations" 1-137.

Thus, it is distinctly evident that all the local maxima, except for one, are reached simultaneously, on the same intervals. *A vivid correlation* of the "Biblical local maxima" and the "Roman local maxima" *is available*. See its quantitative expression below. Consequently, the two texts we compare – namely, the "chapters" 1-137 of the Bible and the "Roman chronicle" *X* – *are dependent*. This, as we already know, can indicate the description of virtually the same flow of events therein.

It is noteworthy that all the duplicate repetitions of series {*T*} indicated by triangles in fig. 6.59 virtually coincide with the local maxima points of the non-averaged volume function of the Bible, calculated for generation chapters 1-137. In particular, we discover that all the duplicates of series {*T*} stand out against an overall background of the Biblical "generation chapters", at least because they cause explicit local jumps and splashes of the volume function.

Following the procedure of local maxima makes it possible to estimate the quantitative proximity of these two series of local maxima points: the "Biblical" and the "Roman". Let us calculate the lengths of segments into which the sequence of numbers 1, 2 …, 19 is divided by these points. We will obtain the two following vectors $a(X)$ and $a(B)$. Namely,

$$a(X) = (1, 2, 3, 3, 2, 3, 3, 1), a(B) = (1, 2, 4, 2, 2, 3, 3, 1).$$

The calculation returns $p(X, B) = 1.4 \times 10^{-4}$, which indicates the dependence between "chapters" 1-137 of the Bible and the "Roman chronicle" X for the number of local maxima equalling 8. Let us note that for non-coincident vectors of local maxima in a discrete, integer model, q.v. above, the proximity of vectors we discovered is virtually ideal. The only divergence occurring here is by one unit in two coordinates.

As we will see below, this statistical identification of allegedly ancient "historical part" of the Bible with European-Asian history of the Middle Ages is confirmed by the results of other independent procedures.

Let us explain now why, in reference to the discovered identification of the Biblical history with the Eurasian history of the III-XVI century A.D., we speak about the latter as a partially phantom history. As we have seen, our methods commanded a further shift of Scaliger's entire Biblical history by at least 1800 years forwards. Moreover, the initial events described in the Bible supposedly occur in the III-IV century A.D., while all of the more recent Biblical events develop until the XV-XVI century A.D. *However, this result is far from being final.* The point is that the Eurasian history of the III-XI century A.D. is also a phantom in itself, composed of reflection duplicates of the original events from the epoch of the XI-XVII century A.D. As we shall see below, the original events are mostly located between the XIII-XVII century A.D. Furthermore, we revealed many other phantom duplicates in the Bible. That is why the Biblical chronology should be substantially truncated, after which it should fit into the range of the XI-XVI century A.D. perfectly.

Below we will describe the further development of the empirico-statistical methods, based on the principle of frequency damping.

Thus, the maxima correlation principle leads to the conclusion that the "Roman chronicle" X and the Bible B apparently describe the same events. This cer-

tainly does contradict the established viewpoint on the content of these "chronicles" and the corresponding historical epochs.

The appearing mutual identification of the described historical events in the Scaligerian "chronicle" X and in the Old Testament B means, in particular, the identification of the kingdoms of Israel and Judah, described in the Biblical 1-2 Samuel + 1-2 Kings and 1-2 Chronicles, with the part of the Holy Roman Empire of the alleged years 962-1300 A.D. It agrees with the independent identification obtained earlier on the basis of independent procedure of duplicate dynasty detection. These dynasties are identified with each other as a result of the coefficient $c(a, b)$ being anomalously infinitesimal, which indicates a dependence between dynasties. Let us recall again that all the chronological results obtained by the methods described concur with each other well, which is a serious argument in favour of the objectivity of the duplicate system discovered.

The identification of the Biblical events with the events of the European (Italo-German) and Eastern-European history reveals the following identifications in particular. The famous events from the reign of the Biblical king Sedekiah, the wars against the pharaoh and against Nebuchadnezzar, the collapse of the Kingdom of Judah, the seizure of Jerusalem and the Babylonian captivity, are superposed over the events of the end of the XIII century A.D. in Italy. Namely, the war in Italy, the seizure of Rome, the transfer of the pontificate from Rome to the city of Avignon in France, the complete subordination of the Papacy to the French crown, or the so-called "captivity of the Papacy". The 70-year Babylonian captivity in the Bible is a reflection of the well-known 70-year Avingon captivity of Popes in 1305-1376 A.D. ([76]). Further Biblical events described in the books of Ezra, Nehemiah and Esther, such as the return to Jerusalem and "the restoration of the temple", – are partial reflections of the corresponding events in Byzantium and Italy in 1376-1410 A.D.: the "return" of the Papal throne to Rome, and certain other major events from the Russian history, or that of the Great = "Mongolian" Empire of the XV-XVI century A.D. See CHRON6.

For the convenience of comparing the Biblical and the European events, we shall present an interpretation of the letter symbols of the "chronicle" B = the

Bible, indicating the backbone of a relevant Biblical legend for each letter.

In this way, the chronicle *B*, i.e., the Old Testament in the Bible =

Duplicate T = the legend about Adam and Eve.

Duplicate K = Cain and Abel, Enoch, Irad, Mehujael, Methuselah, Lamech, Seth, Enosh, Cainan, Mahalalel, Jared.

Duplicate T = Noah, "the Flood", the death and the revival of the humanity.

Duplicate N = Shem, Ham, Japheth, "sons of Japheth".

Duplicate T = "the Tower of Babel", scattering of peoples.

Duplicate K = Arphaxad, Shelah, Eber, Peleg, Reu, Serug, Nahor, Terah, Abraham.

Duplicate T = Abraham, Sarah, the "struggle" against the pharaoh.

Duplicate K = Abraham, Aran, the division into two kingdoms, main Biblical patriarchs – Isaac, Isav, Jacob, Judas, Joseph.

Duplicate T = the history of Joseph in Egypt, serving the pharaoh, the "legend of a wife".

Duplicate T = Moses, the war against the pharaoh, the Exodus, creation of the laws of Moses.

Duplicate N/P/R = the death of Moses, Joshua son of Nun, war and the conquest of "the promised land", as well as the story of "the judges".

Duplicate T = the sons of Benjamin, the war.

Duplicate T = Ruth, Saul, Samuel, David.

The Original and *Duplicate (K, R, P)* = kingdoms of Israel and Judah.

The Original and *Duplicate T* = the wars against the pharaoh, Nebuchadnezzar, the fall of the kingdom of Judah, the beginning of the Babylonian captivity (the analogue of the well-known "Avingon captivity of Popes"), the destruction of Jerusalem.

The Original and *the Duplicate (S, N)* = the Babylonian captivity, the return from the 70 year captivity, the new "foundation of the temple" and the restoration of Jerusalem.

To identify these events with their European counterparts, one should turn to fig. 6.55, fig. 6.56, fig. 6.57, fig. 6.58 on which the chronicle *B*, or the Biblical Old Testament, is depicted on the top, and compare its symbols with the content of appropriate "European symbols".

10.
OUR HYPOTHESIS: HISTORY AS DESCRIBED IN SURVIVING CHRONICLES ONLY BEGINS IN CA. THE X CENTURY A.D.
We know nothing of the events that took place before the X century A.D.

Let us summarize somewhat. The disintegration of the global chronological map – i.e. the "Scaligerian textbook" of ancient history – that we discovered leads to a very important assertion. Namely, nearly the entire part of the Scaligerian textbook preceding 900 or 1000 A.D. consists of phantom duplicates. Their mediaeval originals are in the time interval of 900-1600 A.D. In particular, each event described by the Scaligerian textbook preceding 900 A.D. is a sum of several (mostly, two, three, four) later mediaeval events. In order to determine the exact years of those events, we need to draw a vertical segment on the global chronological map and mark the events that it would intercept on four chronicle lines S_1, S_2, S_3, S_4. In other words, the Scaligerian textbook is a stratified chronicle pasting together four virtually identical pieces shifted in relation to one another.

The "Scaligerian textbook" contains no unexpected duplicates starting with the XVI century A.D. and later. Certain phantom duplicates do exist in the time interval between 900 and 1300 A.D., such as the module *S*, q.v. in fig. 6.55. Its mediaeval original, namely, the Empire of Habsburgs (Nov-Gorod?), supercedes 1300 A.D. In particular, the part of the Scaligerian textbook describing the period between 1000-1300 A.D., is a "sum", or a collation of two chronicles: a certain actual chronicle describing real events of 1000-1300 A.D. (that chronicle must have been fairly scanty), and an actual chronicle describing the events of the Habsburg epoch of 1300-1600.

In general, the outline for the global chronology of Europe was created in the XVI-XVII century, in the works of J. Scaliger and D. Petavius. It is here that the last period *S* ends, having gone back in time due to chronological errors and spanning the phantom "ancient" duplicates – this is very important. See letters *S* on the Scaligerian chronological map, fig. 6.55, fig. 6.56, fig. 6.57 and fig. 6.58. We shall reiterate that the entire Scaligerian chronological map is actually a stratified document. Many events considered "antique"

nowadays are actually made up of certain later mediaeval events described in the descended chronicles S_2, S_3, S_4 identified with the chronicle S_1. The application of our empirico-statistical methods to the period of 1600-2000 A.D. has detected no phantom duplicates, which proves the chronological outline of 1600-2000 to be reliable as a whole. The "Scaligerian textbook" originated from a shorter chronicle S_0 as a result of chronological errors that we refer to later, as well as, apparently, intentional distortions of the mediaeval history. See CHRON5, CHRON6, CHRON7.

The effect that we discovered might possibly be explained in two ways. One is that all reiterated parallelisms we found are sets of accidents. From this "accidental" stance, we can estimate the probability of all the coincidences that we discover. This is what we have done on the basis of statistical methods. The probability thereof turned out to be fairly small, which allows us to put forth the hypothesis that *all repeating coincidences that we have discovered are by no means accidental.*

This brings us to the second explanation we believe to deserve a closer study. The discovered disintegration of the Scaligerian textbook into the sum of four short chronicles is not accidental at all. Quite the opposite, we have come across traces of a fairly deliberate creation of artificially elongated "history", which the chronologists of the XVI-XVII century were actively involved in.

The division of the Scaligerian "history textbook" into four short chronicles gives us a preliminary answer to the two following fundamental questions:

1) what was the actual history like?

and

2) how and why did it give birth to the "Scaligerian textbook"?

Apparently, actual history, – that is, the history described in written sources that have reached to our time, – begins from *ca.* the X-XI century A.D. and on. Facts preceding the X century are fairly scanty, located between 300-1000 A.D. Virtually all epochs placed by the Scaligerian textbook before the X century A.D. are various phantom reflections of the events of the X-XVI century A.D. The Biblical story – that is, all the events of both the Old and the New Testament – fits into the interval between the X century A.D. and XVI century A.D.

11.
AUTHENTIC HISTORY ONLY BEGINS IN XVII CENTURY A.D.
The history of the XI-XVI century is largely distorted. Many dates of the XI-XVI century require correction

The chronological outline, q.v. in fig. 6.55, leads to the need for "shifting" certain events of the X-XIII century forwards by approximately 330 or 360 years, since these could be the events of the Habsburg epoch of the XIV-XVII century. Furthermore, fig. 6.55 proves that the Scaligerian datings can be relied upon from the beginning of the XVII (seventeenth!) century A.D. only. The history of the XIV-XVI century *is largely distorted.* The alteration of dates might not be as considerable as in the earlier epochs; however, the Scaligerian school introduced major distortions into the interpretation of many important events of the XIV-XVI century. We shall describe them in CHRON5, CHRON6, CHRON7. Finally, the actual count of "years of our time" starting from 1053 A.D., and not from the "rounded date of 1000 A.D.", might add at least 50 years to the dates of books considered published in the XV-XVI century. The same applies to the dates of life of kings, military commanders, writers, poets, painters and sculptors who had lived in the XIV-XVI century. Many of them may have lived 50 years closer to our time.

12.
THE RADICAL DISTINCTION OF OUR CHRONOLOGICAL CONCEPT FROM THE VERSION OF N. A. MOROZOV

Our concept as stated above is approximately as different from the version of N. A. Morozov as his concept is from that of Scaliger. For example, according to N. A. Morozov, the main Biblical events took place in the III-V century A.D., which is about one thousand years later than the Scaligerian dating. The results of our methods place these events in the XI-XVI century A.D., which is about a millennium later than N. A. Morozov presumed.

We shall conclude by an example of how the system of three chronological shifts that the author of this work discovered helps resolve certain historical mysteries. We shall remind that the *Almagest* ex-

Fig. 6.60. Portrait of the emperor Maximilian Augustus *Pius* (1440-1519) by Albrecht Dürer. Taken from [1234], engraving 318.

Fig. 6.61. Another version of Dürer's engraving of the emperor Maximilian Augustus *Pius*. Taken from [304], v. 2, p. 561. Mark the imperial bicephalous eagle over Maximilian's head.

plicitly refers to the observations made at the time of Antoninus Pius, the emperor of the Holy Roman Empire. Contemporary historians consider this emperor to be an "ancient" one, who is supposed to have reigned in the II century A.D. At the same time, the astronomical facts in the *Almagest* explicitly refer to the XI-XVI century A.D., as well as the completion dates of the *Almagest*, q.v. in CHRON3. There is no contradiction, though. Let us turn to the chronological map in fig. 6.55. If the total shift is 1053 + 333 = 1386, then the "ancient" emperor Antoninus Pius appears exactly in the XVI century, superposed on the period of 1524-1547 A.D. We shall remind the reader that the Scaligerian dating of the reign of emperor Pius is 138-161 A.D. ([76]).

It is very interesting that the "ancient" Antoninus Pius is superposed precisely over the epoch of the first editions of the *Almagest*. The first Latin edition took place in 1537, the Greek one – in 1538, the "transla-

tion" of the Trapezund one – in 1528, and so on, all this during the reign of "Antoninus Pius" as named in the *Almagest*. The author of the Latin edition deceived no one by inserting the name of the ruler in whose time the observations were made into the text.

We have a marvellous opportunity to verify this result in another independent way. Since the Second Roman Empire of the alleged I-III century A.D. identifies with the Empire of the alleged X-XIII century, and the Empire of the Habsburgs, q.v. above, we can try and directly identify the emperor of the Habsburg (Novgorod?) epoch with the name of *Pius*. The epoch immediately preceding the first publications of the *Almagest* – the beginning of XVI century, – is covered by the famous emperor Maximilian I, 1493-1519. It must have been in his time that the astronomical observations were carried out, provided the book was published right after its completion. The full name of this emperor turns out to comprise the following formula-

tion: Maximilian Kaiser *Pius* Augustus. See the engraving by A. Dürer, fig. 6.60. A slightly different version of the same print by A. Dürer is shown on fig. 6.61.

Thus, we can see a good concurrence between various methods.

Similarly, in the wake of chronological shifts stated above the epoch of the "ancient" Alberti and mediaeval Vitruvius identify with each other perfectly.

13.
THE HYPOTHESIS ABOUT THE CAUSE OF THE FALLACIOUS CHRONOLOGICAL SHIFTS IN THE CREATION OF THE HISTORY OF ANTIQUITY

13.1. Chronological shift of a thousand years as the consequence of the fallacious dating of Jesus Christ's life

The chronological shifts that we discovered could be explained by mistakes made by mediaeval chronologists of the XVI-XVII century A.D. in their dating of the mediaeval events. The first cause for the mistakes was the imperfect recording of dates in the Middle Ages. A serious mistake the mediaeval chronologists made was the erroneous dating of the Nativity or the Crucifixion of Jesus Christ. They made, give or take a little, a mistake of *one thousand years*, shifting the life of Jesus Christ from the XI century A.D. into the I century A.D. According to fig. 6.55, "the beginning of the new era" actually occurs in 1053 A.D. This millenarian shift generated a major confusion in the dating of many other documents which counted years "since the Nativity of Jesus Christ". As a result, mediaeval events of the X-XVII century A.D. as described in those chronicles were erroneously dated and slid one thousand years backwards. Just how could such a major dating error happen?

We shall formulate a hypothesis which can explain the cause for the appearance of certain chronological shifts. Our idea can be encapsulated as follows.

1) Initially, dates were recorded as certain verbal phrases and formulations, which were later abbreviated.

2) Initial meanings of abbreviations were then forgotten.

3) Later chronologists suggested that these letters be regarded not as abbreviations of certain names, but as notations of numerals. May we remind that letters used to stand for figures as well.

4) Substituting letters for digits (by standard rules), chronologists would obtain erroneous "datings", fundamentally different from the original.

5) Since there were many abbreviated formulations, a number of chronological shifts appeared.

6) Each wrong decryption would generate a chronological shift of its own.

The following example illustrates this idea fairy well.

13.2. The letter "X" formerly denoted the name of Christ, but was later proclaimed to stand for the figure of ten. The letter "I" formerly denoted the name of Jesus, but was later proclaimed to be the indication of one thousand

One of the main chronological shifts by 1053 years, or by about 1000 years, could have risen from the comparison of the two different methods of recording dates by the later chronologists.

The first method: abbreviated form of recording. For instance, "the III century since Christ" could be recorded briefly as "X.III", "X" being the first letter of the Greek word XPICTOC (Christ). The letter "X" is one of the prevalent mediaeval anagrams for the name of Christ. Thus, the phrase "Christ's Ist century", when abbreviated, could read as "X.I", the phrase "Christ's IInd century" could read as "X.II", and so on. These abbreviations may possibly have caused the appearance of the contemporary designation of centuries. However, as of a certain later time the mediaeval chronologists suggested that the letter "X" in the beginning of a date should be regarded as the figure of "ten". Such interpretation automatically adds *a thousand years* to the initial date. Thus, an erroneous date appears, a thousand years more ancient than the real one.

This hypothesis of ours concurs well with the famous fact that the mediaeval "Italians designated centuries by hundreds: *trecento* (or *the 300's*) – the XIV century, *quattrocento* (or *the 400's*) – the XV century, *cinquecento* (or *the 500's*) – the XVI century" ([242], page 25). However, these names of centuries *point directly at the beginning of count from exactly the XI century A.D.*, because they ignore the currently accepted addition of an "extra millennium". Hence, the medi-

aeval Italians appear to know nothing about this millennium. As we now understand, there was a very simple reason for it – this "extra thousand years" has never existed.

Facing this effect of "ignoring the extra millennium", contemporary historians usually avoid explaining it. At best, they simply note the fact itself, occasionally referring to it as a "convenient tool". They say dates were easier to write this way. They say, "In the XV-XVI century dating, hundreds and even thousands of years would *quite often* be omitted" ([102], page 117). As it occurs to us, mediaeval chronologists would honestly write: year 150 from Christ, or year 200 from Christ, meaning – in the modern chronology – year 1150 or 1200 A.D. It was only later that the Scaligerite chronologists declared these "small dates" to require a necessary addition of a thousand years, – in certain cases, even several thousand years. This was how they would make mediaeval events look "more ancient".

Furthermore, the Latin letter "I" – the first one in *Iesus*, the Greek spelling of the name Jesus – originally could be an abbreviated version thereof. Thus, the year 1300, for instance, might have originally meant I.300, that is, "year 300 since Jesus" written the Greek way. This recording method conforms with the previous one, because I300 = year 300 of Jesus = year 300 from the beginning of the XI century A.D. In this respect, we believe the next important fact to be worthy of special attention. In mediaeval documents, especially those of the XIV-XVII century, with dates written in letters, the first letters believed today to symbolize "large numbers" turned out to be *separated* from the last ones recording tens or hundreds *by dots*. A few of numerous examples are cited below.

1) The title page of the book printed in Venice, allegedly in 1528. The date is written as {M.D.XXVIII.}, or with separating dots, q.v. in fig. 6.62.

2) Map of the world by Joachim von Watt, allegedly of 1534. The date is written as {.M.D.XXXIIII.}, that is with separating dots, q.v. in fig. 6.63 and fig. 6.64.

3) The title page of the book by Johannes Drusius, allegedly printed in 1583. The date is written down as {M.D.LXXXIII.}, or with the separating dots, q.v. in fig. 6.65.

4) Publisher's sigil of Lodevic Elsevir. The date, allegedly 1597, is written as {ⅠⅠ.Ⅰ.XCVII.}, – with separating dots, as well as crescents facing left and right

Fig. 6.62. The date (the alleged year 1528) is written as "M. D. XXVIII.", with divisive dots. Taken from [1009], page 69.

used for Latin letters "M" and "D", fig. 6.66. This is a very interesting example, because the left band also has a recording of the date in "Arabic" digits. The alleged date of the year 1597 is transcribed as I.597 (or I.595), fig. 6.67. Besides the dot separating the first "figure" from the remaining digits, we also see this figure of "one" clearly written as the *Latin* letter "I", or the first letter of the name *Iesus* (Jesus).

5) The date "1630" is written with right and left crescents on the title pages of printed books presented on fig. 6.68 and fig. 6.69. By the way, the title of the second book is quite curious – **Russia or Moscovia, also known as Tartaria** ([35], page 55).

6) The date transcription of the alleged year 1506 on a print by Altdorfer, a German painter, q.v. in fig. 6.70, is of the utmost interest. We present our drawing of this date on fig. 6.71. The first figure of "one" *is separated* from the remaining digits *by a dot,* and clearly written as the Latin letter "I", i.e. as the first letter of the name *Iesus* (Jesus). Meanwhile, the way the alleged figure of 5 is written down looks very much
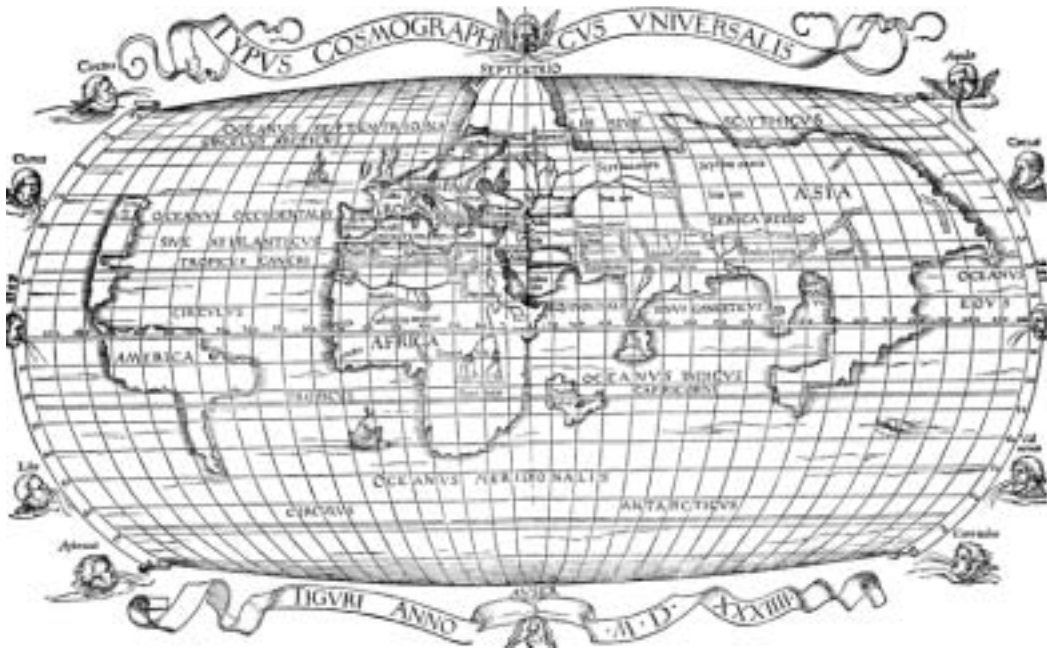
Fig. 6.63. The date (the alleged year 1534) is written as ". M. D. XXXIIII.", with divisive dots. Taken from [1009], page 71.

Fig. 6.64. Fragment saying ". M. D. XXXIIII.". Taken from [1009], page 71.

like a 7. Perhaps the date here is not 1506, but 1706? How reliable is the dating of engravings and paintings ascribed to Altdorfer, who had allegedly lived in the XVI century? Could he have lived later?

7) The recording of the date year 1524 on a print by Albrecht Dürer, q.v. in fig. 6.72 and fig. 6.73 {.i.524.}, is truly striking. We can see the first letter not only separated from the remaining digits by a dot, but also quite explicitly transcribed as the Latin letter "i" with a dot! In other words, like the first letter in the name *iesus*. In this case, the letter "i" is surrounded by dots on both sides. Another similar example of transcribing dates with the usage of Latin letter "i" instead of digit 1 widely accepted nowadays (to stand for the alleged extra millenium) is presented on fig. 6.73a and fig. 6.73b. This is an ancient engraving

Fig. 6.65. The date (the alleged year 1583) written as "M. D. LXXXIII.", with divisive dots. Taken from [35], page 29.

Fig. 6.66. The date (the alleged year 1597) is written as "⟨I⟩. I⟩. XCVII." – with divisive dots as well as left- and right-sided crescents for the transcription of the Roman letters M and D. On the left band on sees the date written with Arabic numerals. The alleged date (1597) is transcribed as I. 597 (or I. 595). The "figure of one" is separated from the other figures with a dot and written as the *Roman* letter I, or the first letter of the name Jesus (Iesus). Taken from [35], page 30.

Fig. 6.67. Fragment with the date I. 597. Taken from [35], page 30.

portraying Berthold Schwartz, the inventor of gunpowder. The photograph of the print was kindly provided by A. M. Isakov.

8) So, let us repeat: in old recordings of dates like "1520", the first digit 1 apparently originated as the letter "I" – the first letter of the name *Iesus* (Jesus) – initially written at the beginning of a date. This is to say, the date used to look like "The year 520 since Jesus", or, in short, I520. Later it was forgotten, or made forgotten, and the letter "I" was perceived as the symbol for "one thousand". Eventually, they replaced "year 520 since Jesus" by "year one thousand five hundred twenty", thus producing a chronological shift by one thousand years and transferring the Nativity of Jesus from XI century to the I. We can still trace this former meaning of the digit 1.

N. S. Kellin reports of an ecumenical, poly-confessional church, with the starsand the stripes on the spire, in the campus of the Harvard University in Boston (USA). A memorial plaque reads:

*This stone from the fabric of
St. Savior's Church. Southwark. London
now the Cathedral Church of that Diocese
commemorates the Baptism of John Harvard
there on November 6, J607.*

Year 1607 is recorded as J607. That means Jesus-607; in other words, "year 607 since Jesus", which refers to the Nativity of Jesus Christ in the XI century. Note that the presence of the letter "J" – the first letter of the name Jesus (instead of "I"), – is yet another argument in favour of our hypothesis.

N. S. Kellin discovered another example in the Closter castle, New York, USA – a mediaeval castle purchased by Rockefeller in Roussillon, France, and transported to the USA, along with various collections from different European countries; in particular, Evangelical, Biblical and hagiographical scenes painted on glass circles of 20-25 centimetres in diameter, of German origin. The condition of those miniatures is excellent. One work is dated as J532. Historians now tend to decipher that date as 1532 A.D., while we see another recording J-532, or "the year 532 since Jesus".

Thus, the mediaeval tradition of recording three-digit dates from the Nativity of Jesus Christ in the form of J*** explicitly points at the name Jesus, or Jesus Christ, automatically indicating the date of his Nativity as the XI century.

Fig. 6.68. The date 1630 on the title page of the book titled *The Republic of Holland* is written with left- and right-sided crescents. Taken from [35], page 49.

Fig. 6.69. The date 1630 on the title page of the book suggestively enough titled *Russia or Moscovia, also known as Tartaria* is written with left- and right-sided crescents. Taken from [35], page 55.

9) A vivid example of the mediaeval recording of dates as J*** is shown in fig. 6.74 – an engraving by Georg Pencz, a XVI century painter. He records the date 1548 as J548, fig. 6.75.

There was yet another method of recording dates: words "since the Nativity of Jesus Christ" written completely and not as one-letter substitutes – i.e. "III century since the Nativity of Christ", not "X.III century". Over the course of time, the knowledge of the letters "X" and "I" in the beginning of above-mentioned formulae being the first letters of the names XPICTOC (Christ) and Iesus (Jesus) was lost. Instead, chronologists assigned their numeric values to those letters. Let us recall that letters were formerly used to denote digits. Thus, chronologists declared "X" to stand for "ten",

and "I" for "one". As a result, phrases like "X.III" or "I.300" became perceived as "the thirteenth century" or "one thousand three hundred years".

According to our reconstruction, Jesus Christ lived in the XI century A.D. and was known in the Scaligerian history of that period as *Pope Gregory Hildebrand*, or *Ablaze With Gold*. Later, historians assigned to him "ordinal number VII", so we know him now as Pope Gregory "VII", q.v. in fig. 6.76. It is noteworthy that a dove is depicted to the right of the head of Gregory "VII". Let us recall that the *dove* is a famous *Evangelical* image of the Holy Spirit. Therefore, the portrait of Gregory "VII" available nowadays bears an explicit trace of *the Gospel,* which, as we are becoming aware now, is perfectly natural.

Fig. 6.70. The alleged date 1506 on an engraving by the German artist Altdorfer. The first "figure of one" is separated with a dot and visibly written as the Roman letter I, or the first letter of the name Jesus (Iesus). The alleged figure of 5 is written as a figure of 7. Could the year have been 1706 and not 1506? Could Altdorfer have lived later than the XVI century? Taken from [1203], No. 2.

Fig. 6.71. Our drawn copy of the date from Altdorfer's engraving ([1203], No. 2).

Fig. 6.72. The alleged date 1524 written as ". i. 524." on an engraving by Albrecht Dürer – that is, the first letter is clearly seen as the Roman dotted "i", or the first letter of the name Jesus (Iesus). Taken from [714], page 22.

Fig. 6.73. Fragment of the inscription from Dürer's engraving ([714], page 22). The drawn parts are ours.

Fig. 6.73a. An old engraving portraying Berthold Schwarz, the inventor of gunpowder. The date on the engraving is written with the Roman letter "i" instead of the figure of 1 used today. Taken from [1121:1], an inset following the title page of the book.

Fig. 6.73b. A close-in of the date from the engraving portraying Berthold Schwarz. We can clearly see the Roman "i" instead of 1. Taken from [1121:1], an inset following the title page of the book.

Fig. 6.74. An engraving by Georg Pencz, a XVI century painter. The alleged date 1548 on this engraving is written as J548, with the first letter of the name Jesus used in lieu of the first "digit". Taken from [714], page 30.

Fig. 6.75. Fragment with the date from the engraving by Pencz ([714], page 30). The drawn parts are ours.

Fig. 6.76. An ancient miniature portraying "Pope Gregory VII Hildebrand", which translates as "ablaze with gold". Taken from [492], Volume 1, page 59.

Fig. 6.77. A rather late and most probably arbitrary picture of Pope "Gregory VII", or "Hildebrand". Taken from [544], Volume 5, page 633, ill. 110.

Fig. 6.78. Another very late and thus apparently quite arbitrary portrait of Pope "Gregory VII", or "Hildebrand". From a XVIII century Latin book titled *The Portraits of the Holy Pontiffs*. Taken from [578], Volume 1, page 356, ill. 13.

"Hildebrand" (Ablaze With Gold?) is considered to have been born in 1020 A.D. and been Pope from 1073 till 1085 ([196]). His portraits, most probably of a later origin, are shown in fig. 6.77 and fig. 6.78. The Nativity of Christ apparently took place in the *middle* of the XI century, but certain documents could have erroneously shifted this event backwards and assigned it to the *beginning* of the XI century. This could have resulted in a further shift – by roughly 1050 or 1000 years – of certain documents using the detailed way of recording dates, "since the Nativity of Christ the III century", instead of the abbreviation "X.III century". In other words, the shift by 1050 or 1000 years might have been the difference between the detailed and abbreviated method of recording dates. The chronological shift generated by this mistake must have constituted about 1000 years. This error is clearly visible in the Scaligerian chronology! What we see is one of its main shifts, q.v. on the global chronological map above.

We shall reiterate: for example, "the III century since Christ", or the III century from the middle of the XI century A.D., could have been recorded both as "III century" and "X.III century". This could have led to confusion and a chronological shift by approximately 1000 years.

13.3. Until the XVIII century, the Latin letters "I" or "J" – i.e. the first letters of the name of Jesus – were still used in several European regions to denote "one" in recording of dates

We have above come up with an idea that old documents used to refer to the name of *ΧΡΙΣΤΟΣ* (Christ) by the first letter *X* in the recording of dates, which was later declared to stand for the figure of *ten*. In a similar way, the letter *I* or *J* used to mean the name of Jesus (*Iesus*), but was later declared to denote *one thousand*. The result: a millenarian chronological shift, casting many events of the XI-XVII century backwards in time.

We shall now present new data on this. Professor, Academician (IAELPS), Merited Employee of Oil and Gas Industry of Russian Federation, M. H. Musin has recently been so kind as to draw our attention to a very rare book from his own private library – the 1937 edition of *Annales de la Société Royale d'Archéologie de Bruxelles* ([1012]) contain-

ing a very interesting work by Chanoine F. Crooy *Les orfèvres de Bois-le-Duc et leurs poinçons* ([1012], pages 5-41). The book analyses several ancient brass plates with the names of XVI-XVIII century Belgian goldsmiths of Bois-le-Duc etched on them, and presents examples of their sigils. We should stress that brass plates were *official records* enabling one to check the authenticity of each goldsmith's sigil. Therefore, these plates are of a special interest to us, as they reproduce the style and form of the official documents from the territory of contemporary Belgium of the XVI-XVIII century.

The book [1012] provides photographs of all those brass plates on which goldsmiths' names are arranged in a column, with the year and a specimen sigil of the craftsman next to each name. It is *the way the dates were recorded* on the plates that is extremely important to us now.

Names of the first 33 Belgian craftsmen are listed without indication of any dates at all. The first date appears in the bottom right corner of the plate in fig. 6.79. Historians tell us it is the year 1642 A.D. recorded here, q.v. in fig. 6.80. However, we see absolutely clearly the Latin letter "J" – that is, the first letter of the name of Jesus – in place of the figure of "one". Thus, this date most probably stands for "year 642 since Jesus". But in this case, counting 642 years back from 1642, we arrive at circa 1000 A.D. as the date of the Nativity of Jesus Christ.

On fig. 6.80, fig. 6.81, fig. 6.82, fig. 6.83, fig. 6.84, fig. 6.85, fig. 6.86, fig. 6.87, fig. 6.88, fig. 6.89, fig. 6.90, fig. 6.91, fig. 6.92, fig. 6.93, fig. 6.94 and fig. 6.95, we list all dates in the order they are mentioned on the Belgian plates. Namely,

J642, i607, i607, j607, i.608, i615, i618, I618, i620, j620, j620, j624, i628, j63i, j63j, i635, i635, j637, j637, j64i, j642, J643, J647, J644, J65J, J65J, J65J, j652, J654, J654, j658, j659, I662, J662, j663, j665, j665, j666, j666, j66, j668, j670, j671, i672, j672, J674, j676, J676. J649, J677, J678, j679, 1679, j684, j685, j685, j686, j690, J692, J692, J693, J693 or J695, J696, J697, j703, J706, J706, J708, J708, J709, J709, j7j0, j7jj, J7JJ, J7J2, i7j2, j7i2, j725, j726, j734, i735, i735, i735, j738, i742, then there is a very curious record of a date, jJ99. Most likely, it is 1744, although one is written as j, seven as J, and four as the modern "Arabic" nine. The subsequent dates are, 1745, i752, i(or j)7-53, J754, j757, J758, J758,

Fig. 6.79. A copper plaque with the names and the sigils of the Belgian goldsmiths of the XVI-XVIII century. Taken from [1012], the appendices at the end of the book.
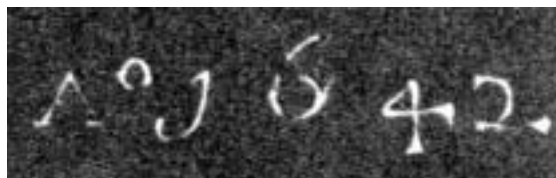

Fig. 6.80. The very first date, namely, J642, that we encounter on the consecutive Belgian plaques with the names of the XVI-XVIII century goldsmiths. The "figure of one" is written as the Roman letter J here – the first name of the name Jesus. Taken from [1012], Appendices, Pl. I/2.

Fig. 6.81. XVII century dates on Belgian copper plaques. The alleged figure of 1 is written as the Roman letter "i" – see the two dates on top transcribed as i607, and the two dates in the bottom transcribed as i608 and i615; it is also written as the Roman letter "j", qv in case of the centre date – j607. Taken from [1012], Appendices, Pl. I/3.
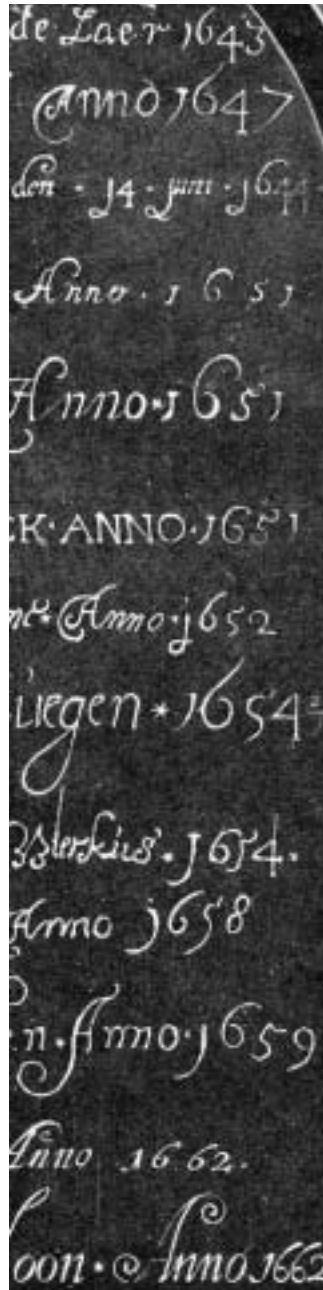

Fig. 6.82. XVII century dates on Belgian copper plaques. The dates are transcribed in the following manner: i618, i620, j620, j620, j624, j628, j63i, j63j, i635, i635, j637, j637, j64i and j642. Taken from [1012], Appendices, Pl. I/4.

Fig. 6.83. XVII century dates on Belgian copper plaques. The dates are transcribed as follows: J643, J647, J644, J65J, J65J, J65J, j652, J654, J654, j658, j659, I662 and J662. Taken from [1012], Appendices, Pl. II/1.
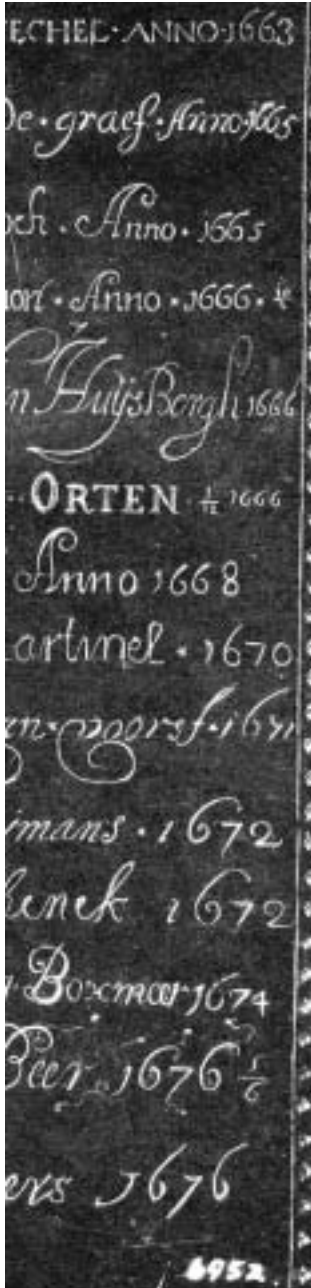
Fig. 6.84. XVII century dates on Belgian copper plaques. The dates are transcribed as follows: j663, j665, j665, j666, j666, j666, j668, j670, j671, i672, i672, J674, j676 and J676. Taken from [1012], Appendices, Pl. II/2.

Fig. 6.85. XVII century dates on Belgian copper plaques. The dates are transcribed as follows: J649, J677, J678, j679 and 1679. Mark the fact that this is the first place where we encounter the figure of one standing in the beginning, in the modern fashion. The dates to follow are: j684, j685, j685, j686, j690, J692 and J692. Taken from [1012], Appendices, Pl. II/3.

Fig. 6.86. Dates of the XVII and early XVIII century on Belgian copper plaques. The dates are transcribed as follows: J693, J693 or J695, J696, J697, j703, J706, J706, J708, J708, J709 and J709. Taken from [1012], Appendices, Pl. II/4.

Fig. 6.87. XVIII century dates on Belgian copper plaques. The dates are transcribed as follows: j7j0, j7jj, J7JJ, J7J2, i7j2, j7i2, j725 and j726. Taken from [1012], Appendices, Pl. III/1.

Fig. 6.88. XVIII century dates on Belgian copper plaques. The dates are transcribed as follows: j734, i735, i735, i735, j738 and i742. As a matter of fact, the first "digit" is written as the Greek letter λ with a dot above. It is clearly visible that the date transcription had not yet been uniform by mid-XVIII century. Further one sees the date transcribed in a peculiar manner – jJ99. It most probably refers to 1744; however, the figure of one is transcribed as "j", the figure of seven as "J", and the figure of four resembles the modern Arabic 9. One also sees the following dates: 1745 transcribed as "j" (or the Greek λ), 7 (or handwritten Slavic G (𝒥)) 45, followed by i752. Taken from [1012], Appendices, Pl. III/2.

Fig. 6.89. A close-in of the date 1744 transcribed as jJ99, unusually enough by the modern standards – what with this being mid-XVIII century. Taken from [1012], Appendices, Pl. III/2.

Fig. 6.90. XVIII century dates on Belgian copper plaques. The dates are transcribed as follows: i (or j) 7-53, J754, j757, J758, J758, J7-59, J7-59, j760, i (or j) 762 and i (or Greek λ) 763. Taken from [1012], Appendices, Pl. III/3.

Fig. 6.91. XVIII century dates on Belgian copper plaques. The dates are transcribed as follows: 1764 (the first digit is written in the modern manner), j764, j764, j768, j768 and j768 . Taken from [1012], Appendices, Pl. III/4.

Fig. 6.92. Late XVIII century dates on Belgian copper plaques. The dates are transcribed as follows: J78J, J78J, i783 and j785. Taken from [1012], Appendices, Pl. IV/2.

Fig. 6.94. Late XVIII century dates on Belgian copper plaques. The dates are transcribed as follows: J793, j (looking like the Roman S) 794, J795, J796, J798, 1799. Note that the last date is transcribed with the Arabic digit 1. See the close-in on the next illustration. Taken from [1012], Appendices, Pl. IV/4.

Fig. 6.93. Late XVIII century dates on Belgian copper plaques. The dates are transcribed as follows: j789, 1798, j790, j79j, J79J and J793. Taken from [1012], Appendices, Pl. IV/3.

Fig. 6.95. A close-in of the last date from the Belgian tables. The first digit is already transcribed as the Arabic numeral that we are accustomed to nowadays. Taken from [1012], Appendices, Pl. IV/4.

J7-59, J7-59, j760, i(or j)762, i(or Greek λ)763, 1764 (here "one" is written in its "Arabic form" accepted nowadays), j764, j764, j768, j768, j768, J78J, J78J, i783, j785, j789, 1798, j790, j79j, J79J, J793, J793, j(as Latin S)794, J795, J796, J798, 1799. We shall note that the last date is written with an "Arabic figure of one".

It is absolutely clear that *in the overwhelming majority of cases the figure of one was written as either the Latin "I", or the Latin "J"*. This practice continued up to the end of the XVIII century; a doubtless conclusion from fig. 6.94, where the penultimate date on the plate is still written as j798 – that is, 1798 in the contemporary sense. Certain official documents in Belgium may have written the figure of one as Latin "i" or "j" even towards the end of the XIX century. However, the register of goldsmiths' names we have come across suddenly breaks off on year 1799. We cannot tell what has been happening thereafter.

It is extremely peculiar that as of the middle of the XVIII century, an *especially persistent inconsistency in the recording of dates set on* in the Belgian plates. See, for example, fig. 6.89. Could it mean that someone had deliberately edited the "earlier" and more regular, or "steadier", recordings of dates on the plates? In other words, were the plates antedated upon previously rubbed soft brass after the middle of the XVIII century, when the recording of figures had more or less settled, though still far from what is accepted nowadays?

Finally, in the last date 1799 on the plate we can see the figure of one written in the "Arabic style" usual for us, fig. 6.95.

Let us return to the very first date appearing on the Belgian plates, fig. 6.79 and fig. 6.80 – allegedly 1642 A.D. There is something strange about it. The point is, in all other cases dates on the plates form *a non-decreasing sequence*, while the very first date, year 1642, is obviously in the wrong place since it is *followed* by substantially earlier dates – namely, i607, j608, i615, and so on. How come year 1642 is about 50 years ahead? One might say there is some confusion involved, and somebody has apparently made a dating mistake – and at the same time, as it turns out, confused the name of a goldsmith, or even several goldsmiths, shifting the date back or forth by 50 years. This could possibly have happened, although in an official state document – a currency act related to gold processing, for instance, – it may look somewhat peculiar. Licensing documentation of that kind is assumed to have been kept under a vigilant watch in XVI-XVIII centuries, as is the case nowadays. Therefore, we believe the following idea to be of relevance.

We must have traced the fact that the sign of 6 formerly meant the figure of *five*, while the sign of 5, vice versa, meant the figure of *six*. Thus, the signs for five and six were switched. *We have already discovered this fact* and described it in detail in our book [RAR]: 4, pp. 255-266. See also CHRON4, chapter 13:5. In other words, the record 1642 in earlier documents might have meant Year *five hundred* forty-second since Jesus, but by no means one thousand *six hundred* forty second, as it is believed nowadays. Nothing remains strange any more if the record J642 is interpreted like this, everything falls in due place. The first date on the Belgian plates is indeed 1542 recorded as J642 where the sign of 6 was interpreted as the figure of *five*. Our hypothesis is in good conformity with the opinion of contemporary Belgium historians that the first names on the brass plates date back to 1538, although this date, as far as the photographs presented in [1012] show, is not engraved on the plates ([1012], page 9). Instead, the date "year *five hundred* forty-second since Jesus" appears to have been engraved, q.v. in fig. 6.80, followed shortly thereafter by the dates iJ607, j608, i615, and so on. As a result, the correct chronological order is restored.

We should sum it up by stating the following. The old method of recording dates with the first letter "i" or "j" referring to a "year since Jesus" survived until the end of the XVIII century in many areas of the Western Europe. Moreover, years were counted down from the XI century A.D. Later on, while editing books on history in the XVII-XVIII century, those old dates were eliminated and replaced by those customary to our age, using the figure of 1 = one instead of letters "I" and "J". However, in certain rarely available documents from European archives – like the list of goldsmiths in Belgium – the old dates have fortunately survived. Those rare documents convey to us the social atmosphere of the XVI-XVII century, which significantly differs from what the Scaligerite historians display to us.

13.4. How the chronological shift by 330 or 360 years could have occured

A similar mechanism may have inchoated the chronological shift of approximately 333 years or 360 years. Chronologists might have recorded dates of the end of the XV century – the beginning of theXVI century in relative chronology, counting years from the moment of accession to the throne, for example, of the famous emperor Caesar Maximilian I, 1493-1519. We shall not elaborate which ruler was called the Great Caesar 1st, or *Maxi*milian *Kaiser* the First, by the mediaeval chronologists. See Chron7 for more details on this. The only thing important to us is that, when dating events from the first year of his accession to the throne, chronologists might have used an abbreviated recording of his name – MCL, i.e. *M*axim *C*aesar the He*L*lenic. In that case, a date such as "Maximilian Caesar his third year" would appear in chronicles as MCL.III. After a while, the original meaning of the letters MCL was forgotten. The Scaligerite chronologists proposed to regard them as figures. Substituting figures for letters, they must have arrived at the "date" of 1153. This fictitious date differs from the actual one – i.e. from 1496 – by 343 years: 1496 – 1153 = 343. Thus, chronologists have automatically shifted the documents using abbreviations similar to MCL(…) to record dates by approximately 330 or 360 years backwards.

13.5. What latin letters M, D, C in Roman dates meant originally, in the Middle Ages

13.5.1. General idea

Many "Roman dates" in old texts, epitaphs, tombstones, etc., considered mediaeval or even "ancient" nowadays, begin with Latin letters *D*, *M*, *C* and so on. We believe all these letters to have originally been abbreviations of various words, first letters thereof. For example,

D = Domini, i.e. the Lord, Divine, or *D* = Dom in terms of reigning house, dynasty;

M = Magnus, i.e. great;

C = Caesar, i.e. caesar, kaiser, king. And so on.

Those were different methods of recording mediaeval dates in relative chronology. They might have counted years either from the beginning of the XI century, – as the Nativity of Christ, – or some great mediaeval king who had lived in the XV century, for instance. But then the original meaning of abbreviations *D*, *M* and *C* was forgotten. The Scaligerite chronologists attached certain numeric meanings to those letters and declared that the Latin letter M had always meant "one thousand years", letter *D* – "five hundred years", letter *C* – "one hundred years", and so on. As the result, formerly correct, or comparatively "close dates" have been arbitrarily turned into "*very distant dates*", mediaeval events forcibly dispatched deep into the past.

In modern times, the Latin method of recording dates, *Anno Domini* (…) would normally be interpreted as "*Year* from *Incarnation of Lord* (so-and-so)", *Domini* translated solely as *the Lord, Divine*. The date of Incarnation, i.e. the Nativity of Jesus Christ, is proposed to have been meant in every case. However, the word *Domini* could have possibly meant *the House*, in terms of *Reigning House, Ruling House*. The word *Dom (House)* did have that "Imperial meaning" in Russia. Until now, the largest central cathedrals in the cities of Western Europe are called *Dom*. In this case, a date written as *Anno Domini* (…) might as well have meant "*The Year of the Reigning House* (so-and-so)". That is, years of different events could have been counted from the accession of a *Reigning House*. This context causes an apparent ambiguity in the dating of inscriptions of this kind. The point is, different mediaeval chroniclers could mean *absolutely different Reigning Houses*, i.e. different regal dynasties. The major reigning *Houses* ascended to their thrones in the XIV century, as well as in the XV and XVI centuries. Converting dates of this kind into modern chronology shall lead us to different dates accordingly.

To sum it up, we shall list a few possible readings for the Latin recordings of dates.

The date of the *Anno D.*(…), or *Anno Domini* (…), or *Anno D. M.* type might read *The Year of (Ruling) House* (such-and-such). We must note that the word *Anno*, or year, was implied when omitted in writing.

The date of the *M. D.*(…) type might mean "the year of the *Great House* (such-and-such)". The Latin *M* here is the abbreviation for Magnus, or *Great*.

The date of the *M. C.*(…) type might mean "the year of the *Great King* (such-and-such)", as *M* is Magnus, *C* is Caesar, i.e. caesar, king (czar), kaiser.

The date of the *C. M.*(…) type might also mean "the year of *King the Great* (such-and-such)", as *C* may stand for caesar, king (czar), and *M* is Magnus, or Great.

The date of type *D.* (…) could mean "the year of (reigning) *House* (such-and-such)".

By the way, the Latin word *Domini* might have formerly meant not only *the Lord, Divine*, but also "a very large *House*", i.e., again, *the Great House*. For example, a very big house is sometimes called *Domina* in Russian. This word is not considered very literary nowadays, though virtually identical to the "Latin" *Domini.*

Finally, the letter *M* might as well have meant *Maria*, i.e. Mother of Jesus Christ. Let us recall that in Western Europe the Virgin Mary was in some sense even more popular than Christ. Therefore, the usage of her name in the chronology of the Christian era looks perfectly natural.

13.5.2. Example: the date on the tomb of Empress Gisela

The next example makes it immediately obvious what various decodings of the same "Latin Date" lead to. The famous cathedral church in the German city of Speyer, the Speyer Dom, houses several sepulchres of the emperors of the Holy Roman Empire of German Nation assigned to the X-XIII century A.D. Conrad II, his wife Gisela, Henry III, Henry IV, and then Rudolf Habsburg (of Nov-Gorod?), etc., are allegedly buried here ([1408], page 16). The fate of those sepulchres was a dismal one. Historians report that "*in 1689 the tombs were completely destroyed*" ([1408], page 17). Over and over we come across a striking fact – mass destruction and annihilation of old imperial burials turns out to have been performed in the XVII century in Russia as well as in Europe, see Chron5.

Remains of a few old tombs of the abovelisted German rulers have recently been discovered during excavations on the territory of the Speyer Dom, and later moved to the Dom and buried in a special crypt ([1408]). Unfortunately, one cannot see the old sarcophagi now, as they all have been replaced with contemporary concrete replicas – A. T. Fomenko and T. N. Fomenko witnessed that during their visit in 1998. We are familiar with such "replica practice" in what concerns the regal tombs in the Archangel Cathedral in Moscow, where the old sarcophagi of Russian Czars and Grand Dukes were covered completely with massive replicas of the Romanov epoch, so today it is impossible to read what has been originally written on the old sarcophagi, q.v. in Chron4.

In the museum of the Speyer Dom (Cathedral), in its basement, one can only see a minor remainder of metallic, apparently leaden, coating of the coffin of Empress Gisela. She is thought to have been buried in 1043 ([1408], p. 15). On a fragment of the leaden sheet, a vague part of a Latin inscription with a date has survived. We managed to read the inscription, although its integrity leaves much to be desired. It begins with:

ANNO DOM INCARN D CCCC XCVIIII-IOWNOV…

An explanatory plaque of the museum says the date is 999 A.D., 11th of November. However, this date can be read in a substantially different manner. Namely,

Year (ANNO) *of the House* (i.e. dynasty, DOM), *from the Accession* (INCARN), *of the House* (D) *four hundred* (CCCC) *ninety-ninth* (XCVIIII).

Which is "*Year four hundred ninety-nine from the Accession of the House*".

Question: from the accession of *which House*, i.e. dynasty, should one count these 499 years? Answers can be most diverse. For example, counting from the Scaligerian date of the accession of the dynasty of the Holy Roman Empire of German Nation allegedly in the X century, Empress Gisela – and her husband Conrad II as well – were buried in the *fifteenth* or even the *sixteenth* century A.D. Counting from the Nativity of Christ in the XI century, we arrive at the *sixteenth century* again. Let us recall that the Holy Roman Empire allegedly of X-XIII century is a partial reflection of a later dynasty of Habsburgs of the XIV-XVI century. So this can be a circumstance to explain *the late dating* obtained upon our reading of the inscription.

We do not insist this is the only way to decode the inscription on the tomb of "ancient" Empress Gisela. Nonetheless, the fact that the inscription can be read in such a way as to perfectly conform to our reconstruction is hardly a mere coincidence.

13.5.3. Another example: the date on the headstone of Emperor Rudolf Habsburg

The same Speyer Dom has an old gravestone from the tomb of King Rudolf of Habsburg (Nov-Gorod?), who died in the alleged year 1291 ([1408], page 16).

Fig. 6.96. The gravestone of king Rudolf Habsburg who had allegedly died in 1291. See [1408], page 17, or [1407], page 13.
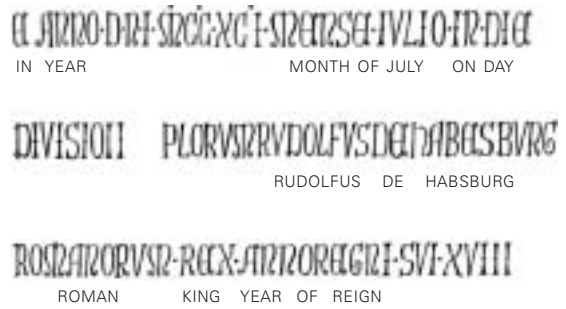
CC ANNO·D·RI·SIXCC·XC·I·SIXEIISSE·IVLIO·IR·DIGE
IN YEAR   MONTH OF JULY   ON DAY

DIVISIOII   PLORVSRRVDOLFVSDEIHABGSBVRG
                         RUDOLFUS   DE   HABSBURG

ROMAIIORVSR·REX·SIIIOREGRI·SVI·XVIII
ROMAN   KING   YEAR OF REIGN

Fig. 6.97 Our drawing of the inscription on Rudolf Habsburg's gravestone.

See fig. 6.96. Our drawing of this inscription is in fig. 6.97, along with the translation of certain words. We can see the date recorded as

ANNO.D.N.I.MCC.X.C.I.

The Scaligerite historians suggest a reading of 1291, where M = one thousand, CC = two hundred, XCI = 91, while the combination D.N.I. is today considered to be the abbreviation of DOMINI. At the same time, the inscription can be read as follows:

Year (Anno) *of the House* (Domini) *Great* (M, i.e. Magnus) *Two Hundred* (CC) *Ninety-One* (X.C.I.).

i.e. "*Year two hundred ninety-one from the accession of the Great House*". The question is as follows: what date does this inscription correspond to, according to the contemporary calendar? The answer depends on which Great House was meant: if it were e.g. the dynasty of Habsburgs (Nov-Gorod?) at the end of the XIII – beginning of the XVI century, then this would be the *fifteenth* or even the *sixteenth century*. If some other mediaeval Reigning House was implied, the date shall be somewhat different.

Let us take another look at the tombstone of Rudolf Habsburg, q.v. in fig. 6.96 and fig. 6.97. Take notice of the way the name of Habsburg is written – the carved stone reads either *Habasburg* or *Nabasburg*. The first letter looks a lot like *N*. We have earlier come up with the idea that the name of Habsburg was derived from the name *Novy Gorod* (New City), which is confirmed by the inscription on Rudolf's gravestone since *Burg* is "city", and *Nabas* obviously "new". The old gravestone is probably conveying to us this

origin of the name of the *Habsburgs*. Unfortunately, the letter *N* or *H* is badly damaged – all other letters of the inscription have survived except for the one most interesting to us. We shall recall that the Latin *H* and the Russian *H* (*N*) are identical.

In his **Universal History,** Oscar Jaeger presents a drawing of this famous inscription ([304], Volume 2, page 396). The dubious letter resembles the handwritten Latin *N,* and is by all means virtually similar to several other letters *N* of the same inscription whose origins are distinctly Latin. For example, in the word *Anno* = year, fig. 6.96, fig. 6.97. The contemporary author of the drawing in the book by O. Jaeger did actually lengthen the "tail" of letter *N* somewhat – most probably to be able to later proclaim it the Latin letter *H*, if desired.

By the way, historian Oscar Jaeger reports that some fragments of the tombstone of Rudolf Habsburg *were* "*renovated,* possibly recently, when *the whole memorial was restored* by the order of Emperor Franz-Joseph" ([304], Volume 2, page 396). Thus, we find ourselves confronted by a phenomenon that we're already accustomed to. *Something has been done to the memorial.* The exact nature of these changes shall remain nebulous. However, we will demonstrate what such restorations looked like sometimes on the example of the famous Cologne sarcophagus of the Magi in CHRON6. We shall see many initial images strangely "lost", others tendentiously *altered.* What if a similar fate befell the gravestone of Rudolf?

13.5.4. Recording of mediaeval dates was not unified everywhere even in the XVIII century

Let us return to the recording of date on the gravestone of Rudolf of Habsburg (Nov-Gorod?). Note the shape of letters in the inscription. The Latin letter *M* is written in much the same way as the Greek letter Ω. There are some small circles over the Ω and the letter *C* right next to it. There is no circle over the next *C*, or over the letter *X*. The circle does re-appear over the next letter *C*. These marks are absolutely certain to contain some information which might fundamentally change the meaning of the abbreviation letters.

This example illustrates the chaos that reigned in mediaeval timekeeping. There was no common, unified rule. *Until the XVIII century, the same date could have been written down in sufficiently different ways.*

Fig. 6.98. An inscription on a column standing in the middle of the German city of Bonn. The date (1777) is transcribed in a manner that we find rather peculiar nowadays. One sees that the unification of dates had not been achieved completely by the XVIII century. The photograph was taken by the author of the book in 1998.
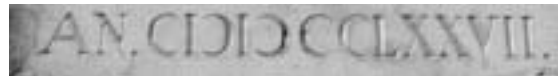

Fig. 6.99. Fragment with a date on an old column in Bonn.

Most various styles of abbreviation, notations, circles, lines and the like were used widely. It was only with the passage of quite some time that a more or less unified system was worked out.

Let us cite a very representative example. In the central marketplace of the German city of Bonn, next to the city hall, one can see an old stone column. An inscription on the plaque attached to it (fig. 6.98), has a date in the end: 1777, – q.v. in fig. 6.99. However, the date is recorded in a curious manner:

$$\text{(I)I) ((LXXVII.}$$

It is easy to work out that the date in question is actually MDCCLXXVII, or 1777. However, the letter *M* is written as *(I)*, the letter *D* as *I)*. In other words, in the recordings of *M* and *D* were made with the aid

of crescents facing left and right, which makes it clear that even by the end of the XVIII century no unification of recording "Roman dates" was attained yet. True, some of the more or less common rules were indeed introduced in the XVIII century, but the traces of previous "chronicle chaos" are still evident.

In this particular case there is no confusion about the reading of the date. But the picture changes drastically when we go backwards by a hundred, two hundred, or even three hundred years. As we could see, the general outlook complexifies in such cases, and various interpretations of the same old record arise.

13.5.5. Some datings of printed books and manuscripts dating from the XV-XVII century will apparently have to be moved forwards in time by at least fifty more years

We will have to revise some of the alleged datings of certain *printed books* published in Europe in the XV-XVII century, as well as *manuscripts, paintings* and *drawings* related to that time. Two systems were used for recording dates – Arabic and Roman figures. Thus, if a book, or a manuscript, or a painting should bear the date of 1552 written in Arabic figures, – must it necessarily mean 1552 in the modern sense, 448 years to the back from the year 2000? Not at all. We have already found out that the figure of *1* used to be written as the Latin capital *I*, sometimes even separated from the rest by a dot, as in I.552. According to our reconstruction, the letter *I* was initially the abbreviation of the name of Iesus (Jesus). Therefore, the date of I.552 would mean "the year 552 of Jesus", i.e. "the year 552 from the Nativity of Jesus Christ". But, as it follows from dynastic parallelisms mentioned above, the Nativity of Jesus Christ occurred in circa 1053 a.d. in the Scaligerian chronology, q.v. in fig. 6.23, fig. 6.24, – that is, virtually at the same time as the famous supernova explosion of 1054 a.d., the one that probably became recorded in the Gospel as the Star of Bethlehem. Now counting 552 years upwards from 1053, we arrive at 1605, and certainly not 1552. Therefore, in spite of "1552" written in the book, it could be printed in 1605, i.e. 53 years *later*. Thus, reconstructing the correct chronology of printed books, we can see that in some cases their dates must be shifted forwards by approximately another half a century. As we begin to understand now, by introducing their own interpretation of such date

transcription as I.552, the Scaligerite historians of the XVII-XVIII century have automatically aged the printed books of the XVI-XVII century by 50 years.

Another example: the first page of the *Geographia* by Prolemy, printed by Sebastian Münster in the alleged year 1540 ([1353]), features the year of publication written as M.D.XL. Today, *M* is accepted to stand for a millennium, *D* for five hundred years, and so forth. Substitution of these values does actually yield 1540, but the first letters separated by dots could have been the abbreviations of words related to the era of Jesus Christ. The letter *M*, for instance, could be the abbreviation for Megas = the greatest. Two letters, *alpha* and *omega*, were very often written on the icons of Jesus Christ. *Omega* or *Megas* meant *the Great, the Greatest*, possibly referring to the God – Jesus Christ. If so, then the date is the year 540 since Christ. Counting 540 years up from 1053 a.d. again, we obtain a date of 1593, or *the very end* of the XVI century, and not its first half. This is a radical change in the evaluation of the very publication of the *Geographia* by Ptolemy and allegedly "ancient" maps in it. It becomes clear why those maps display obvious traces of the Scaligerian version of history and geography. Detailed information about the *Geographia* by Ptolemy can be seen in Chron6.

Another possibility is that, in the recording of the date M.D.XL, only the last letters *XL*, or the numeral 40, stand for the actual date. The first two letters *M.D.* are just the opening letters of the word like the Great Sovereign = Magnus Dominus, and could mean a count of years from the beginning of some Emperor's reign, without mention of his name. By the way, the Scaligerian history believes Dominus = Sovereign to be a common epithet for Emperors after Augustus and Tiberius ([237], page 346). Besides, *D* was the opening letter of the word Divine. Then the date M.D.XL can mean "the fortieth year of the Great Sovereign such-and-such", and there's still a need to work out what emperor in particular the publisher used for point of reference. This context further increases the *ambiguity* of reading lettered dates of this type. Every principality would have a Great Sovereign of its own to count the years from.

Dates of mediaeval scientific literature publications must be revised as well – the works of N. Copernicus, for instance, who had allegedly lived in 1473-1543

([797], page 626). His works may well turn out to have been written 50 years later than we believe today. This idea is backed by the following facts. As a famous contemporary astronomer and historian Robert Newton points out, the actual "heliocentric idea gained a wide recognition *only one century after the Copernicus' works had appeared*" ([614], page 328). *In the seventeenth century*, that is "*Kepler* was the first one to have truly accepted the heliocentric theory" ([614], page 328). It is therefore not entirely impossible that some works of the Kepler epoch were "shifted" by approximately 100 years "backwards" and assigned to Copernicus. Or, alternatively, N. Copernicus could have lived in the XVI-XVII century, about half a century or a whole century closer to our time, and not in the XV-XVI at all. See details in CHRON3.

We should return to the question about the dates of life of some other famous figures in politics, science and culture of the XIV-XVI century in this respect. For instance, actual lifetimes of such outstanding painters as Leonardo da Vinci, the alleged years 1452-1519 ([797], page 701), or Michelangelo, the alleged years 1475-1564 ([797], page 799), etc. are not entirely clear – perhaps fifty years closer to our time, or even more recent than that.

13.6. The foundation date of Rome of Italy

We shall reiterate that our main result at this stage is the discovery of a stratified structure of the "Scaligerian textbook of history". One of our main primary objectives shall be the question of the veracious date of the foundation of Rome in Italy. The Scaligerian history makes us believe it occurred in the VIII century B.C. However, the dynastic parallels that we have discovered tell us something entirely different. According to Titus Livy, the foundation of Rome is linked to the names of Romulus and Remus ([482], Vol. 1). Moreover, Romulus is considered to have been the first King of the so called "regal Rome", or the First Roman Empire in our terms. However, all three Roman Empires – the First, the Second and the Third, – turned out to be duplicates, or phantom reflections of the mediaeval Holy Roman Empire of the X-XIII century and, to a considerable degree, the Empire of Habsburgs of the XIV-XVI century, q.v. in fig. 6.19, fig. 6.20, fig. 6.21, fig. 6.22, fig. 6.23, fig. 6.24, fig. 6.51, fig. 6.52.

Therefore, by shifting the First Roman Empire forwards in time, and "returning it to its rightful place", or superposing it upon the Empire of Habsburgs (Nov-Gorod?), we discover the foundation of the Italian Rome to have occurred in the end of the XIII century – beginning of the XIV century A.D. The correctness of this dating will be further confirmed by a vast number of independent sources.

13.7. A later confusion of foundation dates of the two Romes, on the Bosporus and in Italy

One of the consequences of the mentioned confusion of dates was, most probably, a mix-up of two events – the foundation of Rome on Bosporus, or Constantinople, and that of the city in Italy.

Several documents of roughly identical contents describing the same story of Rome on the Bosporus, Constantinople, or Czar-Grad (King-City), were studied by the first chronologists of the XVI-XVII century A.D. – several versions of the *History* by Titus Livy, for instance. Written by different people, from different viewpoints, in different languages, with the same characters under different names and nicknames. Among those were kings whose chronicles would subsequently become identified as belonging to two different epochs. A natural question of linking these documents to one another arose in the XVI-XVII century. One of the main problems that confronted the chronologists was that of what principles would such identification be based upon. One of the methods offered was apparently as follows. In many chronicles, the count of years started from "the foundation of the City" – in the *History* by Titus Livy, for instance. Therefore, to link a document to the mediaeval chronology it was enough to calculate the date of "the foundation of the City". Scaligerite historians came to the conclusion that the City in question should necessarily be the Italian Rome. *This is apparently incorrect* – q.v. from the shifts on the global chronological map.

The foundation of Rome = Constantinople, later called the New Rome, thus became *split in two*: chronologically and geographically. Scaliger tells us that another "foundation of Rome" took place in the alleged year 753 B.C. – that is, one thousand years prior to the foundation of the New Rome on the Bosporus in the alleged year 330 A.D., according to

Scaliger himself. This is a demonstration of the millenarian chronological shift that began to cast mediaeval events back into remote past.

However, Roman history knows of not just two, but three "foundations of Rome". The first "foundation", dated by Scaliger to 753 B.C. and called the foundation of Rome in Italy. The second "foundation" of Rome on the Bosporus, or the New Rome, "attributed" by Scaliger to 330 A.D., which was yet another error. By the way, Rome on the Bosporus was named New because the capital was moved here from the ancient Alexandria, Egypt, and not from the Italian Rome, since the latter didn't exist at that time.

Many mediaeval documents confuse the two Romes: in Italy and on the Bosporus. It is widely assumed that, around 330 A.D., Constantine the Great moved the capital from Rome in Italy to the Bosporus, into a settlement called Byzantium, that was officially named "the New Rome" in the alleged year 330 A.D. ([240], page 26). Later, the New Rome was called Constantinople ([240], page 26). Today, both Romes are believed to have been capitals of great empires. The citizens of the New Rome were long ago noted to have called themselves "*Romans*". It was other nations that would allegedly call them Rhomaioi. Therefore, the Rhomaioi Empire turns out to have been the Roman Empire – the name that, apparently in the XVI century A.D., was moved (on paper) to Italy.

Along with the Scaligerian myth of moving the Empire's capital from the alleged Italian Rome to the Bosporus, there is a contradictory assertion. The very same Scaligerian history refers to an inverse relocation of the Empire's capital – *from the Bosporus to Italy*. This legend is apparently closer to the truth. Again, it was the emperor Constantine who is presumed to have done it in 663 A.D.; however, not Constantine I (the Great), but rather Constantine III, who allegedly didn't accomplish his plan because he was killed in Italy ([544]). The Rome on the Bosphorus is usually thought to have been the Greek capital. However, a substantial part of Byzantine coinage, as well as Italian coinage, boasts inscriptions in Latin and not in Greek ([196]).

A famous legend about the foundation of Rome tells us the story about the simultaneous foundation of the two cities: one founded by Romulus, and the other by Remus. See the very beginning of the *History* by Titus Livy. The two founders bear similar names: Romulus and Remus. Then Romulus is supposed to have killed Remus, and only one Rome was left – the capital (Titus Livy, Book 1, Chapter 1). It probably is a reflection of the confusion between the two Romes. Furthermore, some ancient chronicles call the founders of both capitals not Romulus and Remus, but rather "Romus and Roma", which makes the names of the founders virtually the same. See, for example, [938], pages 18.1.B. 170-175.

It is considered today that Rome in Italy has *always* been meant by the "city" from the foundation of which the year count begins in Roman chronicles. However, several mediaeval authors of the XII-XIV century A.D. turned out to be of an entirely different opinion. As per the famous crusader Villardoin, for instance, this (Rome on Bosporus) "city surpassed all others, as if it were their lord… *Byzantines would willingly simply call it 'The City'* (! – A. F.)… that is, the *City* by its prevalence, *the only City*" ([248], page 28).

Thus, the count of years "from the foundation of the City" in many old documents, most likely, refers to the Rome on the Bosporus, or Constantinople, which, according to our reconstruction, was founded *earlier* than the Italian Rome.

Constantine I is considered to have "transferred many establishments from Rome to Constantinople… and ordered to build… palaces ad exemplum of their [senators' – A. F.] Roman dwellings… The Byzantine Empire was still called the Roman Empire" ([248], page 28). However, the counter-influence of the New Rome on the Italian Rome is very well known and was great indeed. It is written that, "Rome of the VII and VIII centuries was a *semi-Byzantine town* (sic! – A. F.)… The *Greek* faith could be observed practised everywhere; the *Greek* language was used for quite a long time in official acts as well as for quotidian purposes… Norman kings would wear the magnificent vestments of *Byzantine* emperors with great pride" ([248], pages 31-32).

The Scaligerian history displays irritation when it mentions the so-called "*fiction* to which Byzantines have been holding on for centuries on end: *the Byzantines assumed they were actually Romans*… The Byzantine emperors continued to behave as the only lawful emperors… Greeks turn out to be "Roman" according to all Byzantine historians… To distinguish [they did

in fact fear confusion! – A. F.] between the Western mediaeval Empire and that of Byzantium, the latter was deliberately (?! – A. F.) called the Rhomaioi or Rhomanian Empire… The name Rhomania [Romania – A. F.]… was transposed from Byzantium to Ravenna for designation of that… country of Italy" ([195], page 51).

We have a reason to clarify the confusion between the two Romes in such details. The following reconstruction is readily apparent from the global chronological map and its decomposition into the sum of four chronicles presented above. Most probably, *Rome on Bosporus was founded first*, called Constantinople, and later Istanbul. It happened around the *X-XI century A.D.*, and not in 330 A.D. And only then, approximately 330 or 360 years later, i.e. around the XIV century A.D., the Italian Rome was founded. If a mediaeval chronicler of that age confused the foundation of the Rome on the Bosporus in the X-XI century A.D. with that of Rome in Italy in the XIV century A.D., a chronological shift by approximately 330 or 360 years seems possible. As a result, the chronicler would collate two chronicles together with an apparent shift and obtain a wrong lengthy history with duplicates as a consequence. And it is only today that we can detect them within the "Scaligerian textbook" with the help of statistical methods.

Quite a natural question is that of the appearance of the so-called "non-concise history" textbook. Our discovery of the decomposition of the global chronological map into the sum of four short chronicles allows us to answer this, albeit only in broad outlines so far. An approximate scheme of the new chronology – and, consequently, the new history – is obtained by moving forward and identifying all the duplicate historical periods marked with the same letter symbols with each other on the global chronological map. The following volumes of this edition will encapsulate our hypothetical reconstruction of the world history.

Upon "returning" all ancient chronicles that "went backwards" from the mediaeval period of the X-XVII century A.D. into "antiquity", we find out that the history of Europe, the Middle East, and Egypt is covered in the same degree as the history of the "younger cultures": Scandinavia, Russia, Japan. The "levelling of cultures" may possibly reflect a natural circumstance

– a more or less simultaneous naissance of civilization in different regions of the world and their parallel evolution.

13.8. Scaliger and the Council of Trent. Creation of the Scaligerian chronology of antiquity in the XVI-XVII century

We already mentioned that phantom duplicates were only discovered on the global chronological map before "the Scaligerian era", but not after it. Thus, we are facing yet again the fact that the activity period of Scaliger and Petavius is somehow related to our discovery of the abovementioned effects in ancient chronology and history. We shall recall that it was the fraction of Scaliger-Petavius that had rigidified and immobilized "the historical tradition" which the "the modern textbook of ancient history" is based upon. The Scaliger-Petavius version proves to have been a fruit of bloody confrontation over the issues of chronology (!) in the end of the XVI-XVII century. Moreover, the Scaligerian version turns out to be far from unique. Some other points of view had opposed it, but "lost the battle". Here is information about some of the events of that tumultous time, the epoch of the 30 year war in Europe, chaos and anarchy.

"It suffices to recall the famous chronologist Joseph Scaliger who *stood up against the Gregorian Reform*, or the great Copernicus who *refused* to participate in its preparation that was in full swing at the Lateran Council of 1514" ([295], page 99). Nowadays, it is the shift of the equinoxial date that is considered to have been the main issue in the debates about the reform, but it was just one of many other serious issues discussed in relation to the calendar reform. Apparently, the "new historical" concept of Scaliger's was created in a tough struggle with those who still remembered the true history and objected against an introduction of "the Scaligerian chronology". That struggle has most probably been the reason for the famous "procrastinated" Council of Trent, which had lasted for 18 years (!), from 1545 to 1563, with several intermissions. In particular, it was where *the establishment of the canon for the Biblical books* was allegedly debated. However, those debates might have taken place later, in the XVII century, and subsequently made antedate the Council of Trent in order

to increase the prestige of the discoveries allagedly made in the XVII century. See details in CHRON6.

One of the epicentres of the struggle in the Scaligerian era was the so-called Scaligerian Julian period. The Great Indiction is the 532 year period which is now thought to have been called Indiction in Byzantium and the Great Circle in the West. "It is hard to determine with any fair degree of precision as to when and where that temporal cycle had entered the discourse originally" ([295], page 99).

It is supposed, – although no original documents exist to prove this – that the Great Indiction was known to the Paschalian advocates of the Council of Nicaea in the alleged IV century A.D. ([295], page 99). A modification of that very Great Indiction, namely, the period of 7980 years ([295], page 105), is also in existence. This cycle is also considered "ancient"; however, as it turns out, "this ancient cycle appears to have been included in the chronological science only towards the end of the XVI century under the name of "the Julian period". This notion was introduced into academic circulation by the outstanding encyclopaedist and chronologist… Joseph Scaliger (1540-1609) in his treatise *The New Treatise on Improving the Count of Time*… The work was published in 1583, almost simultaneously [! – A. F.] with the Gregorian Reform, of which the scholar [Scaliger – A. F.] remained a fundamental adversary for the rest of his life. [This is in re establishing the global chronology and a calendar of the ancient world – A. F.]. Resting upon the works of the Byzantine chronologists, heirs of the Alexandrian school, Scaliger insisted that only the Julian calendar, or chronological system, could provide a continuous count of years in the universal chronology… *Kepler was… one of the first to appreciate the advantages of the Scaligerian Julian period*" ([295], page 106).

In this respect it would be extremely important to find out what role Kepler played in the creation and "scientific justification" of the Scaligerian chronology. "Having appreciated its advantages", fallen under the influence of J. Scaliger, and agreed with the claim of "the great antiquity" of many old books and scientific documents, the astronomer Kepler could – sincerely or not – participate in a purposeful "improvement" of the mediaeval astronomical materials, such as the *Almagest* by Ptolemy, that is, to "bring it to conformity" with the Scaligerian dating: for in-

stance, add up an appropriate constant magnitude to the longitudes of the celestial catalogue in order to "age" the catalogue to the II century A.D., and so forth. As a professional astronomer, he must have understood what and how should be done to accomplish this very well. See details in CHRON3.

We have already demonstrated the rather low level of the scientific criticisms of that time in CHRON1, Chapter 1. Let us recall the kind of argumentation that J. Scaliger and his supporters used even in minor occasions – such as when the XVI century mathematicians pointed out a great error in his "argumentation" for "having solved" the issue of "the circle's quadrature".

A heated dispute was going on in re the Scaligerien chronology and its entire concept. Today we are told the following: "In this sense, the fact that Pope Gregory XIII acknowledged the very period [Scaligerian – A. F.], othe that neither astronomy [? – A. F.] nor chronology can do without, to be unsuitable for the calendar, is still a paradox" ([295], page 107). It would be quite edifying to bring up the archive documents of the Council of Trent, or whatever is left of them, and revise all remaining documents of that troublesome epoch relevant for the struggle over the Scaligerian chronology.

13.9. Two phantom "ancient" reflections of Dionysius Petavius, a mediaeval chronologist of the XVII century

The Scaligerian history knows of three famous chronologists, each one named Dionysius, separated from one another by several centuries.

a. The first chronologist Dionysius allegedly died in 265 A.D. ([76]).

■ *b. The second* chronologist, known as Dionysius Exiguus, who had allegedly lived in the VI century A.D. ([72], [76]). The Scaligerian history contains different versions of the date of his death: around 540 A.D. or around 556 A.D.

■ ■ *c. The third* and the last chronologist Dionysius, the famous Dionysius Petavius (1583-1652).

The two "mediaeval chronologists named Dionysius" appear to be phantom reflections of one actual

mediaeval chronologist Dionysius Petavius upon the chronological shifts of 1053 years and 1386 years. The second shift is the sum of the two main shifts by 333 years and 1053 years. Here is a brief table.

1*a*. According to Eusebius Pamphilus, a famous chronologist *Dionysius* who devoted himself to calculations related to the *Easter* died in the alleged year 265 A.D.

■ 1*b*. A famous chronologist *Dionysius the Little* (Exiguus) died in the alleged VI century A.D., in 540 or 556. The so-called "pearl of *Easter Cycles* by Dionysius" occurs allegedly in 563 A.D.

■ ■ 1*c*. A famous chronologist *Dionysius Petavius* (1583-1652), for many years involved with the calculations of the *Easter Cycle*; one of the creators of the version of chronology accepted nowadays.

2*a*. With a total shift by 1386 years (where 1386 = 1053 + 333), Dionysius Petavius from the XVII century is superposed over Dionysius from the alleged III century A.D. Moreover, the death of Dionysius Petavius accurately "transforms" to the death of Dionysius from the III century, because 1652 − 1386 = 266 A.D.

■ 2*b*. With a shift by 1053 years, Dionysius Petavius is superposed over Dionysius Exiguus from the alleged VI century A.D. Indeed, 1652 − 1053 = 599 A.D. One can't but mention that *Petavius* is actually the French word *petit*, meaning *little*. Therefore Dionysius Petavius from the XVII century is merely Dionysius *the Little*. In Latin, Dionysius the Little from the alleged VI century was called *Exiguus* (exigu) = little. Thus, both Dionysii – from the XVII and the VI century – have *coinciding names*.

■ ■ 2*c*. Dionysius Petavius is considered to have been a disciple of Scaliger. Scaliger and his pupils lived in France. Therefore, it is quite natural that the name "Little" sounded in France as *petit* and eventually turned into "Petavius", while in the Latin texts the same name "Little" sounded like "Exiguus". Thus, the mediaeval Dionysius Petavius turned into the "ancient" Dionysius the Little from the alleged VI century A.D.

3*a*. ?

■ 3*b*. Dionysius the Little from the alleged VI century A.D. is thought to have been the first mediaeval author to calculate the date of the Nativity of Jesus Christ. Dionysius declared that Christ was born approximately 550 years before him. It is generally agreed that Dionysius the Little was the first one to have correctly determined the date of Nativity of Christ.

■ ■ 3*c*. According to our reconstruction, Jesus Christ was born in the XI century A.D., i.e. about 550-600 years before the birth of Dionysius Petavius who had died in 1652. *Thus, Dionysius Petavius, or Dionysius the Little, was absolutely right to have stated in the XVII century that Jesus Christ was born approximately 550 years before him.*

Thus, certain documents erroneously assigned to the VI century A.D. and actually describing the life and the work of Dionysius Petavius from the XVII century have retained the correct information that in the XVII century certain authors still remembered quite well that the Nativity of Jesus Christ had actually taken place in the XI century A.D.

14.
A STRATIFIED STRUCTURE OF THE SCALIGERIAN TEXTBOOK OF ANCIENT HISTORY

Here we shall describe in a greater detail the stratified structure of the global chronological map, or the "Scaligerian history treatise", that we have discovered. We will demonstrate the superposition on each of four virtually identical "chronicles" S_1, S_2, S_3, S_4 in the form of a table. In other words, we indicate precisely the events constituting the epoch blocks shown on fig. 6.55. For the convenience of using this table, it is worth to continuously compare it to fig. 6.55.

E = The Scaligerian "history textbook". Dates quoted according to Scaliger.

■ *B* = Bible. We have already lifted the Scaligerian dates of events listed here by 1800 years, due to our discovery of the superposition of Biblical history over the Euro-Asian mediaeval history. However, we

recall that the Biblical history has to be shifted even further forwards. More details on this in our next chapters.

■ ■ S_4 = "Chronicle" obtained by shifting its mediaeval original by circa 1800 (more precisely – 1778) years backwards.

■ ■ ■ S_3 = Chronicle" obtained by shifting its mediaeval original by circa 1000 (more precisely – 1053) years backwards.

1-*E. Duplicate K*: allegedly 1460-1236 b.c. "Antique" Trojan Kingdom of seven kings. Greeks and Trojans

■ 1-*B*. –

■ ■ 1-S_4. *Duplicate K*: allegedly 306-535 a.d. The Third "ancient" Roman Empire of the alleged IV-VI centuries a.d. in the East and West.

■ ■ ■ 1-S_3. –

2-*E. Duplicate T*: allegedly 1236-1226 a.d. The famous Trojan War between Greeks and Trojans. The fall of Troy, the exile of the Trojans.

■ 2-*B*. –

■ ■ 2-S_4. *Duplicate T*: allegedly 535-552 a.d. The famous Gothic War (allegedly in Italy). Expuslion of the Goths from Italy, the fall of Naples and Rome.

■ ■ ■ 2-S_3. –

3-*E. Duplicate N*: allegedly 1226-850 b.c. Regal dynasties of "antique" Greece.

■ 3-*B*. –

■ ■ 3-S_4. *Duplicate N*: allegedly 552-901 a.d. Mediaeval Papal Rome and mediaeval Greece.

■ ■ ■ 3-S_3. –

4-*E. Duplicate T*: allegedly 850-830 b.c. The second version for the dating of the Trojan War according to Hellanicus, Damastus and Aristotle ([579], p. 23). The apple of discord of Venus, the goddess of love. The Trojan War as a consequence of "the apple of discord".

■ 4-*B. Duplicate T*: allegedly 850-830 a.d. Genesis 1-3. Adam and Eve, the apple of discord, punishment and expulsion from Paradise.

■ ■ 4-S_4. *Duplicate T*: allegedly 901-924 a.d. The war in Italy. Alberic I and Theodora I. Legend about "a discordian woman".

■ ■ ■ 4-S_3. –

5-*E. Duplicate T*: allegedly 760-753 b.c. The foundation of Rome in Italy. Romulus and Remus, the rape of the Sabines as a version of "the legend of a rape".

■ 5-*B. Duplicate T*: allegedly 760-753 b.c. Genesis 4:1-16. Cain and Abel, the murder of Abel.

■ ■ 5-S_4. *Duplicate T*: allegedly 931-954 a.d. The war in Italy. Alberic II and Theodora II.

■ ■ ■ 5-S_3. –

6-*E. Duplicate K/R*: allegedly 753-522 b.c. Titus Livy's Regal Rome of the seven kings, the so-called First Roman Empire. The great "ancient" Greek colonization of the alleged VIII-VI century b.c.

■ 6-B. *Duplicate K*: allegedly 753-522 b.c. Genesis 4:5-31. Enoch, Irad, Mehujael, Methuselah, Lamech, Seth, Enosh, Kenan, Mahalalel.

■ ■ 6-S_4. *Original* and *Duplicate R*: 962-1250 a.d. The Holy Roman Empire of German Nation in the X-XIII century. Crusades.

■ ■ ■ 6-S_3. *Duplicate K*: allegedly 300-535 a.d. The Third Roman Empire of the alleged IV-VI century a.d. The foundation of the New Rome – allegedly in 325 a.d. Eastern campaigns of Rome.

7-*E. Duplicate T*: allegedly 522-509 a.d. The war against the Tarquins in Rome. Expulsion of kings from Rome. The beginning of the Republican "ancient" Rome. The Roman legend of the foundation of a city near Rome by the Biblical Noah ([196], Vol. 3, p. 437).

■ 7-*B. Duplicate T*: allegedly 522-509 b.c. Genesis 5-8. The legend about patriarch Noah, the Ark, the Flood, the perishing of mankind, the new Covenant. There is a partial parallelism between the legends of Noah and Moses. The Ark of the Covenant at the time of Moses and the Ark at the time of Noah. The laws of Moses and the laws of Noah.

■ ■ 7-S_4. *Original* and *Duplicate T*: 1250-1268 a.d.

The famous war in Italy; the fall of mediaeval Italian city Troy. Manfred, Conrad.

■ ■ 7-S_3. *Duplicate T*: allegedly 535-552 A.D. The famous Gothic War in Italy. The fall of Naples and Rome. Justinian, Belisarius, Narses, the Goths and the Franks – TRN, without vowels.

8-*E*. *Duplicate N/S*: allegedly 509-82 B.C. Republican "ancient" Rome. Graeco-Persian wars. Cyrus, Darius, Xerxes. Peloponnesian wars in Greece. The Macedonians, Philip II. The fall of Byzantium. The empire of Alexander the Great. A famous period in the history of "classical" Greece. The wars with the Samnites in Rome. The Punic Wars. Hannibal. The end of the "classical" Greece. The beginning of Hellenism.

■ 8-*B*. *Duplicate N*: allegedly 509-82 B.C. Genesis 9,10:1-32. The descendants of Noah, the scattering of people over the Earth. Sons of Noah – Shem, Ham, Japheth. The sons of Japheth.

■ ■ 8-S_4. Partial *Original S*: 1300-1550 A.D. The Empire of the Habsburgs (Habsburg = Nov-Gorod?). Mediaeval Greece. The battles of 1316 A.D. as the original of the "ancient" battle of Marathon. Duke Walter II. The wars between the Franks and the Turks. Mohammed and the Mohammedans. The fall of Byzantium in 1453 A.D. The Ottoman Sultanate. The end of independent mediaeval Greece. The voyage of Columbus, the discovery and colonization of America, or the New World.

■ ■ ■ 8-S_3. *Duplicate N*: allegedly 552-901 A.D. The Mediaeval Papal Rome. The war between the Romans and the Langobards allegedly in 705, 711 and further up to 765 and 769 A.D. The war in the South of Italy. Wars with Saracens. Wars with Franks in Italy.

9-*E*. *Duplicate T*: allegedly from 82 B.C. till 23 A.D. The beginning of the "ancient" imperial Rome. Sulla, Pompey, Julius Caesar, Octavian Augustus. Civil wars in Rome of the alleged I century B.C.

■ 9-*B*. *Duplicate T*: allegedly 82 B.C. – 23 A.D. Genesis 11:1-9. The Tower of Babel, dispersion of people, chaos.

■ ■ 9-S_4. The end of the "chronicle" S_4.

■ ■ ■ 9-S_3. *Duplicate T*: allegedly 931-954 A.D. Wars in Italy. Alberic II and Theodora II. The "Restoration" of many "ancient" customs in the mediaeval Rome. The beginning of Holy Roman Empire of German Nation.

Then the table expands, "chronicles" S_2, S_1 and S_0 appear instead of the "chronicle S_4" which had ended. Finally, the table consists of six series of superposed duplicates. Namely,

E = The Scaligerian "history textbook". Dates according to J. Scaliger.

■ *B* = The Bible. We have already transferred the Scaligerian dates of events listed here by approximately 1800 years forwards thanks to our discovery of the Biblical history superposed over the Eurasian mediaeval history. We recall that the Biblical history has to be shifted even further forwards. More details in the next chapters.

■ ■ S_3 = Chronicle obtained by shifting its mediaeval original by circa 1000 (more precisely – 1053) years backwards.

■ ■ ■ S_2 – Chronicle obtained by shifting its mediaeval original by circa 333 or 360 years backwards.

■ ■ ■ ■ S_1 = Chronicle obtained by several distortions in its mediaeval original, see below. We shall call the chronicle S_1 the *distorted original.*

■ ■ ■ ■ ■ S_0 = The *original* chronicle for all of the previous "duplicate chronicles".

10-*E*. *Duplicate R/K*: allegedly from 23 B.C. to 235 A.D. The Second Roman Empire of the I-III century A.D. During its earliest days, such major events as the Nativity of Jesus Christ, important religious reforms, "the beginning of a new era". Explosion of a nova called the Star of Bethlehem in the Gospel.

■ 10-*B*. *Duplicate K*: allegedly from 23 B.C. to 217 A.D. Genesis 11:10-32. Arphaxad, Shelah, Eber, Peleg, Reu, Serug, Nahor, Terah,

Haran, Abraham. The Biblical Aaron and a Christian reformer by the name of Arius may be reflections of the same actual mediaeval figure.

■ ■ 10-S_3. *Duplicate* and *Original R*: allegedly 965-1250 A.D. The Holy Roman Empire of German Nation of the X-XIII century A.D. At the naissance of this Empire, the most prominent religious reform of "Pope Hildebrand", or "Pope Gregory VII". Schism of the Christian Churches, famous supernova explosion in 1054 A.D., apparently described in the Gospel as "the Star of Bethlehem" that signified the Nativity of Jesus Christ in the XI century.

■ ■ ■ 10-S_2. *Duplicate K*: allegedly 306-535 A.D. The Third Roman Empire of the IV-VI century A.D. A famous Christian Saint Basil the Great, or simply the Great King (king = basileus) in the alleged IV century A.D. A major religious reform; Schism of Christian Churches; "heresy of Arius" (Aaron?), i.e. the famous Arianism.

■ ■ ■ ■ 10-S_1. –

■ ■ ■ ■ ■ 10-S_0. –

11-*E. Duplicate T*: allegedly 235-251 A.D. Anarchy at the end of the Second Roman Empire; The Gothic War; Julia Maesa. Then the second copy of the same *Duplicate T*: allegedly 270-300 A.D. Civil War allegedly of the III century A.D. in Roman Empire.

■ 11-*B. Duplicate T*: allegedly 270-300 A.D. Genesis 12. Abram, Sarah, the struggle against Pharaoh, or TRN without vowels.

■ ■ 11-S_3. *Duplicate* and *Original T*: 1250-1268 A.D. The famous war in Italy. The fall of Naples and the mediaeval Italian Troy.

■ ■ ■ 11-S_2. *Duplicate T*: allegedly 535-552 A.D. The famous Gothic War allegedly in Italy. The fall of Naples, Rome. Goths defeated.

■ ■ ■ ■ 11-S_1. –

■ ■ ■ ■ ■ 11-S_0. –

12-*E. Duplicate P/K/R/S*: allegedly 300-535 A.D. The Third Roman Empire of the alleged IV-VI century A.D. The split of the Empire into two kingdoms – East and West.

■ 12-*B. Duplicate K*: allegedly 306-535 A.D. Genesis 13-38. Abram and Lot. The split into two kingdoms. Isaac, Esau, Jacob, Joseph.

■ ■ 12-S_3. Partial *original*: 1273-1619 A.D. The Empire of the Habsburgs (Nov-Gorod?), "Roman Kingdom". Eastern Romaloi Empire, or Byzantium ending in 1453 A.D. with the fall of Constantinople = New City.

■ ■ ■ 12-S_2. *Duplicate P*: allegedly 681-887 A.D. The Carolingians; the Empire of Charlemagne (the Great King). The Eastern Roman Empire.

■ ■ ■ ■ 12-S_1. *Duplicate R/K*: The Third Roman Empire of the alleged IV-VI century A.D. Disintegration of the Empire into two kingdoms – the Eastern and the Western.

■ ■ ■ ■ ■ 12-S_0. –

13-*E. Duplicate T*: allegedly 535-552 A.D. The famous Gothic War allegedly in Italy. The end of the Third Roman Empire.

■ 13-*B. Duplicate T*: allegedly 535-552 A.D. Genesis 39-50. Exodus, the story of Moses. Then, Leviticus, Numbers, Deuteronomy, Joshua.

■ ■ 13-S_3. The end of chronicle S_3. –

■ ■ ■ 13-S_2. *Duplicate T*: allegedly 901-924 A.D. The Civil War in Italy. Alberic I and Theodora I.

■ ■ ■ ■ 13-S_1. *Duplicate R/K*: allegedly 535-552 A.D. The famous Gothic War in Italy. The exodus of the Goths from Italy.

■ ■ ■ ■ ■ 13-S_0. –

14-*E. Duplicate P/N/R*: allegedly 566-901 A.D. Mediaeval Papal Rome. The Carolingians, the Empire of Charlemagne (the Great King).

■ 14-*B. Duplicate P/N/R*: allegedly 556-901 A.D. Judges 1-18. The story of the Biblical rulers – judges.

■ ■ ■ 14-S_2. *Duplicate* and *Original R*: allegedly

962-1250 A.D. The Holy Roman
Empire of German Nation.

■ ■ ■ ■ 14-S_1. *Duplicate P/N*: allegedly 552-901 A.D.
Carolingians, the Empire of Charle-
magne.

■ ■ ■ ■ ■ 14-S_0. Negligible remains of data regard-
ing actual events of the VI-IX cen-
tury A.D.

15-*E*. *Duplicate T*: allegedly 901-914-924 A.D.
The Civil War in Italy. Alberic I and
Theodora I. Then, another *Duplicate T*:
allegedly 931-954 A.D. The war in Italy.
Alberic II and Theodora II.

■ 15-*B*. *Duplicate T*: allegedly 901-924 A.D.
Judges 19-21. Struggle against Benjamites.
Then, another *Duplicate T*: allegedly 931-
954 A.D. Ruth, 1-2 Samuel, 1 Kings 1-11,
1 Chronicles, 2 Chronicles 1-9. Famous
Biblical Kings: Saul, Samuel, David,
Solomon.

■ ■ ■ 15-S_2. *Duplicate* and *Original T*:
1250-1266 A.D. The famous war in
Italy. The fall of the Hohenstaufens.
The fall of the mediaeval Troy in Italy.
The fall of Naples. Manfred, Charles of
Anjou, Conrad (Khan-of-the-Horde?).

■ ■ ■ ■ 15-S_1. *Duplicate T*: allegedly 901-924 A.D.
The war in Italy. Alberic I and
Theodora I.

■ ■ ■ ■ ■ 15-S_0. *Original*: Negligible remains of
data regarding actual events of the
X century A.D.

16-*E*. *Duplicate* and *Original R/S*: 960-1250 A.D.
The Holy Roman Empire of German Nation.
Emperors are crowned twice: in Rome and
Germany. The "two empires", as it were.

■ 16-*B*. *Duplicate* and *Original R*: 962-1250 A.D.
1 Kings 12-22, 2 Kings 1-23, 2 Chronicles
10-34. Kingdoms of Israel and Judah. Both
kingdoms exist in parallel, at the same time.
"Two kingdoms".

■ ■ ■ 16-S_2. *Duplicate* and *Original R*:
1273-1619 A.D. The Empire of the
Habsburgs (Nov-Gorod?).
"Renaissance" in Europe, the golden

age of "ancient" motifs. The Great =
"Mongolian" Empire. The end of
chronicle S_2.

■ ■ ■ 16-S_1. *Duplicate* and *Original R*: 962-1250
A.D. The Holy Roman Empire of
German Nation. "Double Empire", or
one with double coronation.

■ ■ ■ ■ 16-S_0. *Duplicate* and *Original R*: 962-1250
A.D. The first time any data of ac-
tual events of this epoch appear. A
vague beginning of a partially cor-
rect chronology. Not much data.

17-*E*. *Duplicate* and *Original T*:
1250-1269 A.D. A famous war in Italy.
The fall of the Hohenstaufens. The fall
of the Italian Troy and the fall of Naples.
Manfred, Charles of Anjou, Conrad
(Khan-of-the-Horde?).

■ 17-*B*. *Duplicate* and *Original T*:
1250-1268 A.D. 2 Kings 24-25,
2 Chronicles 35-36. War with the
Pharaoh and Nebuchadnezzar.
The fall of the Kingdom of Judah.

■ ■ ■ 17-S_1. *Duplicate* and *Original T*:
1250-1268 A.D. The war in Italy.
The fall of the Hohenstaufens.
The fall of the Italian Troy and the
fall of Naples. Manfred, Charles
of Anjou, Conrad (Khan-of-the-
Horde?).

■ ■ ■ ■ 17-S_0. *Duplicate* and *Original T*:
1250-1268 A.D. The war in Italy.
The fall of the Hohenstaufens.
The fall of the Italian Troy and
the fall of Naples. Manfred,
Charles of Anjou, Conrad (Khan-
of-the-Horde?).

18-*E*. *Duplicate* and *Original S*:
1273-1619 A.D.
The Great = "Mongolian" Empire.
The Habsburg (Nov-Gorod?) dynasty.
The Avignon captivity of Popes in France
1305-1378 A.D., which lasted 70 years.
After that, the relocation of the Holy See
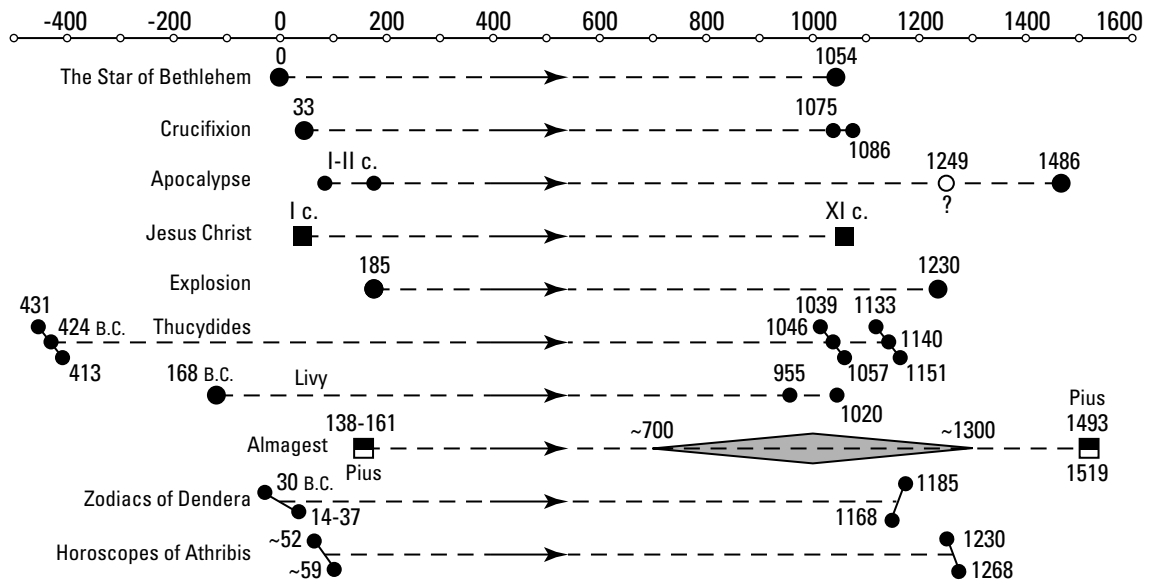to the Italian Rome.

Fig. 6.100. The concurrence of the new exact astronomical dates with the New Chronology. The shifts of "ancient" astronomical event datings concur well with the dynastic parallels.

- 18-*B. Duplicate* and *Original S*: 1273-1600 A.D. The Books of Ezra, Nehemiah, Esther, Judith. The Babylonian captivity of Jews under the rule of "Persia" which lasted 70 years. Then – "return" to the new Jerusalem, its "restoration".

- ■ ■ ■ ■ 18-S_1. *Duplicate* and *Original S*: 1273-1619 A.D. The Great = "Mongolian" Empire. The Habsburg (Nov-Gorod?) dynasty. Towards the end of this period, in the XVI-XVII century, the chronologists J. Scaliger and D. Petavius have been quite active. We recall here that Petavius was most likely the original prototype for "Dionysius the Little" from the alleged VI century A.D.

- ■ ■ ■ ■ 18-S_0. *Original S*: 1273-1619 A.D. The Great = "Mongolian" Empire. Russia-Horde and the Ottoman = Ataman Empire. The seizure of Constantinople = the first Jerusalem in 1453 A.D. The captivity of Jews in "Babylon" – White or Volga Horde. See details in CHRON6.

15.
THE COORDINATION OF A NEW ASTRONOMICAL DATING WITH A DYNASTIC PARALLEL

The above-described shift of astronomical dating from "antiquity" into the Middle Ages appears to conform well to the basic chronological shifts by approximately 330-360, 1050, and 1800 years. We shall note here that those shifts were discovered on the basis of completely different, independent considerations – namely, as a result of analysis of repetition duplicates we revealed in the "Scaligerian textbook of history", and above all, on the basis of the discovered *dynastic parallels, or parallelisms.* Those three shifts shall be referred to as "dynastic".

We shall present a few bright examples of concurrence between *astronomical* and *dynastic* shifts (see fig. 6.100). Now we shall decode the legend we use on this diagram.

1) *The Star of Bethlehem.* According to the Gospel, when Jesus Christ was born, a blazing star flared in the sky, called the Star of Bethlehem. In accordance with tha Scaligerian version, this flash was dated "year zero" of the new era. As demonstrated below, this flash actually occurred in 1054 A.D., but the Scaligerite

chronologists artificially shifted it backwards by 1053 years, from the XI century into the I century. We may recall that a famous supernova explosion was recorded in 1054. More details below. Thus, the difference between 1054 and "the year zero" is 1053 years, exactly equal to the value of one of three main chronological shifts on the global chronological map. That shift is in good concurrence with the independent identification of the Second Roman Empire with the Holy Roman Empire of the X-XIII century (fig. 6.23 and fig. 6.24). The shifts we discovered should not be thought to describe certain periodicity in the distributions of dates of *actual* astronomical phenomena, like eclipses or explosions. We have shown earlier that the Scaligerian links of ancient documents containing descriptions of eclipses as compared to the dates of actual ancient eclipses are at a great stretch in the absolute majority of cases, therefore, it may no way be an astronomical proof.

2) *Total eclipse at the time of the Crucifixion of Jesus Christ.* We have already recalled that, according to the early Christian tradition, at the time of the Crucifixion of Jesus Christ either a solar or a lunar eclipse occured. The Scaligerian chronology offers the dating of 33 A.D. for that eclipse. However, as we noted, this eclipse doesn't fit into the description of the original sources ([544], Volume 1). An accurate dating provides two possibilities: either the lunar eclipse of 1075 A.D., or a solar eclipse of 1086 ([906], [601]). (See CHRON2, Chapter 2.) In this case, the shift of dates originating here is approximately 1050 years as well – in other words, coincides with the second basic chronological shift of 1050 years. This shift conforms well to an independent identification of the Second Roman Empire with the Holy Roman Empire of the X-XIII century (fig. 6.23 and fig. 6.24).

3) *The Apocalypse.* The Scaligerian date for creation of this Biblical book is the I-II century A.D. ([76], [765]). Our new astronomical dating of the Apocalypse in compliance with the horoscope contained therein (see above), yields 1486 A.D. The chronological shift here is approximately of 1300-1350 years – i.e., approximately equal to the sum of the first and the second basic chronological shifts by 330-360 years and 1000-1050 years.

4) *Jesus Christ.* In the Scaligerian version, Jesus Christ lived in the I century A.D. According to our re-

sults, he had lived in the XI century A.D. (see the global chronological map above). The chronological shift here is one of 1053 years (see details below). This shift conforms well to an independent dynastic parallelism superposing the Second Roman Empire over the Holy Roman Empire of the X-XIII century (fig. 6.23, fig. 6.24). Apparently, a reflection of Jesus Christ in the secular-religious "Roman" history of the XI century was "Pope Hildebrand", a.k.a. Gregory VII. (See details below, in CHRON2, Chapter 2.)

5) *Explosions of Stars.* It is very important that the three main chronological shifts by approximately 330, 1050, and 1800 years conform well to the astronomical data of *irregular* character – we mean, phenomena different from eclipses that take place with certain periodicity and are in this sense regular, or can be calculated. The explosions of stars are an important example of irregular phenomena. Three chronological shifts become apparent in the distribution of the Scaligerian dates of nova and supernova explosions. The dates of "ancient explosions" appear to be obtained from shifting the dates of actual mediaeval explosions by approximately 333 years, 1053 years, or 1778 years downwards. In particular, the dates of all explosions allegedly of 900 B.C. – 390 A.D. are obtained from the dates of explosions of the X-XIII century by shifting them 1053 years backwards. More details on this in CHRON2, Chapter 2. In the Fig.6.100 you can observe only one of such examples. The explosion of the alleged year of 186 A.D. "is obtained" from an actual explosion of 1230 A.D. by shifting it backwards by 1044 years, which virtually coincides with the second chronological shift of 1050 years.

6) *Thucydides.* The Scaligerian history dates the three eclipses described by the "antique" Thucydides back to the V century, namely, the years 431, 424 and 413 A.D. Upon precise astronomical dating all three are lifted to the XI or the XII century A.D. (see CHRON1, Chapter 1). Thus, the dates in this case are shifted by 1470 or 1560 years. This is probably the difference between the second and the third basic shifts, as 1800 – 330 = 1470 years.

7) *Titus Livy.* Scaligerite chronologists dated the eclipse described by Titus Livy in his *History* (LIV, 36, 1) back to the middle of the II century A.D., allegedly 168 A.D. Upon precise astronomical dating it

was identified with the eclipse of 955 A.D., or that of 1020 A.D. The value of the shift forwards is either 1120 years or 1188 years. That is close to the second chronological shift of 1050 years.

8) *Ptolemy's Almagest.* Ptolemy's *Almagest* is considered to have been compiled in the time of the "ancient" Roman Emperor Antoninus *Pius* (allegedly 138-161 A.D.), in the second year of his reign. However in our dating, the star catalog *Almagest* dates back to a completely different epoch, namely, the VII-XIV century A.D. (see CHRON3). By precession of longitudes, the Latin edition of *Almagest* dates back to approximately the XV-XVI century A.D. Thus, the dates are shifted forwards by about a millennium in the first case and about 1400 years in the second case – that is, either the second chronological shift by 1050 years, or the sum of the first shift with the second, 350 + 1050 = 1400, is manifested here. It is interesting that the epoch of the first editions of the *Almagest* – allegedly around 1530 A.D. – differs from 140 A.D. (that is, the 2nd year of the reign of Antoninus Pius) by approximately 1390-1400 years as well. It should be noted that upon lifting the dates, the "ancient" Antoninus Pius is superposed, in accordance with independent dynastic parallelisms, over the epoch of the first *Almagest* editions of the alleged years 1528, 1537, 1538, 1542, 1551, and so on. Immediately before this time, in 1493-1519, Maximilian I *Pius* Augustus, a famous Emperor, reigned in the Empire of the Habsburgs (Nov-Gorod?) (fig. 6.60 and fig.6.61).

9) *Zodiacs of Dendera.* The Scaligerian dating of the Round and Long Zodiacs in the Dendera Temple in Egypt – allegedly circa 30 B.C. (or 54-68 A.D.) and the alleged years 14-37 A.D. The exact astronomical solution is completely different – namely, 1185 A.D. for the Round Zodiac and 1168 A.D. for the Long Zodiac (see CHRON1, chapter 2:5.4). Therefore, a shift forwards by approximately 1150-1200 years may be observed.

10) *Horoscopes of Athribis.* Scaligerite historians dated the two horoscopes of Athribis discovered by Flinders Petrie, a famous Egyptologist, back to circa 52 and 59 A.D. However, the exact astronomical solution yields 1230 and 1268 A.D., respectively (see CHRON1, chapter 2:5.4). The shift amounts to about 1200 years here.

16.
A STRANGE LAPSE IN THE SCALIGERIAN CHRONOLOGY NEAR "THE BEGINNING OF THE NEW ERA"

We refer to a curious effect we discovered after a thorough analysis of *Chronological Tables* by J. Blair ([76]), compiled at the end of the XVIII century – the beginning of the XIX century. These tables are of the utmost value to us since they were written at the time when the Scaligerian history had just been formulated. The *Tables* of Blair deliver a chronological version still fairly close to the one offered by Scaliger and his school from the end of the XVI – the beginning of the XVII century. Therefore, these tables vividly demonstrate the principles that the Scaligerian history was based on primarily. From this standpoint, later chronological tables are "worse" than those of Blair and other similar ones from the XVII-XVIII century, in the sense that the later tables are "too smooth". Historians of the XIX-XX century had "polished them", filling enormous gaps and cracks with a host of minor details, keeping the rough layout of the Scaligerian chronology intact. As a result, many traces of the artificial extension of chronology, showing through in the *Tables* by J. Blair, for instance, were glossed over and covered up by many insignificant details in subsequent tables. As a result, the "break points" in the Scaligerian chronology were covered with a thick layer of "historical concrete" of the XIX-XX century.

Therefore, a practical conclusion: if we wish to recreate the original mechanism of the Scaligerian chronology of the XVI-XVII century, we should analyse the *early* tables of the XVII-XVIII century, like the tables of Blair ([76]) – a material much more *primordial* than what we are facing nowadays in the later, levelled tables.

Thus, let us commence the analysis of the *Tables* by Blair ([76]). The full title of his work published in Moscow in 1808 is, *The Tables Chronological, Embracing All Parts of the World History Year to Year from the Creation to the XIX Century, Published in English by John Blair, a Member of Royal Society of London.* They embrace the history of mankind since the alleged year 4004 B.C. until the XIX century. The *Tables* by Blair divide all kingdoms listed therein into
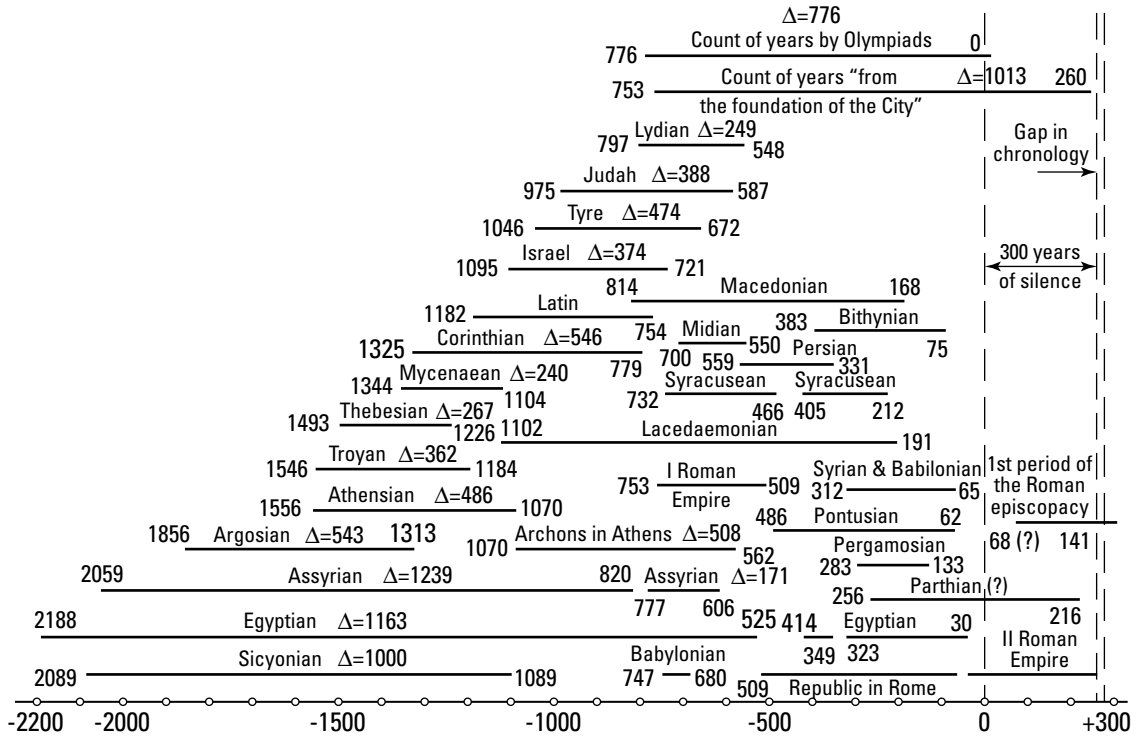
Fig. 6.101. The version of the global chronology of "ancient" kingdoms as given by J. Blair's *Chronological Tables* ([76]). One can clearly see a strange "gap" or "cavity" in the Scaligerian chronology covering the first three centuries in the alleged beginning of the new era. First part of the graph

two types – those which have year-to-year annals of their own, and those whose chronicles didn't survive until the modern times, known only for having been mentioned in the documents of some other "kingdoms featured in annals".

We shall pay our foremost attention to the "featured kingdoms" as well as the different ways of keeping count of years in ancient times, i.e. different eras, etc. In fact, it is this "system of eras" "tidied up" by Scaliger and his disciples that constitutes the framework of the contemporary version of chronology.

The complete list of the main "featured kingdoms" with dynastic currents for which at least partial data is available can be seen in fig. 6.101 and 6.102. In doing so, we retained the terminology of the *Tables* by Blair ([76]). As for the alleged VI-VIII century A.D., we have only shown the *principal* kingdoms listed in [76]. *Minor* kingdoms dated by Blair *after* the VI-VIII century A.D., were not marked, to avoid

bulking the picture. However, the list of "Blair's kingdoms" allegedly *pre-dating* the V century A.D. is presented *in full*.

Let us now revert to the basic "ancient" systems of chronology as presented by Blair and described in contemporary commentaries on chronology. In the Scaligerian chronology, these eras turn out to have often been "forgotten", sometimes for several centuries, then again "revived" in their alleged former state. The basic ones are:

1) *The "ancient" count by Olympiads,* begun allegedly in 776 B.C. ([76], table 1).

The Olympic Games, in honour of which the count by Olympiads was established, were introduced by the Dactyls *for the first time* in the alleged year 1453 B.C.

Then the Games were *forgotten*.

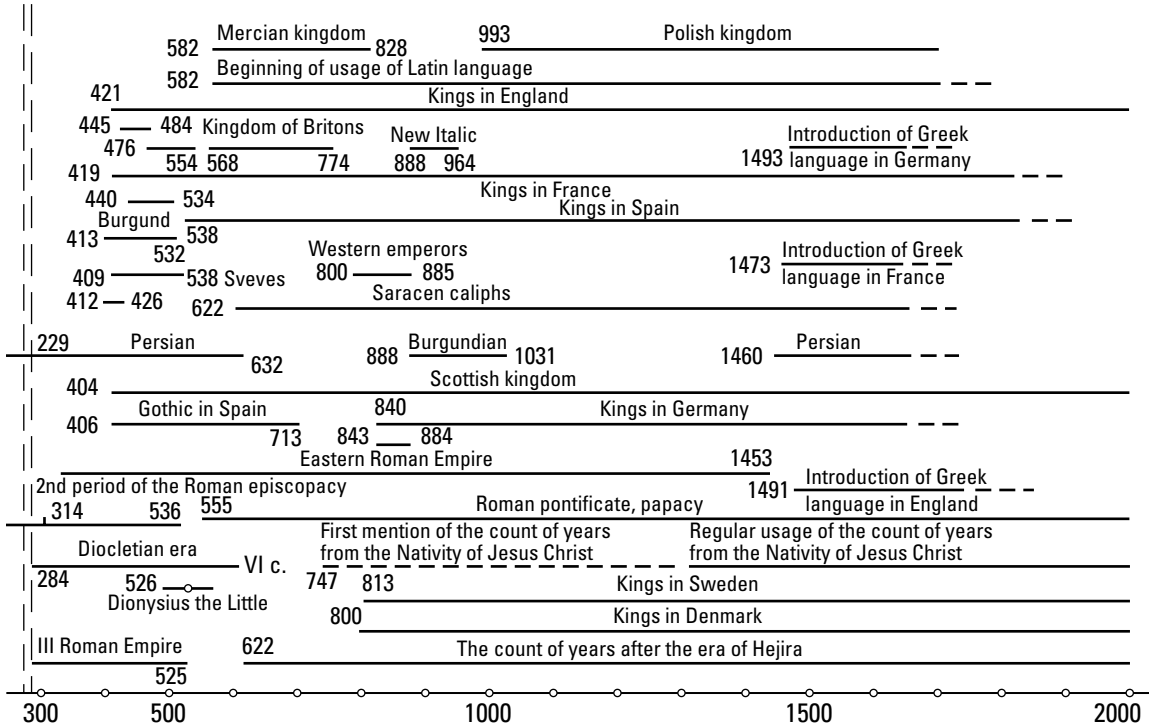Then *restored* by Hercules in 1222 B.C.

Then *forgotten* once again.

Mercian kingdom
582 ————— 828   993   Polish kingdom

582 ————— Beginning of usage of Latin language
421 ——————— Kings in England

445 —— 484 Kingdom of Britons   New Italic   Introduction of Greek
476 ———
419 ——— 554 568   774   888 964   1493 language in Germany

440 —— 534   Kings in France
Burgund   Kings in Spain
413 ——— 538
532   Western emperors   1473 Introduction of Greek
409 ———— 538 Sveves   800 —— 885   language in France
412 — 426   622 ——— Saracen caliphs

229   Persian
632   888 ——— Burgundian 1031   1460 ——— Persian
404 ——————— Scottish kingdom

406 —— Gothic in Spain   840   Kings in Germany
713   843 —— 884
Eastern Roman Empire   1453

2nd period of the Roman episcopacy   1491 Introduction of Greek
314   536   555 —— Roman pontificate, papacy   language in England

Diocletian era   First mention of the count of years   Regular usage of the count of years
VI c.   from the Nativity of Jesus Christ   from the Nativity of Jesus Christ
284   526 ——   747 813   Kings in Sweden
Dionysius the Little   800 —— Kings in Denmark

III Roman Empire   622 ——— The count of years after the era of Hejira
525

300   500   1000   1500   2000

Fig. 6.102. The version of the global chronology of "ancient" kingdoms as given by J. Blair's **Chronological Tables** ([76]). The strange chronological gap is plainly observable. Second part of the graph.

Restored by Iphitus and Lycurgus allegedly in 884 B.C.

However, it suddenly becomes clear that the use of the Games for the count of time started only in the alleged year 776 B.C. By the way, certain other Games – e.g., Isthmian, Nemean, Pythian – were likewise forgotten and restored several times in the Scaligerian chronology. In accordance with the *Tables* by Blair, the count of years by Olympiads *stopped* around 1 A.D. (!), therefore, it had lasted for about 776 years: allegedly since 776 B.C. till 0 A.D., and *was forgotten* thereafter. In general, the disagreement between chronologists regarding the year that the Olympiads were first used for count of time (see below) amounted to almost *five hundred years*.

A few examples of demonstrating this chronological chaos. According to Blair ([76]), the count by Olympiads and the count *from the foundation of the City* began approximately at the same time. Rome in Italy is considered today to have been meant as "The City", which is probably incorrect (see CHRON5). Hence the count of time by Olympiads has allegedly begun in the middle of the VIII century B.C., according to Blair. Our contemporary historian S. Lourier claims that "at the epoch of Xenophon (i.e. allegedly in the V-IV centuries B.C. – A. F.) count by Olympiads *hasn't existed yet*; Timaeus, a Sicilian historian, introduced it *for the first time* around 264 B.C." ([447], p. 224). According to Lourier, the "ancient" Timaeus *first* introduced the count of time by Olympiads *512 years after the first Olympiad*, allegedly dated back to 776 B.C. The resulting disagreement between historians amounts to *five hundred years*, give or take a little.

Thus, whenever an old document quotes the count of time by Olympiads, one should make it clear what particular absolute date is used by the chronologist for reference. Depending on the choice, dates can fluctuate by *five hundred years*!

By the way, N. A. Morozov came up with an idea in [544] that the count by Olympiads, or four-year periods, simply coincides with a *very familiar Julian way of counting years* in which four-year periods are marked by the system of bissextiles, that is, the Julian calendar considers *every fourth* year to be a leap one. This hypothesis indicates that the count by Olympiads had not existed before Julius Caesar, who had introduced the Julian calendar. Hence even in the Scaligerian chronology, the Olympiad/Julian count of years appeared not earlier than the I century A.D., and by no means in the monstrously ancient epoch of Hercules, the "ancient" hero. In accordance with our reconstruction, by which Julius Caesar does not appear before the XI century A.D., the count by Olympiads could not have been introduced before the XI century A.D. and, most probably, coincides with the Christian count of years from the Nativity of Jesus Christ, which, in our reconstruction, began at around 1000 A.D. or 1053 A.D., or the year of the Nativity of Jesus Christ in the XI century.

Thus, the reasons of disagreement between different historians regarding the starting point of count of years by Olympiads become clear. The count by Olympiads must have originated with the Nativity of Jesus Christ in the XI century and continued for several hundred years, without any of the numerous "oblivions and revivals". It was a consequence of "making copies of the chronicles" in the Scaligerian history that the same actual event – the beginning of Olympiads – was "made copies of" (on paper!) and "moved" deep into the past. As a result, the later historians, looking at the duplicate reiterations in the Scaligerian textbook, forgetting the reasons for its appearance, and assuming the air of extreme significance, started debating the "oblivions" and "renewals" of Olympiads, look for reasons, and propose involved theories. Hercules or the Dactyls. Or, Iphitus and Lycurgus. In general, a huge new "sphere of activity" that they have discovered.

2) *The "ancient" count of years from the foundation of the City.* This chronology allegedly originated around 753 B.C. ([76], table 5). But then we are told that this date was established by Varro, a Roman, only in the I century, which is allegedly 700 years (!) after the foundation of Rome in Italy, according to the Scaligerian chronology. The count of years "from the foundation

of the City" ends in the alleged III century A.D., – namely, in the decade of 250-260 A.D. ([76]), the time of civil wars in Rome of the alleged middle of the III century A.D. Blair reports, "Most of the chronicles start [at that time – A. F.] counting years from the foundation of Rome" ([76], table 15). We recall that the Scaligerian identification of the "City" as the Italian Rome founded allegedly in 753 B.C. is only a hypothesis. In CHRON5 we justify the idea that it was the New Rome on the Bosporus, i.e. Constantinople, that was called the City. Constantinople is widely thought to have been founded around 300 A.D. and consecrated in 330 A.D. Thus, even in the Scaligerian chronology, substitution of Rome on the Bosporus for the Italian Rome leads to a millenarian shift of dates counted "from the foundation of the City" in some chronicles. The famous *History* by Titus Livy is an example thereof.

It is noteworthy that the count of years "from the foundation of the City" in the Scaligerian chronology *comes to an end* just at the junction of two duplicate empires, – namely, the Second Roman Empire and the Third Roman Empire. See [76] and figs. 6.101, 6.102.

3) *The count of years from the Nativity of Jesus Christ.* In the Scaligerian chronology, this count was allegedly used *for the first time* in 747 A.D., i.e. *seven hundred years after* the death of Jesus Christ in the I century according to Scaliger ([76]), and *two hundred years* after the calculations of Dyonisius the Little, who lived in the alleged VI century A.D. and who was the *first* to calculate the date of Jesus Christ's Crucifixion. Then we encounter the familiar "oblivions and revivals" of eras. We are told that, after the *first* mention of the era from the Nativity of Jesus Christ "in an official document of 742 A.D., this era *goes out of use again* and *begins to be mentioned every now and then* only in the X century A.D., and *only since* 1431 (i.e. the *fifteenth century*! – A. F.) is it *regularly* recorded in Papal epistles, with a parallel count of years from 'the creation of the world' " ([744], p. 52). It is fairly notable that secular chronicles acquired the era from the Nativity of Jesus Christ even *later* than that. Historians report it to have been fixed in Germany as well as in France only in the XVI century, in Russia – only in 1700, in England, even later – in 1752 ([744], p. 52). Thus, even after the introduction of the Scaligerian chronology, a more or less regular use of the era from the Nativity of Jesus Christ can be spoken of only as of the XV century.

Previous, rather infrequent "mentions" of that era in the documents allegedly earlier than the X-XI century A.D. are, most likely, the results of the Scaligerian duplication of chronicles and shifting them deep into the past. As a result, the actual mediaeval mentions of that era in the documents of the XI-XVII century "appeared as phantoms" allegedly in the VI century and in the VIII century. Looking at those phantoms, the late historians began to build theories – for example, about Dionysius the Little of the alleged VI century A.D. We will answer in the following way. As mentioned above, "Dionysius the Little from the VI century" is actually nothing but a phantom reflection of the actual mediaeval Dionysius Petavius (i.e. actually Little = petit) from the XVI-XVII century A.D. Hence, Dionysius Petavius = Dionysius the Little turns out to have apparently been *the first* to have correctly calculated the date of Jesus Christ's Crucifixion approximately six hundred years before his own time.

As we understand now, *he was absolutely right*, since by counting six hundred years back from the XVI-XVII century we obtain exactly the XI century A.D. when, in accordance with our reconstruction, Jesus Christ actually lived and was crucified.

So, returning to fig. 6.101 and fig. 6.102, we can see that in the Scaligerian history, two basic "antique" counts of years – by Olympiads and from the foundation of the City – went out of use at least 500 years before the first and the only official mention of the era from the Nativity of Jesus Christ in the document allegedly of the year 742, the dating of which, as we have said, is rather dubious.

4) *The "ancient" count of years from the Genesis.* This era is thought to be closely connected with the Bible, therefore entirely depending on the dates of the Biblical events. Since these dates are transferred forwards into the Middle Ages, as a result of the new empirico-statistical dating methods, therefore, this count of years is most probably of a mediaeval or even late mediaeval origin and began, according to our reconstruction, not earlier than the X-XI century A.D. For the dating of Biblical events, see CHRON6.

5) *The count of years in the era of Hejira.* This Arabic chronology is believed to have started in 622 A.D. ([76], table 19), and closely linked to the dating of the Koran and described therein. Therefore, it is most likely of a later origin too, begun in the X-XI century or even later.

The following important fact is obvious on the fig. 6.101 and fig. 6.102. In the Scaligerian chronology, all kingdoms except two are split into two classes – those which existed entirely *before* the beginning of the new era, and those which existed entirely *after* the beginning of the new era. Only two kingdoms – the Roman Empire and Parthian Kingdom – cross the range from 0 to 260 A.D. The beginning of the new era turns out to have had strangely destructive properties – out of many "ancient" kingdoms, only two have safely crossed that "perilous interval" from 0 to 260 A.D.

However, there is no continuous information on Parthian dynasties ([76]). Hence, that kingdom cannot possibly serve as a chronological link and the "collation" of various eras.

As for the other kingdom – the Roman Empire – we can say the following. It is the Second Roman Empire that fits into the range between 0 and 260 A.D. perfectly. Its end, namely 260-270 A.D., perfectly coincides with the end of that "perilous interval" 0-260 A.D. that we have just discovered. Moreover, it is very obvious from the fig. 6.101 and fig. 6.102 that the decade of 260-270 A.D., or the very collation point of the Second and the Third Roman Empires, is not covered by any Olympic count of years, neither the one from the foundation of the City, nor the count of years from the Nativity of Jesus Christ, which, as historians say, "has not existed" yet. According to the Scaligerian chronology, the count of years from the foundation of the City *comes to an end*, the count by Olympiads ended allegedly 250 years before that. The Christian method of counting years has not begun yet, not even been invented – there're a few several hundred years left to go.

Then, in accordance with the results of statistic methods, the Second Roman Empire is the duplicate of the Third Roman Empire. In this relation, both of them are, in their turn, nothing but phantom reflections of the Holy Roman Empire of the X-XIII century and the Empire of the Habsburgs (Nov-Gorod?) of the XIV-XVI century; fig. 6.11, fig. 6.12, fig. 6.12a, fig. 6.19, fig. 6.20, fig. 6.21, fig. 6.22, fig. 6.23, fig. 6.24. Hence, Roman history of the alleged I-III century A.D. is not original, but rather a "phantom". It must

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be lifted and identified with at least the Third Roman Empire, but actually with later kingdoms of the X-XIII century, and of the XIV-XVI century.

Furthermore, the Roman episcopacy partly falls into that "perilous interval" of 0-260 A.D. But Papal history of 68-141 A.D. is considered to be an absolute legend of the Scaligerian history ([492], p. 312). Blair writes, "Until expiration of this century [i.e. the beginning of the II century A.D. – A. F.]… this column [i.e. the list of Roman Popes – A. F.] is *completely obscure*" ([76], table 13). The next Papal period of 68-141 A.D. is not independent, but only a phantom reflection of the Papal period of the alleged years 314-536 A.D., fig. 6.16; moreover, both of them are reflections of a much later Papal history. Thus, the first period of the Roman episcopacy, when moved forwards, is identified with its second period. Consequently, we discover that the epoch of 300 years from 30 B.C. to 270 A.D. in the Scaligerian chronology is an area of *complete chronological silence of the documents.* In that period, according to the Scaligerian chronology, there is not a single kingdom with its own independent dynastic current.

The epoch from 30 B.C. to 270 A.D. in the Scaligerian chronology ends with *a gap.* We recall that the two main "ancient counts of years" of that period – the era from the foundation of the City and the Diocletian era allegedly begun in 284 A.D. – *do not agree* ([76]). Between them there is a chronological lapse, a gap of at least 20 years. We repeat that no count of years from the Nativity of Jesus Christ is in question yet.

CONCLUSION. The *place of the collation* of several duplicate chronicles is obvious in the Scaligerian chronology – the epoch of the alleged years 0-260 A.D. In the XVI-XVII century, someone allocated several phantom duplicate chronicles along the axis of time and pasted them together in one "textbook", quite roughly at that. They didn't even bother to cover up the place of sewing with any era, having probably decided it would work well as it was. As the result, the false "beginning of a new era" in the alleged year zero split up the Scaligerian history "in two", fig. 6.101 and fig. 6.102. Enter many "antique" kingdoms *before* the beginning of the new era, as well as many mediaeval kingdoms *after* the beginning of the new era, while around the beginning of that very new era there appeared a strange lapse that we discover today with our new methods, analysing the whole structure of the Scaligerian chronology.

Per annum volume distribution in
The History of the City of Rome in the Middle Ages
by F. Gregorovius

We shall now present the volume function *f* that we have calculated for *The History of the City of Rome in the Middle Ages*, a fundamental work by F. Gregorovius ([196], Volumes 1-5). We divide the work [196] into fragments referring to particular time segments. *These time intervals and dates are those given by F. Gregorovius himself.* In cases where he knows the date of an event (in the Scaligerian chronology, naturally), he always provides it. If, however, he is not aware of a precise dating, he will quite frequently provide a rougher reference to a time interval within which the events he describes are located. We have simply calculated volumes based on these descriptions.

Following the dates provided by F. Gregorovius, we shall be referring each time to relevant pages from [196], and cite the volume of a given text fragment. In cases where this volume covers several years instead of falling on a single one, in other words, a certain prolonged time interval, we provide *an average value of volume* falling on one year out of the given interval. That is, we average the volume function by dividing the number of pages by the number of years described therein. We denote text fragment volume by *vol*; length of time interval is indicated by *d*; and the average value of volume function by *f = vol/d*.

IMPORTANT NOTE: At the end of each chapter, F. Gregorovius provides an extensive commentary to the events described there. We considered this text as being *to the entire time interval described in a given chapter.* In other words, we do not assign a comment to a spe-

cific event; we simply 'average' this information by distributing it uniformly over the entire epoch described in the chapter. In other words, we calculate the average volume of comments via dividing their summary volume by the length of the period they spoke to.

1) F. Gregorovius begins his description of the history of medieval Rome from the beginning of the IV century; therefore, when plotting the volume function, we begin the count of time from around 300 A.D. The first two chapters of Volume 1 of [196] are of an introductory character. F. Gregorovius provides a general overview of surviving data on the history of Rome of the IV-V century A.D., and very few specific dates. The narration is of a summarizing and slightly chaotic character, which F. Gregorovius explains by the rather general statement that the history of Rome in those times was fairly tenebrous. The only story F. Gregorovius pays a special attention to is that of the activity of Emperor Constantine I the Great who moved the capital of the Roman Empire to the city of Byzantium, later Constantinople, around year 330 A.D. A special note is made in re the construction of temples around the time of Constantine, or the propagation of Christianity allegedly supported by Constantine openly and legally. Thus, it is Emperor Constantine singled out by F. Gregorovius rather unequivocally as the protagonist of the two first chapters of the first volume of his œuvre. We are citing all the fragments of the first volume of [196] that refer to Constantine, having calculated their vol-

ume and dating them to the period of 330-337 A.D., or starting with the moment of the foundation of Constantinople and ending with the death of Constantine in 337 A.D. ([72], p. 238).

Thus, the time interval of 330-337 A.D. (events related to Constantine I) is described by F. Gregorovius in the following fragments:

a) Vol. 1, pp. 8-13, *vol* = 5 pages;
b) Vol. 1, pp. 19-20, *vol* = 1 page;
c) Vol. 1, p. 57, *vol* = 1 page;
d) Vol. 1, pp. 73-79, *vol* = 6 pages.

Thus, the total of $5 + 1 + 1 + 6 = 13$ pages is dedicated to the epoch of 330-337 A.D. The length of the relevant time interval is $d = 8$ years; therefore, the average value of function f in the segment 330-337 equals $f = 13/8 = 1.6$.

2) As we have already pointed out, F. Gregorovius describes the rest of the epoch of 300-499 A.D. from a rather general stance, without any streamlined narration containing specific dates. Therefore, we have simply calculated the average volume falling on one year. We have certainly neither counted pages devoted to the activity of Constantine I, nor taken them in consideration when calculating the average. We proceeded to discover that the time interval 300-499 A.D. was described in Vol. 1, pp. 1-105, i.e. $vol = 105 - 13 = 92$ pages. We subtracted 13 pages devoted to Constantine; as a result, the average is $f = 92/200 = 0.5$.

3) The epoch of 403-407 A.D. is described in Vol. 1, pp. 106-113. Its largest part is the story of Emperor Honorius and Commander Stilicho. $vol = 8$ pages, time interval $d = 4$ years, the average $f = 8/4 = 2$.

4) The epoch of 408-409 A.D. is described in Vol. 1, pp. 113-132. The most of it is the story of Alaric. $vol = 19$ pages, time interval $d = 2$ years, the average $f = 19/2 = 9.5$.

5) The epoch of 403-409 A.D. is described in Annexes to chapter 3, Vol. 1, pp. 133-136. $vol = 4$ pages, $d = 7$ years, $f = 4/7 = 0.6$.

6) The epoch of 410 A.D. is described in Vol. 1, pp. 137-155. Seizure of Rome by Alaric, destruction of Rome, withdrawal of Alaric. $vol = 19$ pages, $d = 1$ year, $f = 19/1 = 19$.

7) The epoch of 411-417 A.D. is described in Vol. 1, pp. 156-159. $vol = 3.5$ pages, $d = 7$ years, $f = 3.5/7 = 0.5$.

8) The epoch of 418-423 A.D. is described in Vol. 1, pp. 159-164. $vol = 4.5$ pages, $d = 6$ years, $f = 4.5/6 = 0.8$.

9) The epoch of 424-432 A.D. is described in Vol. 1, pp. 164-167. $vol = 4$ pages, $d = 9$ years, $f = 4/9 = 0.4$.

10) The epoch of 433-439 A.D. is not described. Only the average volume is available from Annexes: $0.4 + 0.5 = 0.9$.

11) The epoch of 440-451 A.D. is described in Vol. 1, pp. 168-172. $vol = 5$ pages, $d = 12$ years, $f = 5/12 = 0.4$.

12) The epoch of 452-453 A.D. is described in Vol. 1, pp. 172-176. $vol = 4$ pages, $d = 2$ years, $f = 4/2 = 2$.

13) The epoch of 410-453 A.D. is described in Annexes to Chapter 5, Vol. 1, pp. 177-182. $vol = 6$ pages, $d = 14$ years, $f = 6/14 = 0.4$.

14) The epoch of 454-460 A.D. is described in Vol. 1, pp. 183-204, incl. Annexes. $vol = 22$ pages, $d = 7$ years, $f = 22/7 = 3.1$.

15) The epoch of 461-472 A.D. is described in Vol. 1, pp. 205-210. $vol = 5$ pages, $d = 12$ years, $f = 5/12 = 0.4$.

16) The epoch of 472-476 A.D. is described in Vol. 1, pp. 210-219. $vol = 9$ pages, $d = 5$ years, $f = 9/5 = 1.8$.

17) The epoch of 461-476 A.D. is described in Vol. 1, pp. 221-227, Annexes. $vol = 7.5$ pages, $d = 16$ years, $f = 7.5/16 = 0.5$.

18) The epoch of 477-499 A.D. is described in Vol. 1, pp. 231-260. $vol = 30$ pages, $d = 23$ years, $f = 30/23 = 1.3$.

19) The epoch of 500-513 A.D. is described in Vol. 1, pp. 261-282. $vol = 22$ pages, $d = 13$ years, $f = 22/13 = 1.7$.

20) The epoch of 514-526 A.D. is described in Vol. 1, pp. 282-293. $vol = 12$ pages, $d = 13$ years, $f = 12/13 = 0.9$.

21) The epoch of 500-526 A.D. is described in Vol. 1, pp. 294-306, Annexes. $vol = 12$ pages, $d = 27$ years, $f = 12/27 = 0.4$.

22) The epoch of 527-529 A.D. is described in Vol. 1, pp. 307-314. $vol = 8$ pages, $d = 3$ years, $f = 8/3 = 2.7$.

23) The epoch of 530-535 A.D. is described in Vol. 1, pp. 314-320. $vol = 7$ pages, $d = 6$ years, $f = 7/6 = 1.2$.

24) The epoch of 536 A.D. is described in Vol. 1, pp. 321-329. $vol = 9$ pages, $d = 1$ year, $f = 9/1 = 9$.

25) The epoch of 527-536 A.D. is described in Vol. 1, pp. 330-337, Annexes. $vol = 8$ pages, $d = 10$ years, $f = 8/10 = 0.8$.

26) The epoch of 537 A.D. is described in Vol. 1, pp. 338-358. $vol = 20$ pages, $d = 1$ year, $f = 20/1 = 20$.

27) The epoch of 538 A.D. is described in Vol. 1, pp. 358-363. $vol = 5$ pages, $d = 1$ year, $f = 5/1 = 5$.

28) The epoch of 537-538 A.D. is described in Vol. 1, pp. 364-371, Annexes. $vol = 6$ pages, $d = 2$ years, $f = 6/2 = 3$.

29) The epoch of 539-546 A.D. is described in Vol. 1, pp. 372-395, incl. Annexes. $vol = 17$ pages, $d = 8$ years, $f = 17/8 = 2.1$.

30) The epoch of 547-553 A.D. is described in Vol. 1, pp. 396-423, incl. Annexes. $vol = 28$ pages, $d = 7$ years, $f = 28/7 = 4$.

31) The epoch of 554-566 A.D. is described in Vol. 1, pp. 424-435, incl. Annexes. $vol = 11$ pages, $d = 13$ years, $f = 11/13 = 0.8$.

32) The epoch of 567-568 A.D. is described in Vol. 1, pp. 435-439. $vol = 4$ pages, $d = 2$ years, $f = 4/2 = 2$.

33) The epoch of 569-579 A.D. is described in Vol. 1, pp. 439-441. $vol = 1.5$ pages, $d = 11$ years, $f = 1.5/11 = 0.1$.

34) The epoch of 554-579 A.D. is described in Vol. 1, pp. 442-447, Annexes. $vol = 5$ pages, $d = 26$ years, $f = 5/26 = 0.2$.

35) The epoch of 530-589 A.D. is described in Vol. 2, pp. 3-21. $vol = 18$ pages, $d = 60$ years, $f = 18/60 = 0.3$.

36) The epoch of 590 A.D. is described in Vol. 2, pp. 21-27. $vol = 6$ pages, $d = 1$ year, $f = 6/1 = 6$.

37) The epoch of 530-590 A.D. is described in Vol. 2, pp. 28-33, Annexes. $vol = 6$ pages, $d = 61$ years, $f = 6/61 = 0.1$.

38) The epoch of 590 A.D. is described in Vol. 2, pp. 34-37. $vol = 3.5$ pages, $d = 1$, $f = 3.5/1 = 3.5$.

39) The epoch of 591-599 A.D. is described in Vol. 2, pp. 37-45. $vol = 7$ pages, $d = 9$ years, $f = 7/9 = 0.8$.

40) The epoch of 600-604 A.D. is described in Vol. 2, pp. 45-88. $vol = 42$ pages, $d = 4$ years, $f = 42/4 = 10.5$.

41) The epoch of 605-607 A.D. is described in Vol. 2, pp. 89-90. $vol = 1$ page, $d = 3$ years, $f = 1/3 = 0.3$.

42) The epoch of 608-610 A.D. is described in Vol. 2, pp. 90-94. $vol = 5$ pages, $d = 3$ years, $f = 5/3 = 1.7$.

43) The epoch of 611-614 A.D. is not described. $f = 0.2$ is only available due to Annexes.

44) The epoch of 615-625 A.D. is described in Vol. 2, pp. 94-96. $vol = 2$ pages, $d = 11$ years, $f = 2/11 = 0.2$.

45) The epoch of 626-629 A.D. is not described. $f = 0.2$ is only available from Annexes.

46) The epoch of 630 A.D. is described in Vol. 2, pp. 96-101. $vol = 3.5$ pages, $d = 1$ year, $f = 3.5/1 = 3.5$.

47) The epoch of 631-638 A.D. is described in Vol. 2, pp. 101-107. $vol = 6$ pages, $d = 8$ years, $f = 6/8 = 0.8$.

48) The epoch of 605-638 A.D. is described in Vol. 2, pp. 108-114, Annexes. $vol = 6$ pages, $d = 34$ years, $f = 6/34 = 0.2$.

49) The epoch of 639-651 A.D. is described in Vol. 2, pp. 115-123. $vol = 8$ pages, $d = 12$ years, $f = 8/12 = 0.7$.

50) The epoch of 652-655 A.D. is described in Vol. 2, pp. 123-125. $vol = 2$ pages, $d = 4$ years, $f = 2/4 = 0.5$.

51) The epoch of 656-662 A.D. is described in Vol. 2, pp. 125-126. $vol = 1$ page, $d = 7$ years, $f = 1/7 = 0.2$.

52) The epoch of 663 A.D. is described in Vol. 2, pp. 126-134. $vol = 8$ pages, $d = 1$ year, $f = 8/1 = 8$.

53) The epoch of 639-663 A.D. is described in Vol. 2, pp. 135-140, Annexes. $vol = 5$ pages, $d = 25$ years, $f = 5/25 = 0.2$.

54) The epoch of 664-671 A.D. is not described.

55) The epoch of 672 A.D. is described in Vol. 2, p. 141. $vol = 0.3$ page, $d = 1$ year, $f = 0.3/1 = 0.3$.

56) The epoch of 673-675 A.D. is not described. Only the average volume is available from Annexes: 0.2.

57) The epoch of 676 A.D. is described in Vol. 2, p. 141. $vol = 0.3$ page, $d = 1$ year, $f = 0.3/1 = 0.3$.

58) The epoch of 677 A.D. is not described. Only the average volume is available from Annexes: 0.2.

59) The epoch of 678-687 A.D. is described in Vol. 2, pp. 141-151. $vol = 10$ pages, $d = 10$ years, $f = 10/10 = 1$.

60) The epoch of 688 A.D. is not described. Only the average volume is available from Annexes: 0.2.

61) The epoch of 689 A.D. is described in Vol. 2, pp. 160-163. $vol = 3.5$ pages, $d = 1$ year, $f = 3.5/1 = 3.5$.

62) The epoch of 690-691 A.D. is not described. Only the average volume is available from Annexes: 0.2.

63) The epoch of 692-695 A.D. is described in Vol. 2, pp. 151-154. $vol = 3$ pages, $d = 4$ years, $f = 3/4 = 0.8$.

64) The epoch of 672-695 A.D. is described in Vol. 2, pp. 155-159, Annexes. $vol = 4$ pages, $d = 24$ years, $f = 4/24 = 0.2$.

65) The epoch of 696-700 A.D. is not described.

66) The epoch of 701-705 A.D. is described in Vol. 2, pp. 163-165. $vol = 2.3$ pages, $d = 5$ years, $f = 2.3/5 = 0.5$.

67) The epoch of 706 A.D. is not described. Only the average volume is available from Annexes: 0.4.

68) The epoch of 707 A.D. is described in Vol. 2, pp. 165-169. *vol* = 3.3 pages, *d* = 1 year, *f* = 3.3/1 = 3.3.

69) The epoch of 708-709 A.D. is described in Vol. 2, pp. 169. *vol* = 0.6 page, *d* = 2 years, *f* = 0.6/2 = 0.3.

70) The epoch of 710-711 A.D. is described in Vol. 2, pp. 170-175. *vol* = 6 pages, *d* = 2 years, *f* = 6/2 = 3.

71) The epoch of 712 A.D. is not described. Only the average volume is available from Annexes: 0.4.

72) The epoch of 713-714 A.D. is described in Vol. 2, pp. 176. *vol* = 1 page, *d* = 2 years, *f* = 1/2 = 0.5.

73) The epoch of 701-714 A.D. is described in Vol. 2, pp. 177-182, Annexes. *vol* = 5.5 pages, *d* = 15 years, *f* = 5.5/15 = 0.4.

74) The epoch of 715-725 A.D. is described in Vol. 2, pp. 185-192. *vol* = 7 pages, *d* = 10 years, *f* = 7/10 = 0.7.

75) The epoch of 726-731 A.D. is described in Vol. 2, pp. 193-206. *vol* = 14 pages, *d* = 6 years, *f* = 14/6 = 2.3.

76) The epoch of 732 A.D. is not described. Only the average volume is available from Annexes: 0.2.

77) The epoch of 733-741 A.D. is described in Vol. 2, pp. 207-213. *vol* = 6 pages, *d* = 9 years, *f* = 6/10 = 0.6.

78) The epoch of 715-741 A.D. is described in Vol. 2, pp. 214-220, Annexes. *vol* = 6 pages, *d* = 27 years, *f* = 6/27 = 0.2.

79) The epoch of 742 A.D. is described in Vol. 2, pp. 221-224. *vol* = 3.5 pages, *d* = 1 year, *f* = 3.5/1 = 3.5.

80) The epoch of 743-746 A.D. is not described. Only the average volume is available from Annexes: 0.4.

81) The epoch of 747-751 A.D. is described in Vol. 2, pp. 224-229. *vol* = 5 pages, *d* = 5 years, *f* = 5/5 = 1.

82) The epoch of 752 A.D. is described in Vol. 2, pp. 229-233. *vol* = 4.5 pages, *d* = 1 year, *f* = 4.5/1 = 4.5.

83) The epoch of 753 A.D. is described in Vol. 2, pp. 234-235. *vol* = 2 pages, *d* = 1 year, *f* = 2/1 = 2.

84) The epoch of 754 A.D. is described in Vol. 2, pp. 236-241. *vol* = 5.3 pages, *d* = 1 year, *f* = 5.3/1 = 5.3.

85) The epoch of 755-757 A.D. is described in Vol. 2, pp. 241-251. *vol* = 10 pages, *d* = 3 years, *f* = 10/3 = 3.3.

86) The epoch of 757 A.D. is described in Vol. 2, pp. 261-263. *vol* = 3 pages, *d* = 1 year, *f* = 3/1 = 3.

87) The epoch of 742-757 A.D. is described in Vol. 2, pp. 254-260, Annexes. *vol* = 6 pages, *d* = 16 years, *f* = 6/16 = 0.4.

88) The epoch of 758-765 A.D. is described in Vol. 2, pp. 264-269. *vol* = 5 pages, *d* = 8 years, *f* = 5/8 = 0.6.

89) The epoch of 766 A.D. is not described. Only the average volume is available from Annexes: 0.5.

90) The epoch of 767-768 A.D. is described in Vol. 2, pp. 270-276. *vol* = 6 pages, *d* = 2 years, *f* = 6/2 = 3.

91) The epoch of 769 A.D. is described in Vol. 2, p. 277. *vol* = 1 page, *d* = 1 year, *f* = 1/1 = 1. Year 769 A.D. is also described in Vol. 2, pp. 284-287. *vol* = 4 pages, *d* = 1 year, *f* = 4/1 = 4. The total is: *f* = 5.

92) The epoch of 757-769 A.D. is described in Vol. 2, pp. 278-283, Annexes. *vol* = 6 pages, *d* = 13 years, *f* = 6/13 = 0.5.

93) The epoch of 770-772 A.D. is described in Vol. 2, pp. 287-295. *vol* = 8 pages, *d* = 3 years, *f* = 8/3 = 2.7.

94) The epoch of 773-774 A.D. is described in Vol. 2, pp. 295-301. *vol* = 6 pages, *d* = 2 years, *f* = 6/2 = 3.

95) The epoch of 775-789 A.D. is described in Vol. 2, pp. 301-315. *vol* = 14 pages, *d* = 15 years, *f* = 14/15 = 0.9.

96) The epoch of 770-789 A.D. is described in Vol. 2, pp. 316-325, Annexes. *vol* = 9 pages, *d* = 20 years, *f* = 9/20 = 0.5.

97) The epoch of 790 A.D. is not described.

98) The epoch of 791-795 A.D. is described in Vol. 2, pp. 326-392. *vol* = 66 pages, *d* = 5 years, *f* = 66/5 = 13.2.

99) The epoch of 796-800 A.D. is described in Vol. 2, pp. 393-434. *vol* = 41 pages, *d* = 5 years, *f* = 41/5 = 8.2.

100) The epoch of 801-813 A.D. is described in Vol. 3, pp. 3-16. *vol* = 13 pages, *d* = 13 years, *f* = 13/13 = 1.

101) The epoch of 814-817 A.D. is described in Vol. 3, pp. 16-28. *vol* = 13 pages, *d* = 4 years, *f* = 13/4 = 3.3.

102) The epoch of 801-817 A.D. is described in Vol. 3, pp. 29-34, Annexes. *vol* = 5 pages, *d* = 17 years, *f* = 5/17 = 0.3.

*   *   *

All that remains to be done is summing up the values of function *f* on each of the time segments listed above. This shall give us the final graph of the volume function for the part of the work by F. Gregorovius describing the period of 517 years allegedly from 300 A.D. to 817 A.D.

Epoch of 300-330 A.D., *f* = 0,5
Epoch of 331-337 A.D., *f* = 2,1
Epoch of 338-402 A.D., *f* = 0,5
Epoch of 403-407 A.D., *f* = 3,1

Epoch of 408-409 A.D., $f = 10,6$
Epoch of 410 A.D., $f = 19,9$
Epoch of 411-417 A.D., $f = 1,4$
Epoch of 418-423 A.D., $f = 1,7$
Epoch of 424-432 A.D., $f = 1,3$
Epoch of 433-439 A.D., $f = 0,9$
Epoch of 440-451 A.D., $f = 1,3$
Epoch of 452-453 A.D., $f = 2,9$
Epoch of 454-460 A.D., $f = 3,6$
Epoch of 461-472 A.D., $f = 1,4$
Epoch of 473-476 A.D., $f = 2,8$
Epoch of 477-499 A.D., $f = 1,8$
Epoch of 500-513 A.D., $f = 2,1$
Epoch of 514-526 A.D., $f = 1,3$
Epoch of 527-529 A.D., $f = 3,5$
Epoch of 530-535 A.D., $f = 2,4$
Epoch of 536 A.D., $f = 10,2$
Epoch of 537 A.D., $f = 23,4$
Epoch of 538 A.D., $f = 8,4$
Epoch of 539-546 A.D., $f = 2,5$
Epoch of 547-553 A.D., $f = 4,4$
Epoch of 554-566 A.D., $f = 1,4$
Epoch of 567-568 A.D., $f = 2,6$
Epoch of 569-579 A.D., $f = 0,7$
Epoch of 580-589 A.D., $f = 0,4$
Epoch of 590 A.D., $f = 8,6$
Epoch of 591-599 A.D., $f = 0,8$
Epoch of 600-604 A.D., $f = 10,5$
Epoch of 605-607 A.D., $f = 0,5$
Epoch of 608-610 A.D., $f = 1,9$
Epoch of 611-614 A.D., $f = 0,2$
Epoch of 615-625 A.D., $f = 0,4$
Epoch of 626-629 A.D., $f = 0,2$
Epoch of 630 A.D., $f = 3,7$
Epoch of 631-638 A.D., $f = 1$
Epoch of 639-651 A.D., $f = 0,9$
Epoch of 652-655 A.D., $f = 0,7$
Epoch of 656-662 A.D., $f = 0,4$
Epoch of 663 A.D., $f = 8,2$
Epoch of 664-671 A.D., $f = 0$
Epoch of 672 A.D., $f = 0,5$
Epoch of 673-675 A.D., $f = 0,2$
Epoch of 676 A.D., $f = 0,5$
Epoch of 677 A.D., $f = 0,2$
Epoch of 678-687 A.D., $f = 1,2$
Epoch of 688 A.D., $f = 0,2$
Epoch of 689 A.D., $f = 3,7$

Epoch of 690-691 A.D., $f = 0,2$
Epoch of 692-695 A.D., $f = 0,8$
Epoch of 696-700 A.D., $f = 0$
Epoch of 701-705 A.D., $f = 0,9$
Epoch of 706 A.D., $f = 0,4$
Epoch of 707 A.D., $f = 3,7$
Epoch of 708-709 A.D., $f = 0,7$
Epoch of 710-711 A.D., $f = 3,4$
Epoch of 712 A.D., $f = 0,4$
Epoch of 713-714 A.D., $f = 0,9$
Epoch of 715-725 A.D., $f = 0,9$
Epoch of 726-731 A.D., $f = 2,5$
Epoch of 732 A.D., $f = 0,2$
Epoch of 733-741 A.D., $f = 0,8$
Epoch of 742 A.D., $f = 3,9$
Epoch of 743-746 A.D., $f = 0,4$
Epoch of 747-751 A.D., $f = 1$
Epoch of 752 A.D., $f = 4,9$
Epoch of 753 A.D., $f = 2,4$
Epoch of 754 A.D., $f = 5,7$
Epoch of 755-756 A.D., $f = 3,7$
Epoch of 757 A.D., $f = 6,7$
Epoch of 758-765 A.D., $f = 1,1$
Epoch of 766 A.D., $f = 0,5$
Epoch of 767-768 A.D., $f = 3,5$
Epoch of 769 A.D., $f = 5,5$
Epoch of 770-772 A.D., $f = 3,2$
Epoch of 773-774 A.D., $f = 3,5$
Epoch of 775-789 A.D., $f = 1,4$
Epoch of 790 A.D., $f = 0$
Epoch of 791-795 A.D., $f = 13,2$
Epoch of 796-800 A.D., $f = 8,2$
Epoch of 801-813 A.D., $f = 1,3$
Epoch of 814-817 A.D., $f = 3,9$

* * *

We did not go any further, since the text by Titus Livy (whom we compare to Gregorovius) peters out at around the year 460 from *ab urbe condita*, which corresponds to year 760 A.D. when the "ancient" history of Rome is identified with the mediaeval, which is the aftermath of the shift of approximately 1000 years. We continued to calculate volume functions for the books by F. Gregorovius until 817 A.D. only because we had at our disposal the volume functions for the book by Sergeyev describing "ancient Rome" and going somewhat further than Titus Livy.

Per annum volume distribution in
The Roman History from the Foundation of the City
by Titus Livy

We used the following edition of the work *The Roman History from the Foundation of the City* by Titus Livy: Volumes 1-6, Moscow, 1897-1899, 2nd Edition, translated by P. Adrianov ([482]).

In his work, Titus Livy counts the years "from the foundation of the City", or *ab urbe condita*. As to what "City" is referred to in this manner is an issue quite apart, and one that is of interest to us, q.v. CHRON1, ch. 6:13.6, and also elsewhere.

1) The period of the years 1-36 *ab urbe condita* is described by Titus Livy in bk. 1:6 – bk. 1:15, pp. 10-26 in the edition [482], 1,785 characters per page. We shall be using this information to re-calculate volumes for their comparison with other editions. The length of the period is 36 years; Livy provides no detailed annual subdivision. Therefore, for our calculation of the volume function we shall uniformly distribute the total volume of 16 pages over 36 years, which should yield 0.45 pages per year. For the sake of convenience in plotting volume graphs we shall *increase the scale* by a factor of 10, or plot the value of $10f = 4.5$ instead of $f = 0.45$. Thus, in the segment of the years 1-36, the average value of $10f$ for volume per year = 4.5.

2) The year 37 is described in bk. 1:16, pp. 26-27, i.e. volume of the year $10f = 13$.

3) The year 38 is described in bk. 1:17, pp. 28-29, i.e. volume of the year $10f = 20$.

4) The years 39-82 – the reign of King Numa – a total of 43 years. Described in bk. 1:18 – bk. 1:21, pp. 30-36, or an average volume of $10f$ per year = 1.4.

5) The years 83-114 (or 113) – the reign of King *Tullus Hostilius* (a total of 32 years) – are described in

bk. 1:22 – bk. 1:31, pp. 36-53. Livy does not specify how the events of this period are distributed over the years; however, his story naturally breaks down into 7 separate legend plots.

Due to the absence of supporting information, we shall adhere to the following general principle. We shall uniformly distribute the entire time interval described here – years 83-114, a total of 32 years – between all of the seven plots, which shall yield nearly 4.5 years per plot. We shall further calculate the volume of each plot in the book, and divide the volume by 4.5 years, obtaining the average value f of volume within each plot. We shall then list the 7 plots, stating the obtained average value $10f$ of volume per year.

a) The death of King Numa. Interregnum. $10f = 0.3$.

b) A general profile of King Tullus. $10f = 0.3$.

c) Peace weakens the state. Reasons for a war sought for. $10f = 1$.

d) Cattle stolen. Negotiations and severance. Preparations for war. $10f = 1$.

e) The war against the Albans. $10f = 3$.

f) The war against the Sabines. $10f = 4$.

g) The end of the reign of King Tullus. Eruption of a volcano. $10f = 3$.

6) The years 114-138 – the reign of King *Ancus Marcius* (a total of 24 years) – described in bk. 1:32 – bk. 1:34, pp. 53-58. Again, Livy does not provide us with the details concerning the distribution of events over the years. The volume of this fragment is 4.9 pages, distributed over 24 years, i.e. $10f = 2.4$.

7) The year 139 is described on pp. 59-61. A new

character appears in Rome in the time of King Ancus Marcius – Tarquin the Elder (bk. 1:34, pp. 59-60). His wife Tanaquil, their intrigues. The volume of the plot = 2 pages. Thereafter, the intrigues of the Tarquins during their seizure of power. Detailed description of the coup, the volume = 1.3 pages (pp. 60-61). All these events took place in the course of less than one year. Thus, the summarized volume of the year 139 is 3.3 pages. The value *10f* of the volume function (with scale modified by a factor of 10, see above) = 33.

8) The years 140-175 are described in bk. 1:35-1:38 + 1:39 (?), the total volume = 4 or 5 pages. This is where Livy's story is fairly intricate in structure, and hard to divide into separate plots; therefore, we simply calculate an average value of volume per year, obtaining *10f* = 1.4.

9) The year 176 is described in bk. 1:40-bk. 1:41, pp. 67-69, the total volume = 2.7 pages. The assassination of King Tarquin by Servius in 176 = 38th year of the reign of Tarquin. Thus, the value *10f* of the volume function in 176 = 27.

10) The years 176/177-219 are described in bk. 1:42 – bk. 1:48. The reign of King Servius Tullius. This is where Livy's story explicitly breaks down into two plots. The first one – the reform of Servius Tullius, bk. 1:42 – bk. 1:46. The length of this time segment is 21 years; the volume of the relevant text, 6.7 pages. The average value of volume function per year is 3.2. The second plot – the struggle of Servius Tullius against Tarquin the Proud. The Tarquins strive for power. Time seg-

ment of nearly 20 years is described in bk. 1:46 – bk. 1:47 on 3.5 pages, average value per year *10f* = 1.7.

11) The year 220 is described in bk. 1:48, pp. 79-81. The assassination of Servius. Volume = 1.5 pages, i.e. the value of the volume function = 15.

12) The years 221-243 are described in bk. 1:49-1:60, pp. 81-92, a total of 11 pages. Description of acts and wars of King Tarquin the Proud in the course of 23-25 years. Average value of volume per year *10f* = 5.

13) Year 244 is described in bk. 1:57-1:60, pp. 92-97, a total of 5 pages. The rape of Lucretia, the uprising in Rome. The value of volume function *10f* = 50. The next year, 245, is omitted by Livy. If the preceding 5 pages are distributed over the two years 244 and 245, then the average value for these two years *10f* = 25. Nevertheless, following the formal procedure, we assign the value *10f* = 50 to year 244, and the value *10f* = 0 to year 245.

14) As of year 246, the character of Livy's book *changes dramatically*. He starts to accurately mark *each* year, giving accounts of all events that happened over this time. He does sometimes span two or more years at once, though. In these cases we shall calculate the average value *10f* of volume as usual, by dividing the volume *vol* of a fragment by the number *d* of years spanned. Henceforth, we shall state years, then divisions of Livy's books devoted to them, then the value of volume *vol* (measured in pages), then the length *d* of the time interval described, then the average annual value *10f*.

Years 246-247	bk. 2:1-14	pp. 98-120	vol = 22,3	d = 2	10f = 112
Year 248	bk. 2:15	pp. 120-121	vol = 1	d = 1	10f = 10
Year 249	bk. 2:16	p. 121	vol=0,3	d=1	10f = 3
Year 250	bk. 2:16	pp. 121-122	vol=0,4	d=1	10f = 4
Year 251	bk. 2:16	p. 122	vol=0,5	d=1	10f = 5
Year 252	bk. 2:17	pp. 122-123	vol=1	d=1	10f = 10
Year 253	bk. 2:18	pp. 123-125	vol=1,5	d=1	10f = 15
Year 254	bk. 2:19	p. 125	vol=1	d=1	10f = 10
Year 255	bk. 2:19-20	pp. 125-127	vol=3	d=1	10f = 30
Year 256	bk. 2:21	p. 127	vol=0,1	d=1	10f = 1
Year 257	bk. 2:21	p. 127	vol=0,1	d=1	10f = 1
Year 257	bk. 2:21	p. 127	vol=0,1	d=1	10f = 1
Year 258	bk. 2:21	pp. 127-128	vol=0,3	d=1	10f = 3
Year 259	bk. 2:21-27	pp. 128-137	vol=9,7	d = 1	10f = 97
Year 260	bk. 2:28-33	pp. 137-146	vol=10,3	d = 1	10f = 103

Year 261	bk. 2:33	pp. 146-147	vol=1,2	d = 1	10f = 12
Year 262	bk. 2:34	pp. 147-148	vol=1	d = 1	10f = 10
Years 263-265	bk. 2:34-39	pp. 147-148	vol=1	d = 3	10f = 22
Year 266	bk. 2:39-40	pp. 155-157	vol=2,7	d = 1	10f = 27
Year 267	bk. 2:40	pp. 157-158	vol=0,1	d = 1	10f = 1
Years 268-269	bk. 2:41-42	pp. 158-160	vol=2,2	d = 2	10f = 11
Year 270	bk. 2:42	pp. 160-161	vol=0,8	d = 1	10f = 8
Year 271	bk. 2:42	p. 161	vol=0,7	d = 1	10f = 7
Year 272	bk. 2:43	p. 162	vol=0,2	d = 1	10f = 2
Year 273	bk. 2:43	pp. 162-163	vol=1,5	d = 1	10f = 15
Year 274	bk. 2:44-47	pp. 163-170	vol=7,3	d = 1	10f = 73
Year 275	bk. 2:48-50	pp. 170-176	vol=5,6	d = 1	10f = 56
Years 276-277	bk. 2:51	p. 176	vol=0,4	d = 2	10f = 2
Year 278	bk. 2:51-52	pp. 177-178	vol=1,7	d = 1	10f = 17
Year 279	bk. 2:52-53	pp. 178-180	vol=1,5	d = 1	10f = 15
Year 280	bk. 2:54	p. 180	vol=0,3	d = 1	10f = 3
Year 281	bk. 2:54-55	pp. 180-183	vol=2,5	d = 1	10f = 25
Years 282-284	bk. 2:56-62	pp. 183-191	vol=8	d = 3	10f = 27
Year 285	bk. 2:63-64	pp. 191-192	vol=1	d = 1	10f = 10
Year 286	bk. 2:64-65	pp. 192-194	vol=2,4	d = 1	10f = 24
Year 287	bk. 3:1	pp. 195-196	vol=1,2	d = 1	10f = 12
Year 288	bk. 3:2	p. 196	vol=0,2	d = 1	10f = 2
Years 289-290	bk. 3:2-5	pp. 196-204	vol=7	d = 2	10f = 35
Year 291	bk. 3:6-8	pp. 204-207	vol=3,2	d = 1	10f = 32
Year 292	bk. 3:8-10	pp. 207-211	vol=4	d = 1	10f = 40
Year 293	bk. 3:10-14	pp. 211-218	vol=7,5	d = 1	10f = 75
Years 294-295	bk. 3:15-24	pp. 218-234	vol=15,8	d = 2	10f = 79
Year 296	bk. 3:25-29	pp. 234-241	vol=6,9	d = 1	10f = 69
Year 297	bk. 3:30	pp. 241-242	vol=1	d = 1	10f = 10
Year 298	bk. 3:31	p. 242	vol=0,2	d = 1	10f = 2
Year 299	bk. 3:31	p. 242	vol=0,7	d = 1	10f = 7
Year 300	bk. 3:31	pp. 242-243	vol=0,7	d = 1	10f = 7
Year 301	bk. 3:32	pp. 243-244	vol=0,4	d = 1	10f = 4
Years 302-303	bk. 3:32-35	pp. 244-248	vol=4,4	d = 2	10f = 22
Years 304-305	bk. 3:36-64	pp. 248-292	vol=44	d = 2	10f = 220
Year 306	bk. 3:65	p. 292	vol=0,5	d = 1	10f = 5
Year 307	bk. 3:65	pp. 292-294	vol=1	d = 1	10f = 10
Year 308	bk. 3:66-72	pp. 293-303	vol=10	d = 1	10f = 100
Year 309	bk. 4:1-6	pp. 304-316	vol=11,7	d = 1	10f = 117
Year 310	bk. 4:7	pp. 316-318	vol=2,4	d = 1	10f = 24
Year 311	bk. 4:8-10	pp. 318-323	vol=5,2	d = 1	10f = 52
Year 312	bk. 4:11	pp. 323-324	vol=1,1	d = 1	10f = 11
Year 313	bk. 4:12	pp. 324-325	vol=0,5	d = 1	10f = 5
Years 314-315	bk. 4:12-17	pp. 325-333	vol=8	d = 2	10f = 40
Year 316	bk. 4:17-20	pp. 333-338	vol=5	d = 1	10f = 50
Year 317	bk. 4:20	p. 338	vol=0,4	d = 1	10f = 4
Year 318	bk. 4:21	pp. 338-339	vol=0,8	d = 1	10f = 8

Year 319	bk. 4:21-22	pp. 339-341	vol=1,8	d = 1	10f = 18
Year 320	bk. 4:23-25	pp. 341-344	vol=3	d = 1	10f = 30
Year 321	bk. 4:25	p. 344	vol=0,4	d = 1	10f = 4
Year 322	bk. 4:25-26	pp. 344-346	vol=1,5	d = 1	10f = 15
Years 323-324	bk. 4:26-30	pp. 346-353	vol=7	d = 2	10f = 35
Year 325	bk. 4:30	p. 353	vol=0,1	d = 1	10f = 1
Year 326	bk. 4:30	pp. 353-354	vol=1	d = 1	10f = 10
Year 327	bk. 4:30	pp. 354-355	vol=0,6	d = 1	10f = 6
Year 328	bk. 4:31-34	pp. 355-361	vol=6	d = 1	10f = 60
Year 329	bk. 4:34	p. 361	vol=0,2	d = 1	10f = 2
Year 330	bk. 4:35-36	pp. 361-363	vol=2,2	d = 1	10f = 22
Year 331	bk. 4:37-42	pp. 363-371	vol=7,5	d = 1	10f = 75
Year 332	bk. 4:42	pp. 371-372	vol=1,2	d = 1	10f = 12
Year 333	bk. 4:43	pp. 372-373	vol=1,3	d = 1	10f = 13
Year 334	bk. 4:43-44	pp. 373-376	vol=3	d = 1	10f = 30
Year 335	bk. 4:45	pp. 376-377	vol=0,8	d = 1	10f = 8
Year 336	bk. 4:45-47	pp. 377-381	vol=3,5	d = 1	10f = 35
Years 337-338	bk. 4:47-48	pp. 381-383	vol=2,6	d = 2	10f = 13
Year 339	bk. 4:49	pp. 383-384	vol=0,8	d = 1	10f = 8
Year 340	bk. 4:49-50	pp. 384-387	vol=3,2	d = 1	10f = 32
Year 341	bk. 4:51	pp. 387-388	vol=1,3	d = 1	10f = 13
Year 342	bk. 4:52	pp. 388-389	vol=0,5	d = 1	10f = 5
Year 343	bk. 4:52	p. 389	vol=0,7	d = 1	10f = 7
Year 344	bk. 4:53	pp. 389-391	vol=2	d = 1	10f = 20
Year 345	bk. 4:54-56	pp. 392-395	vol=3,2	d = 1	10f = 32
Year 346	bk. 4:56-57	pp. 395-398	vol=3,3	d = 1	10f = 33
Year 347	bk. 4:58	pp. 398-399	vol=0,8	d = 1	10f = 8
Year 348	bk. 4:58-60	pp. 399-403	vol=4	d = 1	10f = 40
Year 349	bk. 4:61	p. 403	vol=0,3	d = 1	10f = 3
Year 350	bk. 4:61	pp. 403-404	vol=1,3	d = 1	10f = 13
Year 351	bk. 5:1-7	pp. 405-418	vol=12,8	d = 1	10f = 128
Year 352	bk. 5:8-9	pp. 418-421	vol=3,2	d = 1	10f = 32
Year 353	bk. 5:10-12	pp. 421-427	vol=5,6	d = 1	10f = 56
Year 354	bk. 5:12-13	pp. 427-429	vol=2,4	d = 1	10f = 24
Years 355-356	bk. 5:13-16	pp. 429-433	vol=4	d = 2	10f = 20
Year 357	bk. 5:16-17	pp. 433-436	vol=3	d = 1	10f = 30
Year 358	bk. 5:18-23	pp. 436-446	vol=10,3	d = 1	10f = 103
Year 359	bk. 5:24-26	pp. 446-450	vol=3,7	d = 1	10f = 37
Year 360	bk. 5:26-29	pp. 450-456	vol=6,1	d = 1	10f = 61
Year 361	bk. 5:29-30	pp. 456-459	vol=3	d = 1	10f = 30
Year 362	bk. 5:31	pp. 459-460	vol=1,2	d = 1	10f = 12
Year 363	bk. 5:32-36	pp. 460-468	vol=8	d = 1	10f = 80
Year 364	bk. 5:37-55	pp. 468-499	vol=31	d = 1	10f = 310

NOTE. This is where the format of the book changes: books 6-10, Vol. 2, of the edition of the Livy's book that we were using, were printed in another printing house – Herbeck. The format is different from that of the previous books, with 2,072 characters per page. Therefore, to transform the volume function to the format of our table, each volume should be multiplied by a coefficient of 1.2. The table shows the final result only. We have performed the levelling of scale for our table starting with year 365.

Year 365	bk. 6:1-4	pp. 1-6	vol=6	d = 1	12f = 72
Year 366	bk. 6:4-5	pp. 6-7	vol=0,4	d = 1	12f = 5
Year 367	bk. 6:5-10	pp. 7-12	vol=5,8	d = 1	12f = 67
Year 368	not described (?)		vol=0	d = 1	12f = 0
Year 369	bk. 6:11-18	pp. 12-21	vol=8,6	d = 1	12f = 103
Year 370	bk. 6:18-21	pp. 21-26	vol=4,7	d = 1	12f = 56
Year 371	bk. 6:21	pp. 26-27	vol=0,8	d = 1	12f = 9,6
Year 372	bk. 6:22	p. 27	vol=0,5	d = 1	12f = 6
Year 373	bk. 6:22-29	pp. 27-36	vol=8,8	d = 1	12f = 106
Year 374	not described (?)		vol=0	d = 1	12f = 0
Year 375	bk. 6:30	pp. 36-37	vol=0,8	d = 1	12f = 9,6
Year 376	bk. 6:31-32	pp. 37-38	vol=1,1	d = 1	12f = 13
Year 377	bk. 6:32	pp. 38-39	vol=0,9	d = 1	12f = 10.8
Years 378-383	bk. 6:33-36	pp. 39-43	vol=4	d = 6	12f = 8
Year 384	bk. 6:36	p. 43	vol=0,3	d = 1	12f = 4
Year 385	bk. 6:36-38	pp. 43-45	vol=2,3	d = 1	12f = 28
Years 386-389	bk. 6:38-42; 7:1	pp. 45-55	vol=9	d = 4	12f = 25
Year 390	bk. 7:2-3	pp. 55-57	vol=1,8	d = 1	12f = 22
Year 391	bk. 7:3	pp. 57-58	vol=0,9	d = 1	12f = 10.8
Year 392	bk. 7:4-8	pp. 58-63	vol=5	d = 1	12f = 60
Year 393	bk. 7:9-11	pp. 63-66	vol=2,4	d = 1	12f = 29
Year 394	bk. 7:11	pp. 66-67	vol=1,1	d = 1	12f = 13
Year 395	bk. 7:12	p. 67	vol=0,5	d = 1	12f = 6
Year 396	bk. 7:12-15	pp. 67-72	vol=4,8	d = 1	12f = 54
Year 397	bk. 7:16	pp. 72-74	vol=1,2	d = 1	12f = 14
Years 398-399	bk. 7:17	pp. 74-75	vol=1,4	d = 2	12f = 8
Year 400	bk. 7:18-19	pp. 75-77	vol=1,6	d = 1	12f = 19
Year 401	bk. 7:19-21	pp. 77-79	vol=2,3	d = 1	12f = 28
Year 402	bk. 7:21	pp. 79-80	vol=0,6	d = 1	12f = 7
Year 403	bk. 7:22	pp. 80-81	vol=1,1	d = 1	12f = 13
Year 404	bk. 7:23-24	pp. 81-83	vol=2,3	d = 1	12f = 28
Year 405	bk. 7:25-26	pp. 83-86	vol=2,9	d = 1	12f = 35
Year 406	bk. 7:26-27	pp. 86-87	vol=0,5	d = 1	12f = 6
Year 407	bk. 7:27	p. 87	vol=0,2	d = 1	12f = 2
Year 408	bk. 7:27	p. 87	vol=0,6	d = 1	12f = 7
Year 409	bk. 7:28	pp. 87-88	vol=0,6	d = 1	12f = 7
Year 410	bk. 7:28	p. 88	vol=0,5	d = 1	12f = 6
Year 411	bk. 7:28-38	pp. 88-102	vol=13,7	d = 1	12f = 164
Years 412-414	bk. 7:38-42; 8:1-12	pp. 102-127	vol=23,2	d = 3	12f = 90
Year 415	bk. 8:12	pp. 127-128	vol=1,2	d = 1	12f = 14
Year 416	bk. 8:13-14	pp. 128-131	vol=3,2	d = 1	12f = 38
Year 417	bk. 8:15	pp. 131-132	vol=0,9	d = 1	12f = 10.8
Year 418	bk. 8:16	p. 132	vol=0,3	d = 1	12f = 4
Year 419	bk. 8:16	pp. 132-133	vol=0,8	d = 1	12f = 10
Year 420	bk. 8:16-17	pp. 133-134	vol=0,7	d = 1	12f = 8
Years 421-422	bk. 8:17	p. 134	vol=0,6	d = 2	12f = 4
Year 423	bk. 8:18	pp. 134-136	vol=1,2	d = 1	12f = 14

Year 424	bk. 8:19-20	pp. 136-137	vol=1,9	d = 1	12f = 23
Year 425	bk. 8:20-21	pp. 137-140	vol=2	d = 1	12f = 24
Year 426	bk. 8:22	p. 140	vol=0,7	d = 1	12f = 8
Year 427	bk. 8:22-25	pp. 140-144	vol=4	d = 1	12f = 48
Year 428	bk. 8:25-29	pp. 144-149	vol=4,4	d = 1	12f = 53
Year 429	bk. 8:29-37	pp. 149-160	vol=11,4	d = 1	12f = 137
Years 430-431	bk. 8:37	pp. 160-161	vol=1,1	d = 2	12f = 6
Years 432-437	bk. 8:38-40; 9:1-20	pp. 161-198	vol=36	d = 6	12f = 70
Year 438	bk. 9:21	pp. 198-199	vol=0,7	d = 1	12f = 8
Years 439-446	bk. 9:22-42	pp. 199-232	vol=32,6	d = 8	12f = 50
Year 447	bk. 9:42	pp. 232-233	vol=1	d = 1	12f = 12
Years 448-449	bk. 9:42-44	pp. 233-237	vol=4,4	d = 2	12f = 26
Years 450-454	bk. 9:45-46; 10:1-9	pp. 237-253	vol=15,2	d = 5	12f = 36
Year 455	bk. 10:9-11	pp. 254-257	vol=3,2	d = 1	12f = 38
Year 456	bk. 10:11-13	pp. 257-259	vol=2,8	d = 1	12f = 34
Year 457	bk. 10:14-15	pp. 259-263	vol=3,2	d = 1	12f = 38
Years 458-460	bk. 10:16-37	pp. 263-295	vol=32,5	d = 3	12f = 130
Year 461	bk. 10:38-47	pp. 295-309	vol=13,6	d = 1	12f = 163

This is where Livy's text breaks up.

Thus, the volume function of Titus Livy looks like this:

In the segment of years 1-36	10f = 4.5	
in year 37	10f = 13	
in year 38	10f = 20	
in the segment of years 39-82	10f = 1.4	
in the segment of years 83-91	10f = 0.3	
in the segment of years 92-100	10f = 1	
in the segment of years 101-104	10f = 3	
in the segment of years 105-109	10f = 4	
in the segment of years 110-113	10f = 3	
in the segment of years 114-138	10f = 2.4	

in year 139	10f = 33
in the segment of years 140-175	10f = 1.4
in year 176	10f = 27
in the segment of years 177-219	10f = 1.7
in year 220	10f = 15
in the segment of years 221-245	10f = 5
in year 244	10f = 50
in year 245	10f = 0
in year 246	10f = 112
in year 247	10f = 112

Henceforth, the first number in the table denotes the year *ab urbe condita*, the second – the volume function value for the year in question:

248 – 10;	249 – 3;	250 – 4;	251 – 5;	252 – 10;	253 – 15;	254 – 10;
255 – 30;	256 – 1;	257 – 1;	258 – 3;	259 – 97;	260 – 103;	261 – 12;
262 – 10;	263 – 22;	264 – 22;	265 – 22;	266 – 27;	267 – 1;	268 – 11;
269 – 11;	270 – 8;	271 – 7;	272 – 2;	273 – 15;	274 – 73;	275 – 56;
276 – 2;	277 – 2;	278 – 17;	279 – 15;	280 – 3;	281 – 25;	282 – 27;
283 – 27;	284 – 27;	285 – 10;	286 – 24;	287 – 12;	288 – 2;	289 – 35;
290 – 35;	291 – 32;	292 – 40;	293 – 75;	294 – 79;	295 – 79;	296 – 69;
297 – 10;	298 – 2;	299 – 7;	300 – 7;	301 – 4;	302 – 22;	303 – 22;
304 – 220;	305 – 220;	306 – 5;	307 – 10;	308 – 100;	309 – 117;	310 – 24;
311 – 52;	312 – 11;	313 – 5;	314 – 40;	315 – 40;	316 – 50;	317 – 4;
318 – 8;	319 – 18;	320 – 30;	321 – 4;	322 – 15;	323 – 35;	324 – 35;

325 – 1;   326 – 10;   327 – 6;   328 – 60;   329 – 2;   330 – 22;   331 – 75;
332 – 12;   333 – 13;   334 – 30;   335 – 8;   336 – 35;   337 – 13;   338 – 13;
339 – 8;   340 – 32;   341 – 13;   342 – 5;   343 – 7;   344 – 20;   345 – 32;
346 – 33;   347 – 8;   348 – 40;   349 – 3;   350 – 13;   351 – 128;   352 – 32;
353 – 56;   354 – 24;   355 – 20;   356 – 20;   357 – 30;   358 – 103;   359 – 37;
360 – 61;   361 – 30;   362 – 12;   363 – 80;   364 – 310;   365 – 72;   366 – 5;
367 – 67;   369 – 103;   370 – 56;   371 – 9.6;   372 – 6;   373 – 106;   375 – 9.6;
376 – 13;   377 – 11;   378 – 8;   379 – 8;   380 – 8;   381 – 8;   382 – 8;
383 – 8;   384 – 4;   385 – 28;   386 – 25;   387 – 25;   388 – 25;   389 – 25;
390 – 22;   391 – 11;   392 – 60;   393 – 29;   394 – 13;   395 – 6;   396 – 54;
397 – 14;   398 – 8;   399 – 8;   400 – 19;   401 – 28;   402 – 7;   403 – 13;
404 – 28;   405 – 35;   406 – 6;   407 – 2;   408 – 7;   409 – 7;   410 – 6;
411 – 164;   412 – 90;   413 – 90;   414 – 90;   415 – 14;   416 – 38;   417 – 11;
418 – 4;   419 – 10;   420 – 8;   421 – 4;   422 – 4;   423 – 14;   424 – 23;
425 – 24;   426 – 8;   427 – 48;   428 – 53;   429 – 137;   430 – 6;   431 – 6;
432 – 70;   433 – 70;   434 – 70;   435 – 70;   436 – 70;   437 – 70;   438 – 8;
439 – 50;   440 – 50;   441 – 50;   442 – 50;   443 – 50;   444 – 50;   445 – 50;
446 – 50;   447 – 12;   448 – 26;   449 – 26;   450 – 36;   451 – 36;   452 – 36;
453 – 36;   454 – 36;   455 – 38;   456 – 34;   457 – 38;   458 – 130;   459 – 130;
460 – 130;   461 – 163.

Per annum volume distribution in the book by Baronius describing mediaeval Rome

See Baronius, C., *The Ecclesial and Secular Annals from the Birth of Christ and until the Year 1198.* Moscow, Typography of P. P. Ryabushinsky, 1913. (***Baronius. Annales ecclesiastici a Christo nato ad annum 1198.***)

The *first* column of the table indicates *the year* A.D.

The *second* column indicates the names of the Roman emperors and the years of their reigns according to Baronius. E.g., the first line: column 1, "1"; column 2, "Augustus 42." This means that the year 1 A.D. corresponds to the 42nd year of the reign of Augustus.

Along with the emperors, Baronius mentions Roman Pontiffs (Popes) with years of their reigns (pontificates). This data is presented in the *third* column.

The *fourth* column, separated from the third one by an equal mark, indicates the volume of the part of Baronius' book describing this year, measured in centimeters of "height" that this text fragment occupies in the book. Sometimes Baronius happens to describe a certain period of several years at once, that is, without clarifying the precise year of a certain event within this fragment. In this case, we *uniformly* distribute the volume of this text fragment among all the years it consists of, or divide the summarized volume by the number of years described, and assign the result – *the average value* – to every single year within this interval.

Year	Emperors	Popes	Volume
	Augustus		
1	42		=20
2	43		=20
3	44		=20
4	45		=20
5	46		=20
6	47		=20
7	48		=20
8	49		=1
9	50		=1
10	51		= 1
11	52		= 1
12	53		= 4
13	54		= 4
14	55		= 4
15	56		= 4
	Augustus		
16	57		= 11
	and Tiberius		
	1		
17	?		= 11
18	2		= 11
19	3		= 11
20	4		= 9
21	5		= 9
22	6		= 9
23	7		= 9
24	8		= 9
25	9		= 9

Year	Emperors	Popes	Volume	Year	Emperors	Popes	Volume
26	10		= 9	68	12	24	= 140
27	11		= 9	69	13	25	= 75
28	12		= 9			Lenus	
29	13		= 9	70	14	1	= 5,5
30	14		= 9		Galba		
31	15		= 9	71	1	2	= 29
32	16		= 8,5		Vespasian		
33	17		= 32	72	1	3	= 78
34	18		= 133	73	2	4	= 26
35	19		= 36	74	3	5	= 11
36	20		= 18	75	4	6	= 18
37	21		= 6	76	5	7	= 4
38	22		= 15	77	6	8	= 3
		Caia		78	7	9	= 3
39		1	= 21,5	79	8	10	= 3
40		2	= 22,5	80	9	11	= 6
41		3	= 23,5	81	10		= 40
42		4	= 15,5		Titus	Cletus	
	Claudius				1	1	
43	1		= 48	82	2	2	= 7,5
44	2		= 136	83	3	3	= 11
		St. Peter			Domitian		
45	3	1	= 73	84	1	4	= 4
46	4	2	= 10,5	85	2	5	= 4,5
47	5	3	= 27	86	3	6	= 0,8
48	6	4	= 15	87	4	7	= 0,8
49	7	5	= 2,5	88	5	8	= 0,8
50	8	6	= 2,5	89	6	9	= 3,7
51	9	7	= 89	90	7	10	= 3,7
52	10	8	= 70	91	8	11	= 9
53	11	9	= 11,5	92	9	12	= 11
54	12	10	= 8,5			Clement	
55	13	11	= 12,5	93	10	1	= 10
56	14	12	= 12,5	94	11	2	= 11
	Nero			95	12	3	= 5
57	1	13	= 48	96	13	4	= 3,5
58	2	14	= 43	97	14	5	= 5
59	3	15	= 93	98	15	6	= 32
60	4	16	= 43		Nerva		
61	5	17	= 15	99	1	7	= 13
62	6	18	= 4,5	100	2	8	= 45
63	7	19	= 10,5		Trajan		
64	8	20	= 5		1		
65	9	21	= 15	101	2	9	= 13
66	10	22	= 39	102	3	?	= 13
67	11	23	= 9,5				

Year	Emperors	Popes	Volume	Year	Emperors	Popes	Volume
		Anaclytes				Thelesphorus	
103	4	1	= 4	142	3	1	= 7
104	5	2	= 39	143	4	2	= 3
105	6	3	= 2	144	5	3	= 3
106	7	4	= 13	145	6	4	= 6,5
107	8	5	= 5,5	146	7	5	= 4
108	9	6	= 7,5	147	8	6	= 4
109	10	7	= 29	148	9	7	= 4
110	11	8	= 24	149	10	8	= 4
111	12	9	= 2	150	11	9	= 9
		Evareste		151	12	?	= 9
112	13	1	= 9	152	13	?	= 9
113	14	2	= 2,5	153	14	?	= 9
114	15	3	= 10			Hegin	
115	16	4	= 1	154	15	1	= 26
116	17	5	= 3,5	155	16	2	= 1
117	18	6	= 3,5	156	17	?	= 1
118	19	7	= 14	157	18	?	= 1
119	20	8	= 8			Pius	
		Adrian		158	19	1	= 1
120	1	9	= 39	159	20	2	= 3,5
		Alexander		160	21	3	= 3,5
121	2	1	= 3	161	22	4	= 4,5
122	3	2	= 5	162	23	5	= 4
123	4	3	= 15		Aurelius		
124	5	4	= 1,5		and Lucius Verus		
125	6	5	= 3	163	1	6	= 31
126	7	6	= 1,5	164	2	7	= 32
127	8	7	= 4		Aurelius		
128	9	8	= 13,5	165	3	8	= 6
129	10	9	= 1	166	4	9	= 7,5
130	11	10	= 9	167	5	10	= 16
131	12	11	= 2			Anicetus	
		Sixtus				1	
132	13	1	= 6	168	6	2	= 3
133	14	2	= 6	169	7	3	= 3
134	15	3	= 2,5	170	8	4	= 12
135	16	4	= 5	171	9	5	= 22,5
136	17	5	= 2,5	172	10	6	= 22,5
137	18	6	= 10	173	11	7	= 27
138	19	7	= 4	174	12	8	= 6
139	20	8	= 4,5	175	13	9	= 39
		Antoninus				Soter	
140	1	9	= 5			1	
141	2	?	= 5	176	14	2	= 28
				177	15	3	= 22,5

Year	Emperors	Popes	Volume	Year	Emperors	Popes	Volume
178	16	4	= 12	216	4	14	= 18
179	17	5	= 54	217	5	15	= 25
		Eleutherius		218	6	16	= 5
		1			Macrinus		
180	18	2	= 3	219	1	17	= 3
181	19	3	= 4		Heliohabal		
	Commodus			220	1	18	= 35
182	1	4	= 17			Callistes	
183	2	5	= 8	221	2	1	= 3,3
184	3	6	= 7	222	?	2	= 3,3
185	4	7	= 1	223	?	3	= 3,3
186	5	8	= 1		Alexander		
187	6	9	= 1	224	1	4	= 28
188	7	10	= 4	225	2	5	= 5
189	8	11	= 2,7	226	3	6	= 22
190	9	12	= 2,7			Urban	
191	10	13	= 3,5	227	4	1	= 5
192	11	14	= 15	228	5	2	= 1
193	12	15	= 6,5	229	6	3	= 4
		Victor		230	7	4	= 6,5
194	13	1	= 8	231	8	5	= 99
	Severus			232	9	6	= 10,5
195	1	2	= 14	233	10	7	= 24
196	2	3	= 14,5			Pontianus	
197	3	4	= 4			1	
198	4	5	= 38	234	11	2	= 3
199	5	6	= 4	235	12	3	= 3
200	6	7	= 16	236	13	4	= 7
201	7	8	= 41		Maximinus		
202	8	9	= 28	237	1	5	= 15
203	9	10	= 13,5			Anterus	
		Zephyrinus		238	2	1	= 5
		1				Fabian	
204	10	2	= 24	239	3	1	= 5
205	11	3	= 64	240	4	2	= 6,5
206	12	4	= 25		Gordian		
207	13	5	= 2	241	1	3	= 5
208	14	6	= 2	242	2	4	= 2,5
209	15	7	= 2	243	3	5	= 3,5
210	16	8	= 2	244	4	6	= 3,5
211	17	9	= 5	245	5	7	= 8
212	?	10	= 5		Philipp		
	Caracalla			246	1	8	= 4,5
213	1	11	= 34	247	2	9	= 4,5
214	2	12	= 9	248	3	10	= 8
215	3	13	= 5,5	249	4	11	= 20

Year	Emperors	Popes	Volume	Year	Emperors	Popes	Volume
250	5	12	= 6,5		Tacitus + Probus		
251	6	13	= 6,5	278	1	4	= 4,5
252	7	14	= 9,5		Probus		
	Decius			279	1	5	= 6
253	1	15	= 76	280	2	6	= 4
	Cornilius			281	3	7	= 3
254	2	1	= 144	282	4	8	= 3
	Gallus + Volusius			283	5	9	= 6
	1				Carinus		
255	2	2	= 40		+ Numerian	Gaia	
	Valerian				1		
	1	Lucius		284	2	1	= 8
256	2 3	1	= 42		Diocletian		
257	3 4	2	= 21		1		
	Stephan			285	2	2	= 4
		1		286	3	3	= 7
258	4	2	= 35	287	4	4	= 1
259	5	3	= 83		Diocletian		
	Valerian				+ Maximinus		
	+ Galien			288	5	5	= 3,5
260	6	4	= 48	289	6	6	= 3,5
	Dionysius				Diocletian		
261	7	1	= 15	290	7	7	= 2,6
262	8	2	= 76	291	8	8	= 2,6
	Galien			292	9	9	= 5
263	9	3	= 60	293	10	10	= 19,5
264	10	4	= 34	294	11	11	= 3
265	11	5	= 19	295	12	12	= 3
266	12	6	= 7	296	13	13	= 3
267	?	7	= 7		Marcellinus		
268	?	8	= 7	297	1	14	= 16
	Claudius			298	2	15	= 33
269	1	9	= 15	299	3	16	= 4
270	2	10	= 3	300	4	17	= 7
271	3	11	= 19	301	5	18	= 52
	Aurelian			302	6	19	= 88
	1			303	7	20	= 90
272	2	12	= 10		Galerius		
	Felix				+ Constans	Marcellus	
273	3	1	= 13	304	1	1	= 81
274	4	2	= 8,5	305	2	2	= 50
275	5	3	= 3	306	3	3	= 65
	Eutychianus				Constantine		
	1				1		
276	6	2	= 3	307	2	4	= 68
277	7	3	= 14,5	308	3	5	= 14

Year	Emperors	Popes	Volume	Year	Emperors	Popes	Volume
309	4	6	= 33	344	8	8	= 21
		Eusebius		345	9	9	= 14
		1		346	10	10	= 18
310	5	2	= 35	347	11	11	= 66
311	6	3	= 39	348	12	12	= 52
		Melhiades		349	13	13	= 21
		1		350	14	14	= 49
312	7	2	= 66	351	15	15	= 61
313	8	3	= 64	352	16	16	= 11
		Silvester				Liberius	
314	9	1	= 51			1	
315	10	2	= 28		Constantius		
316	11	3	= 60	353	17	2	= 61
317	12	4	= 14	354	18	3	= 22
318	13	5	= 61	355	19	4	= 100
319	14	6	= 20	356	20	5	= 108
320	15	7	= 10	357	21	6	= 67
321	16	8	= 30	358	22	7	= 30
322	17	9	= 2,5	359	23	8	= 126
323	18	10	= 8	360	24	9	= 93
324	19	11	= 137	361	25	10	= 99
325	20	12	= 192		Julian		
326	21	13	= 78	362	1	11	= 462
327	22	14	= 70	363	2	12	= 188
328	23	15	= 3		Jovian		
329	24	16	= 15	364	1	13	= 35
330	25	17	= 29		Valentinian + Valens		
331	26	18	= 22		1		
332	27	19	= 11	365	2	14	= 38
333	28	20	= 8	366	3	15	= 42
334	29	21	= 8	367	4	16	= 72
335	30	22	= 58			Damasus	
		Marcus				1	
336	31	1	= 86	368	5	2	= 27
		Julius		369	6	3	= 42
337	32	1	= 91	370	7	4	= 205
	Constantine			371	8	5	= 106
	+ Constans + Constantius			372	9	6	= 172
	1			373	10	7	= 49
338	2	2	= 43	374	11	8	= 29
339	3	3	= 18	375	12	9	= 65
340	4	4	= 72		Valens + Gratian		
	Constans + Constantius				1		
341	5	5	= 40	376	13 2	10	= 21
342	6	6	= 42	377	14 3	11	= 50
343	7	7	= 7	378	15 4	12	= 112

Year	Emperors		Popes	Volume	Year	Emperors		Popes	Volume
	Theodosius + Gratian				391	13	8	7	= 82
379	1	5	13	= 64	392	14	9	8	= 75
380	2	6	14	= 54		Theodosius			
381	3	7	15	= 155	393	15		9	= 47
382	4	8	16	= 66	394	16		10	= 122
383	5	9	17	= 90	395	17		11	= 114
	Theodosius + Valentinian					Arcadius			
384	6	1	18	= 51		+ Honorius			
	Siricius					1			
385	7	2	1	= 59	396	2		12	= 47
386	8	3	2	= 97	397	3		13	= 77
387	9	4	3	= 92		Anastasius			
388	10	5	4	= 139	398	4		1	= 120
389	11	6	5	= 90	399	5		2	= 66
390	12	7	6	= 82	400	6		3	= 110

The "double entry" of the Biblical royal reigns of Israel and Judah

The Kingdom of Judah (Theocratic), allegedly dating from 928-587 b.c. ([72], p. 192), and the Kingdom of the Israelites (Theomachy), allegedly dating from 922-724 b.c. ([72], p. 192), are described in the Old Testament, in books 1-2 Samuel + 1-2 Kings and 1-2 Paralipomenon. The Bible contains both a direct enumeration of reign durations of the kings of Israel (and respectively Judah) and the years of their reign related to the sequence of the kings of Judah (and respectively Israel).

Thus, there appear two possibilities for calculating reign durations for all these kings. N.A.Morozov wrote the following on the subject:

"The book of the Theomachist and the Theocratic Kings fails to list them in a simple chronological sequence, resorting to an extremely complex one instead, which is, reminiscent of the so-called 'double-entry' in modern accounting whereby every mistake reveals itself immediately and provides an opportunity to correct the same… With an explicit intention in mind, something very serious has been conceived and systematically performed. For every theocratic king, first, the time of his reign is stated directly in years or fragments of a year, and second, it is marked in which year of reign of a theomachist king nearest in time he began his reign, and in which year of reign of his successor he died. The same has been done, vice versa, for every theocratic king" ([544], Vol. 7, p. 310).

Comparative chronological tables are presented in ([544], Vol. 7, pp. 311-318). Research into the comparative Biblical chronology of the kingdoms of Israel and Judah has been undertaken by many scientists, such as Munt, d'Oeilly, Clerk, Usher, Horn, and Halls ([544], Vol. 7, pp. 311-318). They were all bound to the limitations of the Scaligerian chronology, and were thus primarily interested in minute adjustments of certain reign durations.

For the purposes of verification, independent of [544] and the research enumerated, we have completely restored this "Biblical double-entry." The result is presented in fig. r6.4.1, fig. r6.4.2, fig. r6.4.3, fig. r6.4.4, fig. r6.4.5, fig. r6.4.6.

Double-entry, or the mutual re-calculation of the dynastic streams of Israel and Judah, in general conforms well to direct statements of the durations of these reigns in the Bible. However, one keeps running into dissent and controversy here, which is usually explained away by the fact that the Bible does not mark out the periods of the common reigns of two kings in any special way. Such common reigns did actually take place; it is the "double-entry" system which makes it possible to restore them. The system also makes it possible to discover periods of strife and interregnum, when there were no rulers. Without going into much detail, we shall merely cite the final results. Below, we shall see that the name of a king is followed by two numbers – the durations of his reign in direct and indirect counting. If a direct number cannot be checked on the Judah scale (that means there is no triple conformity stated in the Bible), we insert a question mark instead of a number.

Jeroboam (I) 22-?, Nadab 2-?, Vaasha 24 or 23, Elah 2 or 1, Zimri 7 days-?, Omri 12-7, Ahab 22-20, Ahaziah 2-1, Joram 12-8, Jehu 28-29, Jehoahaz 17-14, Joash

Fig. r6.4.1. Comparative locations of the Judean (theocracy), and the Israelite (theomachy) dynastic currents in the Bible. This is the so-called "double-entry chronology" of the Israelite and the Judean kings. Part one.

Fig. r6.4.2. Comparative locations of the Biblical Israelite and the Judean reigns. Part two.

Fig. r6.4.3. Comparative locations of the Biblical Israelite and the Judean reigns. Part three.

Fig. r6.4.4. Comparative locations of the Biblical Israelite and the Judean reigns. Part four.

Fig. r6.4.5. Comparative locations of the Biblical Israelite and the Judean reigns. Part five.

Fig. r6.4.6. Comparative locations of the Biblical Israelite and the Judean reigns. Part six.

16-18, Jeroboam (II) 41-52, Zechariah 6 months-?, Shallum 1 month-?, Menahem 10-11, Pekahiah 2-?, Pekah 20-?, Hoseah 1-3.

Now we shall provide references to all fragments of the Bible, which provided for the basis of the construction of the complete table of "dual entry" that we present on the structures above. We have not performed any special calculations, just very carefully plotted both dynastic streams along the time axis meticulously considering all Biblical data regarding their mutual position.

1) *Rehoboam* reigned for 17 years (1 Kings 14:21).

2) *Jeroboam* reigned for 22 years (1 Kings 14:20).

3) *Abijah* (Abijam) reigned for 3 years (1 Kings 15:2). He became king in the 18th year of Jeroboam I (1 Kings 15:1).

4) *Nadab (Nabath)* reigned for 2 years and became king in the 2nd year of Asa of Judah, i.e., immediately after Jeroboam I in his dynastic current (1 Kings 14:20, 15:25).

5) *Asa* (Jesus?) reigned for 41 years and became king in the 20th year of Jeroboam I (1 Kings 15:9-10).

6) *Baasha* became king in the 3rd year of Asa (Jesus?) and reigned for 24 years (1 Kings 15:33). Thus, Baasha became king in the 3rd-4th year of Asa (Jesus?), when compared to Nadab. Otherwise, in his first year Baasha reigned jointly with Nadab.

7) *Elah* became king in the 26th year of Asa (Jesus?) and reigned for 2 years (1 Kings 16:8). Elah turns out to have reigned jointly with Baasha.

8) *Zimri (Zimvri)* became king in the 27th year of Asa (Jesus?) and reigned for 7 days (1 Kings 16:9, 15). Thus, Zimri reigned in the time of Baasha and Elah – does this mean there was a third co-ruler?

9) *Amariah* became king in the 31st year of Asa (Jesus?) and reigned for 12 years (1 Kings 16:23). Thus, an interval of 3 years separates Amariah from Elah (and Baasha).

10) *Ahab* became king in the 38th year of Asa (Jesus?) and reigned for 22 years (1 Kings 16:29).

11) *Josaphat* became king in the 4th year of Ahab and reigned 25 years (1 Kings 22:41, 42). Thus, an interval of 1 year occurs between Josaphat and Asa, and Josaphat becomes king in the 11th year of Amariah. Thus, Ahab and Amariah turn out to have been co-rulers with a 5-year period of common reign.

12) *Ahaziah (Ohoziah)* became king in the 17th year of Josaphat and reigned for 2 years (1 Kings 22:51).

13) *Joram* of Israel (the Theomachist) became king in the 18th year of Josaphat and reigned for 12 years (2 Kings 3:1). Thus, Ahaziah turns out to have reigned together with Ahab for 1 year, and with Joram for 1 year. This fact conforms with another indication in the Bible that Joram became king immediately after Ahab (2 Kings 3:5-6). But there also exists another version: "Joram succeeded him as king in the second year of Jehoram son of Josaphat king of Judah" (2 Kings 1:17). We certainly fix both variants.

14) *Joram* of Judah (Theocracy) became king in the 5th year of Joram of Israel and reigned for 8 years (2 Kings 8:16-17). Thus, Joram turns out to have reigned together with Josaphat for 2 years.

15) *Ahaziah (Ohoziah)* of Judah (Theocracy) became king in the 12th year of Joram of Israel (the Theomachist) and reigned for 1 year (2 Kings 8:25-26). In another version, he became king in the 11th year of Joram of Israel (2 Kings 9:29), and turns out to have died simultaneously with him (2 Kings 9:27). Therefore, he did actually reign for 1 year. In both variants, he reigned together with Joram of Judah (his father) all of the time.

16) *Athaliah (Gotholiah)*, an usurper, became king immediately after the death of Ahaziah of Judah (thus, of Joram as well) and reigned for 6 years (2 Kings 11:1, 3).

17) *Jehu* became king immediately after the death of Joram of Israel (1 Kings 9:27-28), and reigned for 28 years (2 Kings 10:36).

18) *Joash* of Judah became king in the 7th year of Jehu (therefore, immediately after Athaliah) and reigned for 40 years (2 Kings 12:1).

19) *Joahaz* of Israel became king in the 23rd year of Joash of Judah and reigned for 17 years (2 Kings 13:1). Thus, a gap of 2 years occurs between Jehu and Joahaz.

20) *Jehoash* of Israel became king in the 37th year of Joash of Judah and reigned for 16 years (2 Kings 13:10). Thus, Joash reigned together with Jehoahaz for 3 years.

21) *Amaziah* of Judah became king in the 2nd year of Jehoash of Israel and reigned for 29 years (2 Kings 14:1, 2). Thus, Amaziah reigned together with Joash of Judah for 1 year.

22) *Azariah (Hozeah)* of Judah became king after the death of Amaziah in the 14th or 15th year of Jeroboam II, if we assume him to have become king

immediately after the death of Amaziah (2 Kings 14:13-21). He reigned for 52 years (2 Kings 15:2). However, the 15th year of the reign of Azariah (Czar?) is referred to in this part of the Bible "following the death" of Amaziah in the 14th year of Jeroboam II. Therefore, such an indication cannot be considered unambiguous – the Bible does not state that Azariah (Czar?) became king immediately after the death of Amaziah (2 Kings 14:13-21). This creates opportunities for all kinds of different interpretations. However, most likely to eliminate doubt in this respect, a few verses later the Bible does explicitly define the time of reign of Azariah (Hozeah): "In the twenty-seventh year of Jeroboam king of Israel, Azariah son of Amaziah king of Judah commenced his reign. He was sixteen years old when he became king, and he reigned in Jerusalem for fifty-two years" (2 Kings 15:1-2). Regarding the two following short-term kings of Israel, there is a certain confusion regarding the scale of Judah as well.

23) *Zechariah* became king in the 38th year of Azariah (Czar?) and reigned for 6 months (2 Kings 15:8).

24) *Shallum (Shollom* or *Shallom)* became king in the 39th year of Azariah (Czar?) and reigned for 1 month (2 Kings 15:13). Moreover, Shallum is said to have reigned immediately after Zechariah (2 Kings 15:10). The difficulty in dating this pair of kings (the two of whom reigned for 7 months only) is related to the insufficient clarity as to which position of Azariah on the time scale the indication of the years of their reigns is related to. As a matter of fact, the Bible provides two variants for Azariah, q.v. above, differing by 12-13 years. Namely, the pair Zechariah-Shallum "fluctuates" around this time interval. At the same time, the Bible says that "Jeroboam rested with his fathers, the kings of Israel. And Zechariah his son succeeded him as king" (2 Kings 14:29). This is a standard Biblical formula used to indicate, in other cases as well, an immediate succession of kings. Researchers usually call this obscure period, lasting for 23-24 years (see below), "interregnum." In view of the reign of Zechariah immediately following that of Jeroboam II, we place him in our table immediately after Jeroboam II, together with Shallum. The period of interregnum where the pair Zechariah-Shallum "fluctuates" begins immediately after the death of Jeroboam II and ends with the coronation of Menahem.

25) *Menahem* became king in the 39th year of Azariah (Czar?) and reigned for 10 years (2 Kings 15:17). Thus, the interregnum lasted from the 14th or 15th year of Azariah (Czar?) until the 39th year of Azariah.

26) *Pekahiah* became king in the 50th year of Azariah (Czar?) and reigned for 2 years (2 Kings 15:23). Thus, one year is missing between Menahem and Pekahiah.

27) *Fakh (Pekah)* became king in the 52nd year of Azariah (Czar?) and reigned for 20 years (2 Kings 15:27).

28) *Jotham* of Judah became king in the 2nd year of Fakh and reigned for 16 years (2 Kings 15:32-33). Thus, two years are missing between Hozeah and Jotham. NOTE: If we assume that the author of the book made a mistake and confused Pekahiah with Pekah, this gap disappears.

29) *Ahaz* of Judah became king in the 17th year of Fakh and reigned for 16 years (2 Kings 16:1-2). Thus, Ahaz and Jotham reigned jointly for one year.

30) *Hoseah* became king in the 20th year of Jotham and reigned for 9 years (2 Kings 15:30, 17:1). A complication arises in relation to the fact that Jotham reigned for 16 years only. However, if we consider the indication "in the 20th year of Jotham" merely as information that Hoseah became king 20 years after Jotham did, this complication disappears, and a gap, probably anarchy, appears between the reigns of Hoseah and Fakh. However, different researchers define the length of this strife in different ways ([544], Vol. 7, p. 311-318). Sometimes a term of 9 years is assumed, since the Bible also says that Hoseah became king in the 12th year of Ahaz (2 Kings 17:1), which leads to a gap of 9 years. We discuss the questions arising in reference to the reign of Hoseah in the chapter dedicated to dynastic parallelisms. The Kingdom of Israel ends with Hoseah.

The Kingdom of Judah continues to exist: Manasseh, 55 years; Amon, 2 years; Josiah, 31 years; Jehoahaz, 3 months; Jehoiakim, 11 years; Jehoiachin, 3 months; Zedekiah, 11 years. Zedekiah is the last king of Judah.

Armenian history. Emperors of the Holy Roman Empire of the alleged X-XIII century A.D., a.k.a. the Kings of Judah, a.k.a. the mediaeval Armenian Catholicoses

1.
THREE PHANTOM REFLECTIONS OF THE SAME MEDIAEVAL DYNASTY

Let us take the well-known list of *Armenian Catholicoses,* or the supreme Patriarchs of the Armenian Church, spanning the period from the alleged year 30 A.D. to 1909 A.D. It was published in 1913 in Moscow by Ch. Barkhudaryan's printing house. The succession of the Armenian Catholicoses naturally continues into the XX century, but this epoch is of no interest to us.

Armenian history is considered to be rooted in deep antiquity, which is supposed to be supported by Armenian documents, the earliest of which are said to date back to the I century A.D. However, a closer look reveals the fact that Armenian history is in no way free from the problems we encountered when studying Roman, Greek, and Byzantine history. Armenian history *gets substantially shorter*, and this "condensation" conforms well with a similar condensation of other branches of "ancient history."

AN APPROPRIATE GENERAL NOTE: the Scaligerian version believes *Roman history* to be the most dependable and documented. Scaligerian history of other "ancient" European, Asian, and African states is substantially *less lucid*, and frequently *relies on the Roman history*. However, our research has already proved that Roman history is full of deep contradic-

tions, contains a large number of duplicates and can thus be truncated substantially.

Therefore we have reasons to expect this truncation effect to manifest itself *more explicitly* in the "weaker" chronologies of other countries, and we were convinced this was actually the case when we considered examples of Greek, Egyptian, and other branches of ancient history, q.v. above. Chinese history is a separate paradigm altogether, and a substantial part of CHRON5 deals with it.

Let us now proceed with the Armenian history.

STATEMENT 1

We have discovered an amazing dynastic parallelism, presented in fig. r6.5.1, between:

a) *the dynasty of the Armenian Catholicoses*, from the alleged year 922 A.D. until 1286 A.D., and

b) *the Imperial Roman dynasty* of the Holy Roman Empire, the alleged X-XIII century A.D.

Besides, as stated above, the same Roman-German dynasty of the alleged X-XIII century is most likely described in the Bible as *the Kingdom of Judah*. Thus, the same royal mediaeval dynasty of the X-XIII century A.D., or the Habsburg (Nov-Gorod?) dynasty of the XIV-XVI century, was reflected in different documents under the names of:

1) The Roman-German emperors of the alleged X-XIII century A.D.,

Fig. r6.5.1. Triple superposition of mediaeval Armenian Catholicoses over the mediaeval Holy Roman Empire of the alleged X-XIII century and the "ancient" Judean kings described in the Bible, with a rigid shift of roughly 1840 years.

2) The Armenian Catholicoses of the alleged X-XIII century A.D.,

3) The Biblical Kings of Judah of the alleged X-VI century B.C.

It is a curious fact that there is no time shift between the Roman-German emperors and the Armenian Catholicoses – the Scaligerian chronology locates them in the same historical epoch, the alleged X-XIII century A.D. – while the Biblical description of the same dynasty "slid down" by approximately 1,838 years, with the Graeco-Biblical shift.

STATEMENT 2

The beginning of the list of the Armenian Catholicoses from the alleged I century A.D. until the X century A.D., is not independent either, since it contains a partial reproduction of the mediaeval history of the X-XIII century A.D., as well as that of the XIV-XVI century A.D., – that is, yet another duplicate, phantom reflection.

STATEMENT 3

The list of the Armenian Catholicoses allegedly of the I-XIII centuries A.D. is probably a phantom duplicate of the *artificially extended* Scaligerian history of Rome-Rhomaioi of the alleged I-XIII century A.D. In other words, it was made up after the Scaligerian school had constructed the erroneous chronological framework of Rome-Rhomaioi. *Those who compiled the list of the Armenian Catholicoses (in the XVII-XVIII century) must have reproduced the erroneous extended version of the Rome-Rhomaioi history, artificially extended to span the long period of the alleged I-XIII century A.D.*

Armenian history probably begins from a number of documents that relate the actual history of the mediaeval Empire of the XIV-XVI century, which certain documents called Roman. One shouldn't assume, however, that the Rome of the annals had always been identified with the city in Italy. According to the Scaligerian version, Armenia has for a long time been a part of the Roman Empire. Moreover, the word *Armenia* itself clearly is a distorted version of *Romania* or *Rhomaioi*, also indicating the Rhomaioi-Roman origin of the Armenian history of the X-XIII and the XIV-XVI century A.D. In the procrastinated Scaligerian history it is shifted into the "deep past," which is possibly explained by the following.

HYPOTHESIS

Genuine chronicles describing the history of the Eurasian empires of the X-XIII and the XIV-XVI century wound up on the territory of one of the imperial areas known later as Armenia. These metropolitan chronicles were adopted by local intellectuals as their own, truly local, history and erroneously laid in the foundation of the history of Armenia. Chronicles were re-written, edited, and included in the local history of Armenia by the Armenian historians of the XVII-XVIII century. In doing so, they called the great emperors "Armenian Catholicoses."

Traces of the metropolitan Imperial origin of the "Armenian Catholicoses" can be found in the very word "*Catholicos*" – a slightly distorted version of *Kapholic* or *Catholic*. "KaPHolic" is the word the Orthodox Church uses for referring to itself to this day. "CaTHolic" is what the Occidental Church is called nowadays. The letters θ (*PH, phita*) and *T* were subject to flexion all the way; therefore, *Kapholic* and *Catholic* must have been the same word in the Middle Ages.

Thus, the term "*Armenian Catholicoses*" may have originally been a slight distortion of the term "*Rhomaioi* or the *Roman Kapholics* or *Catholics*," with the memory of the relation subsequently lost.

The events we're looking at may have occurred in a slightly different manner. The territory occupied by the contemporary Armenia was formerly a province within the Empire. *Local chroniclers* meticulously recorded the history of the huge Empire, mostly concerned with its distant emperors. One shouldn't assume the scribes were necessarily referring to the Italian Rome. Subsequent historians in their concern for the reconstruction of Armenian history, considered these chronicles to have referred to *local events*. The rulers described in the old chronicles were given the name of the "Armenian Catholicoses." Since then the chronicle has been believed to describe the ancient history of a small state on the territory of the contemporary Armenia.

The history of actual Armenia, or the history of the inhabitants of contemporary Armenia, is probably known to us starting with the XIV-XV century A.D. the earliest, all preceding history being a phantom reflection of that which was supposed to immortalize the gigantic Empire.

Fig. r6.5.2. A historical superposition of the mediaeval Armenian Catholicoses of the alleged I-XIII century A.D. over the phantom Scaligerian history of the mediaeval Rome of the alleged I-XIII century A.D. Part one.

Fig. r6.5.3. A historical superposition of the mediaeval Armenian Catholicoses of the alleged I-XIII century A.D. over the phantom Scaligerian history of the mediaeval Rome of the alleged I-XIII century A.D. Part two.

Fig. r6.5.4. A historical superposition of the mediaeval Armenian Catholicoses of the alleged I-XIII century A.D. over the phantom Scaligerian history of the mediaeval Rome of the alleged I-XIII century A.D. Part three.

Fig, r6.5.5. A historical superposition of the mediaeval Armenian Catholicoses of the alleged I-XIII century A.D. over the phantom Scaligerian history of the mediaeval Rome of the alleged I-XIII century A.D. Part four.

2.
THE PARALLELISM BETWEEN THE MEDIAEVAL ARMENIAN HISTORY AND THE PHANTOM ROMAN EMPIRE ACCORDING TO SCALIGER

Let us now go over the entire list of the Armenian Catholicoses, indicating their names, years and reign durations to demonstrate the parallelism between the Armenian and the Roman history of the alleged X-XIII century A.D. This parallelism is presented in fig. r6.5.2, fig. r6.5.3, fig. r6.5.4, and fig. r6.5.5, which display, along with the current of the Armenian Catholicoses, the dynastic stream of the phantom Roman-Rhomaioi history in the artificially extended Scaligerian chronology of the alleged I-XIII century A.D. As we understand, this pre-X century history actually consists of several phantom duplicates of the history of the XI-XVII century. For the sake of not overcomplicating the picture, we shall merely point out the parallelism between the Armenian Catholicoses and the extended history of Rome-Rhomaioi. Then, having truncated the history of Rome, we shall automatically truncate and condense the Armenian history, shifting it into the epoch that begins from the XI century A.D., and is thus closer to us.

1a. *The Armenian Catholicoses. The beginning of the list coincides with the beginning of* A.D.

1) *St. Thaddeus,* beginning of reign is not exactly known, died in 50 A.D., reigned for about 50 years; therefore, his reign must have started around 1 A.D. It is a most curious fact that the list of the Armenian Catholicoses begins *exactly* with the beginning of the new era. This is hardly a mere coincidence, and we shall soon see for ourselves that this is truly a consequence of the chronological shift by approximately 1,000 years (the Roman shift). The list of the Catholicoses does not actually begin before the XI century A.D., which is also true for the list of Roman emperors.

■ 1b. *The Roman history of the alleged I-III century* A.D. *The origins of the Second Roman Empire.*
At the junction of the I century B.C. and the I century A.D., the Second Roman Empire begins its existence. The beginning of the new era is marked in the Scaligerian chronology by the Nativity of Jesus

Christ. Thus, the list of the Armenian Catholicoses begins virtually simultaneously with that of the Second Roman Empire.

2a. *The Armenian Catholicoses of the alleged 50-230* A.D.

2) *St. Bartholomew,* 50-68 A.D., reigned for 18 years.

3) *St. Zakaria,* 68-76, reigned for 8 years.

4) *St. Zementus,* 76-81, reigned for 4 years.

5) *St. Atirnerseh,* 81-97, reigned for 15 years.

6) *St. Musche,* 97-128, reigned for 30 years. *Musche* is most likely a slightly distorted version of the name *Moisha*, or *Moses*.

7) *St. Schahen*, 128-154, reigned for 25 years.

8) *St. Schavarsch,* 154-175, reigned for 20 years.

9) *St. Leontius,* 165-193, reigned for 17 years.

10) Lacuna, 193-230, lasts for 37 years. Names of Catholicoses lost for some reason. This is the end of the first part of the list of Catholicoses.

■ 2b. *The Roman history of the alleged I-III century* A.D. *The beginning of the Second Roman Empire and its end.*
We approach *the end* of the Second Roman Empire, the alleged middle of the III century A.D. It is noteworthy that this is where the Scaligerian version of the Roman history from 217-250 A.D. placed one of the phantom duplicates of the Gothic-Trojan-Tarquinian war we spoke of above: the end of the Second Roman Empire, epoch of strife, anarchy, "soldier emperors," reign of Julia Maesa, the Gothic war of the alleged years 238-251 A.D. It is little wonder therefore, that the duplicate list of the Armenian Catholicoses reacts to this strife with a lacuna as well.

3a. *The Armenian Catholicoses. Lacuna in the list.*

11) *St. Mehroujan*, 230-260, reigned for 30 years.

12) Lacuna, 260-301, lasts for 41 years. Names of Catholicoses lost for some reason.

■ 3b. *The Roman history allegedly of the III-IV century* A.D. *The beginning of the Third Roman Empire and strife.*
It is noteworthy that this is where the Scaligerian version of the Roman history of the alleged years 275-284 A.D. placed another phantom duplicate of the Gothic-Trojan-Tarquinian war, see CHRON1,

Chapter 5-6. This is the beginning of the Third Roman Empire, strife, and struggle for power between several emperors. The strife ends when, allegedly in 284 A.D., Diocletian the Divine comes to power. In the list of the Armenian Catholicoses we see a natural lacuna before Diocletian.

4a. *The Armenian Catholicoses. St. Grigor I.*

13) *St. Grigor I Lousavorich*, a.k.a. *Grigor I the Enlightener*, 301-325, reigned for 24 years. Grigor I opens the group of the Armenian Catholicoses who reigned from the alleged IV century, and had the title "The First" to their names. These are: Grigor I, Aristakes I, Vertanes I, Paren I, Houssik I, Nerses I, etc. Since the entire alleged IV century in the history of the Armenian Catholicoses is full of "The First" rulers, the IV century must have marked the beginning of some *new* chronicle. What could possibly be the matter here? Why were *virtually all of the Armenian Catholicoses of the alleged IV century A.D.* named "*The First*"? We obtain the answer by turning to the Scaligerian history of Rome of that epoch.

■ 4b. *The Roman history of the alleged III-IV century A.D. Diocletian.*

The Catholicos Grigor I, after a slight shift, is identified with the Roman Emperor Diocletian who had reigned for 21 years, allegedly from 284-305 A.D. Lengths of reigns – 24 and 21 – are fairly similar. Both Grigor I and Diocletian are enthroned after periods of civil war and strife. Diocletian's reign marks the beginning of Third Roman Empire. This is *the new chronicle*, which the list of the Armenian Catholicoses has quite justly marked by assigning the title "The First" to almost all of the Catholicoses who had reigned at that time.

5a. *The Armenian Catholicoses. Aristakes I.*

14) *St. Aristakes I Parthian,* 306-325-333, reigned for 27 years, out of which 8 final years as the sole ruler. At first, he had reigned together with Grigor I, in the position of co-adjutor from 306 till 325, then without co-rulers since 325.

■ 5b. *The Roman history of the alleged IV century A.D. Constantine I.*

Aristakes I must be a duplicate reflection of Constantine I Augustus, the famous emperor of the Third Roman Empire who had reigned for 31 years, allegedly from 306 till 337. The period and length of his reign (31 years) virtually coincide with that of Catholicos Aristakes I.

6a. *The Armenian Catholicoses. Houssik I = Jesus?*

15) *St. Vertanes I the Parthian* 333-337, reigned for 4 years.

16) *St. Houssik I the Parthian* 341-347, reigned for 6 years. It is quite obvious that the name *Houssik* is a slightly distorted version of *Jesus*. Then other Catholicoses replace Houssik, but all of a sudden, in the alleged year 352, there appears another *Houssik* (this time a.k.a. *Sahak of Manazkert*) who reigns from 352 till 377, with interruptions. Furthermore, this "second Houssik" is not called "the Second". Therefore, this might as well be Houssik I we already know, otherwise authors would have assigned him the number "the Second". Subsequently, in the history of the Armenian Catholicoses we see a *Houssik* who had reigned between the alleged years 341-377, with interruptions.

Thus, the list of the Armenian Catholicoses features a *Jesus*, with the number "the First", in the first half of the IV century A.D. What happens in the Third Roman Empire at that time?

■ 5b. *The Roman history of the alleged IV century A.D. St. Basil the Great – a duplicate of Jesus Christ.* In the history of the Third Roman Empire, in the alleged year 333 A.D., a famous religious figure was born, – *St. Basil the Great*, one of the phantom duplicates of *Jesus Christ*. See CHRON2, Ch.1:5. He was not formally a Roman ruler, but according to the Scaligerian history, his political influence was enormous ([544]). The name Basil (Basileus) the Great simply means "The Great King". His birth, allegedly in 333, virtually coincides with the "enthronement" of *Houssik I*, an Armenian Catholicos. St. Basil the Great is a phantom duplicate of Jesus from the XI century. St. Basil the Great allegedly died in 378 ([544]), and his Armenian duplicate *Houssik I* died in the alleged year 377. *The dates virtually coincide.* The Great King had lived for 45 years, while the Armenian Houssik had reigned for 36 years, with interruptions.

7a. *The Armenian Catholicoses. Sahak = Isaak = Jesus?*

17) *St. Daniel,* 347, reigned for less than 1 year.

18) *Paren I of Aschtischat,* 348-352, reigned for 4 years.

19) *Sahak I of Manazkert, a.k.a. Chonak, Houssik* (!). Reigned with interruptions: in 352, from 359 till 363, and from 373 until 377. As we have already said, this is most likely Houssik I whose reign began in 341 and who is a duplicate of St. Basil the Great, who, in his turn, is a phantom reflection of Jesus Christ from the XI century A.D. See CHRON1, Chapter 6. By the way, one can't fail to mention that the name *Sahak* is, most likely, just a variant for the name *Isaak*.

■ 7b. *The Roman history of the alleged IV century A.D. St. Basil the Great re-visited?*

As we have already mentioned, St. Basil the Great (The Great King) had been active in the Third Roman Empire of that time, the alleged years 333-378. This amazing identification of the Armenian *Jesus* with the Roman duplicate of *Jesus* is worth a deeper study. It would be extremely interesting to compare more detailed "biographies" of these two duplicates of the actual Jesus Christ from the XI century A.D.

8a. *The Armenian Catholicoses. Nerses The Great.*

20) *St. Nerses I The Great,* 353-373, temporarily removed from power of the alleged years 359-363, reigned either for 20 years (if we disregard the lacuna) or 16 years. He is a contemporary of *Houssik* described above called *The Great,* as one might expect looking at the history of the Third Roman Empire, – the name of St. Basil *the Great.*

21) *Houssik,* 373-377. We have already discussed him.

■ 8b. *The Roman history allegedly of the IV century A.D. Basileus the Great.*

We're still in the epoch of St. Basil *the Great,* of the alleged years 333-378, who gave his name *The Great* to St. Nerses.

9a. *The Armenian Catholicoses of the alleged years 381-456 A.D.*

22) *Zaven I of Manazkert,* 381-386, reigned for 5 years.

23) Lacuna, 386-387, lasts for 1 or 2 years. "The seat is vacant".

24) *St. Sahak I The Great,* 387-428, then expelled, and reigned again from 432 till 439. Reigned for the total of either 52 years (if we disregard the lacuna) or 48 years.

25) *Surmak I of Manazkert,* Anti-Patriarch in 428, then discharged, and enthroned again reigning from 437 till 444. Reigned either for 8 years (if we disregard the lacuna) or 7 years.

26) *Birkisho the Syrian,* 428-432, reigned for 4 years.

27) *Schimuel the Syrian,* Anti-Patriarch 432-437, reigned for 5 years.

28) *St. Mesrop,* 439-440, reigned for 1 year.

29) *St. Hovsep I of Hoghotzim,* 440-444-451-452, exiled in 451, discharged in 452, reigned either for 12 years or 8 years.

30) *Melitus I,* 452-456, reigned for 4 years.

■ 9b. *The Roman history of the alleged V-VI century A.D. The period before the Gothic-Trojan war.*

We are not going to linger too long on the parallels revealing biographical similaities with the Roman rulers, pointing out only the most vivid and conspicuous superpositions. To observe one of those we shall regard the end of the V – beginning of the VI century A.D. As we already know well, Roman history features the famous Gothic war of the alleged VI century, which is a phantom reflection of the Trojan-Tarquinian war of the XIII century A.D.

The *names* on the list of the Armenian Catholicoses are expected to reflect this circumstance. What are the most characteristic names and nicknames of the protagonists of the Trojan-Gothic-Tarquinian war? A good Biblical example of such a name would be Moses. In the Gothic-Roman version there are such *Gothic* names as John and Narses, as well as the name *TRN (Rus. TPH)* and its variants *TRNK (Rus. TPHK),* etc. Besides, the Gothic war is a turning point in the Scaligerian phantom history of Rome, therefore, another group of rulers with the title "the First" is expected to appear on the Armenian list. We shall now watch these predictions of ours to confirm.

10a. *The Armenian Catholicoses, of the alleged years 456-604 A.D. Goths, Moses, the exile of Guth.*

31) *Movses I of Manazkert,* 456-461, reigned for 5 years.

32) *St. Gut I of Araheze Kristapor I Arzruni*, 461-478, reigned for 17 years. *Banished* in 471. The same scenario recurs with the *Goths* in Rome, in the alleged VI century. Thus, it becomes clear why the name of this Catholicos is *Gut*, – i.e. *Goth*.

33) *St. Hovhannes I Mandakouni,* 478-490, reigned for 12 years. The seat *relocates* to Dvin in 484, during his time.

34) *Babken I of Othmous,* 490-515, reigned for 25 years.

35) *Samuel I of Ardzke,* 516-526, reigned for 10 years.

36) *Mousche I of Ailaberk,* 526-534, reigned for 8 years. The name *Mousche* is clearly related to the name Moishe, or the Biblical Moses.

37) *Sahak II of Ouhki,* 534-539, reigned for 5 years. His name obviously originates from the Biblical *Isaac.*

38) *Kristapor I of Tiraritch,* 539-545, reigned for 6 years. His name sounds very much like the familiar combination *TRR* – a version of *TRN* or *TRQN*, or the name *Tartar = Tatar.*

39) *Ghevont I of Erast,* 545-548, reigned for 3 years.

40) *Nerses I of Bagrevand,* 548-557, reigned for 9 years.

41) *Hovhannes II Gabeghian,* 557-574, reigned for 17 years.

42) *Movses II of Eghivart,* 574-604, reigned for 30 years.

■ 10b. *The Roman history of the alleged VI century* A.D. *The famous Gothic-Trojan war.*
We see the list of the Armenian Catholicoses lively responding to the phantom Gothic war of the alleged VI century. We see the *Goths* (the Armenian *Gut*), *Movses* mentioned twice, *Hovhannes (John), the banishment of Gut* (the exile of the Goths from Rome-Rhomaioi as a result of the war), Armenian "relocation of the seat", or the end of the Third Roman Empire. Also remarkable is the mention of the eunuch, or the military commander *Narses* (as in the Armenian *Nerses*) who contributed to the defeat of the Goths. Thus, the history of the Armenian Catholicoses from the 31st until the 42nd most likely reflects the Gothic-Trojan-Tarquinian war of the XIII century A.D. in its phantom variant of the VI century A.D.

11a. *The Armenian Catholicoses, of the alleged years* 607-967 A.D.

43) *Vertanes Kertogh* 604-607, reigned for 3 years.

44) *Abraham I of Aghbatank,* 607-615, reigned for 8 years.

45) *Comitas I of Aghtzik,* 615-628, reigned for 13 years.

46) *Kristapor I Apahouni,* 628-630, reigned for 2 years.

47) *Yezer I of Parajenakert,* 630-641, reigned for 11 years.

48) *Nerses III of Ischkhan* a.k.a. *Schinogh,* 641-652, reigned for 11 years, then was temporarily ousted, and reigned again from 658 till 661, for 3 years more.

49) *Anastasius I of Akori,* 661-667, reigned for 6 years.

50) *Israel I of Othmous,* 667-677, reigned for 10 years.

51) *Sahak (*Isaak?*) III of Tzorapor,* 677-701, reigned for 26 years.

52) *Eghia I of Ardjesch,* 703-717, reigned for 14 years.

53) *Himastaser St.Hovhannes III of Otzoun,* 717-728, reigned for 11 years.

54) *David I of Aramonk,* 728-741, reigned for 13 years.

55) *Tirdat I of Othmous,* 741-764, reigned for 8 years.

56) *Tirdat I of Dasnavork,* 764-767, reigned for 3 years.

57) *Sion I of Bavonk,* 767-775, reigned for 8 years.

58) *Yessai I of Egipatrouschc,* 775-788, reigned for 13 years.

59) *Stepanos I of Douinc,* 788-790, reigned for 2 years.

60) *Hovab I of Douinc,* 790-791, reigned for 1 year.

61) *Soghomon I of Garni,* 791-792, reigned for 1 year.

62) *Gueorg I of Oschakan*, a.k.a. *Oylorbuk,* 792-795, reigned for 3 years.

63) *Hovsep II of Parpi*, a.k.a. *Karitch,* 795-806, reigned for 11 years.

64) *David II of Gagagh,* 806-833, reigned for 27 years.

65) *Hovhannes IV of Ova,* 833-855, reigned for 22 years.

66) *Zakaria I of Tzak,* 855-877, reigned for 22 years.

67) *Gueorg II of Garni,* 878-898, reigned for 20 years.

68) *St.Maschtotz I of Eghivart,* 898-899, reigned for 1 year.

69) *Hovhannes V of Drashkonakert,* 899-931, reigned for 32 years. The "relocation of the seat" in 928.

70) *Stepanos II Rischtouni,* 931-932, reigned for 1 year.

71) *Theodoros I Rischtouni,* 932-938, reigned for 6 years.

72) *Yeghische I Rischtouni,* 938-943, reigned for 5 years.

73) *Anania I of Moks,* 943-967, reigned for 24 years; during his reign, another "relocation of the seat" occurs in 943.

■ 11b. *The Roman history of the alleged X century A.D. Two phantom duplicates of the Trojan war.*
Pay attention to the last couple of Catholicoses in the list. Their reign falls on the phantom epoch of two more adjacent duplicates of the Gothic-Trojan-Tarquinian war, or the civil war in Rome-Rhomaioi of the alleged years 901-924, and the civil war that is presumed to have taken place in 931-954. See Chron1, Chapter 7, and fig. r6.5.2. The Armenian history immediately responds to these two duplicates – with *the two "relocations of the seat"* that are supposed to have occurred in the years 928 and 943 – with perfect timing, in other words!

Furthermore, in both Roman-Rhomaioi duplicates Theodora figures as one of the protagonists. In the first duplicate, she acts as Theodora I; in the second, as Theodora II, q.v. in Chron2, Chapter 2. This is exactly the point when *Theodor I* (as *Theodoros I*) appears on the Armenian list.

12a. *The Armenian Catholicoses of the alleged 967-992 A.D.*

74) *Vahan I Suni,* 967-969, reigned for 2 years.

75) *Stepanos III of Sevan,* 969-971, reigned for 2 years.

76) *Khatchik I Arscharouni,* 972-992, reigned for 20 years. Moved to Ani in the alleged year 991.

■ 12b. *The Roman history of the alleged X century A.D. This is where the Holy Roman Empire of the alleged X-XIII century begins.*

We now find ourselves in an area full of extremely apparent dynastic parallelisms which were revealed by our statistical method, see Chron1, Chapter 5. In the history of Rome-Rhomaioi, we are now at the very roots of the Holy Roman Empire of the alleged X-XIII century A.D. The Armenian list immediately responds with a note of yet another "relocation of the seat" allegedly in 992. The parallelism is shown on fig. r6.5.2 and begins with the next Catholicos Sarkis I.

13a. *The Armenian Catholicoses. Sarkis I.*

77) *Sarkis I of Sevan,* 943-967, reigned for 27 years, In the first years of his reign, the "relocation of the seat" to Ani had occurred.

■ 13b. *Roman emperors, a.k.a. kings of Judah, of the alleged X-XIII century A.D. Henry I = Rehoboam.*
The duplicate, Emperor Henry I, reigned allegedly from 919, according to [415], and until 936, according to [76]. The reign duration thus equals 17 years. As we have earlier displayed, he is also described in the Bible as Rehoboam, the first King of Judah, who had also reigned for 17 years according to the Bible, and 17 years according to the tables of Bickerman [72], p.192.

For the sake of convenience, we shall present the reign durations of the kings of Judah counting from the 1st year of King Rehoboam, or the moment of the foundation of the Kingdom of Judah. In accordance with the Scaligerian chronology, it happened in the alleged year 928 B.C. In accordance with the new chronology, however, the Kingdom of Judah most probably dates back to the XIII-XIV century A.D., q.v. above.

Thus, Rehoboam, the first King of Judah, reigned from year 0 and until the year 17 of the Kingdom of Judah.

14a. *The Armenian Catholicoses. Petros I.*

78) *Petros I Guetadartz,* 1019-1054, reigned for 35 years. In 1038, affirmed (confirmed?) on the see. During his time, a new "relocation of the seat" takes place – to Sebastia this time.

By the way, a part of his name reads *Gueta* or *Goth, Goths.* As soon as *Goths* appear on the Armenian list,

we immediately see a "relocation of the seat" – probably a reflection of the exile of Goths from Rome-Rhomaioi as a result of the Gothic-Trojan-Tarquinian war of the XIII century A.D. Armenian history certainly refers to the relocation of the seat *during other epochs* than those of the duplicates of the Gothic-Trojan-Tarquinian war.

■ **14b.** *Roman emperors, a.k.a. kings of Judah, of the alleged X-XIII century A.D. Otto I = Asa.*
Duplicate – Emperor Otto I the Great, allegedly of 936-973, according to [76], had reigned for 37 years. He is also described in the Bible as *Asa* King of Judah, reigning from 20 to 61 of the Kingdom of Judah, or from 20 to 55 according to [72]. Thus, he had reigned for 41 years according to the Bible, or 35 years according to [72].

15a. *The Armenian Catholicoses. Dioscoros.*
79) *Dioscoros of Sanai*, Anti-Patriarch 1036-1038, had reigned for 1 or 2 years.

■ **15b.** *Roman emperors, a.k.a. kings of Judah, of the alleged X-XIII century A.D. Lothair = Abijah.*
Duplicate – Emperor Lothair 947-950, according to [76], had reigned for 3 years. He is also described in the Bible as *Abijah* King of Judah from the years 17-20, according to [72], who had reigned for 3 years.

16a. *The Armenian Catholicoses. Khatchik II.*
80) *Khatchik II of Ani,* 1049-1060, had reigned for 6 or 11 years; 1049 till 1054, ruled together with Petros I. During his epoch, the relocation of the chair to Tavblour occurs – in 1057.

■ **16b.** *Roman emperors, a.k.a. kings of Judah, of the alleged X-XIII century A.D. Otto III = Joram + Ohoziah + Gotholiah.*
Duplicate – Emperor Otto III 983-996, according to [64], or 983-1002, according to [76]. Had reigned for 13 years [64], according to one of the two versions giving us 13 or 19. He is also described in the Bible as the sum of three kings of Judah, – Joram, Ohoziah, and Gotholiah, who had reigned for 13 years, according to [72], from the year 79 to 92 [72].

17a. *The Armenian Catholicoses. Grigor II.*
81) Vacancy (lacuna), 1060-1065. Lasts for 5 years.
82) *Grigor II Vikaiasser,* 1065-1105, had reigned for 40 years. In the beginning of his reign in 1065, a relocation of the seat to Tzamndav. His name, Vikaiasser, is the distorted 'Kaiser', which is natural – *Kaiser* Henry II is his duplicate, q.v. below. All the emperors of the Holy Roman Empire of German Nation were referred to as *Kaisers.*

■ **17b.** *Roman emperors, a.k.a. kings of Judah, of the alleged X-XIII century A.D. Henry II + Conrad = Joash.*
The duplicate is the sum of the two emperors – Henry II the Lame 1002-1024, according to [76], and Conrad 1024-1039, according to [76]. The reign duration of both equals 37 years. They are also described in the Bible as one king of Judah – Joash, of the years 92-130, according to [72]. He had reigned for 38 years according to [72], or for 40 years according to the Bible.

18a. *The Armenian Catholicoses. Georgh III.*
83) *Georgh III of Lori,* 1069-1072, reigned for 3 years.

■ **18b.** *Roman emperors, a.k.a. kings of Judah, of the alleged X-XIII century A.D. (?) = Athaliah.*
No Roman duplicate could be found. In the Bible he is described as Athaliah King of Judah, of the years 95-101, who had reigned for 6 years according to the Bible.

19a. *The Armenian Catholicoses. Barsegh I.*
84) *Sarkis of On,* Anti-Patriarch 1076-1077, reigned for 1 year. Neither Roman nor Biblical duplicate discovered.
85) *Theodoros Alahossik,* Anti-Patriarch 1077-1090, reigned for 13 years. Neither Roman nor Biblical duplicate discovered.
86) *Poghos of Varagh,* Anti-Patriarch 1086-1087, reigned for 1 year.
Neither Roman nor Biblical duplicate discovered; probably because these three Catholicoses were considered *Anti-Patriarchs*, or usurpers. Besides, all three of them are "duplicated" by one legal Catholicos

Grigor II, who is already included in the parallel, see above.

87) *Barsegh I of Ani*, 1081-1113, reigned for 32 years; 1081 to 1105, co-ruler of Grigor II.

■ 19b. *Roman emperors, a.k.a. kings of Judah, of the alleged X-XIII century A.D. Henry III = Amaziah.* Duplicate – Roman Emperor Henry III from 1028, according to [64], and until 1056, according to [76], reigned for 28 years. He is also reflected in the Bible as Amaziah King of Judah, dating from the years 130-159, according to [72]. The duration of his reign equalled 29 years, according to the Bible.

20a. *The Armenian Catholicoses. Grigor III.*

88) *David Thornikian,* Anti-Patriarch, reigned for 1 year in 1114. Neither Roman nor Biblical duplicate discovered, which is quite understandable: firstly, he was an Anti-Patriarch, or an usurper; secondly, he is "covered" by, or reigns together with, the legitimate monarch *Grigor III* who enters the parallel.

89) *Grigor III Pahlavouni*, 1113-1166, reigned for 53 years. During his time, the relocation of the seat to Hromkla. Isn't it Rome?

■ 20b. *Roman emperors, a.k.a. kings of Judah, of the alleged X-XIII century A.D. Henry IV = Hozeah (Azariah).*
Duplicate – Emperor Henry IV from 1053, according to [64], who had reigned until 1106, according to [76], or for 53 years. A perfect coincidence of reign durations! He is also described in the Bible as Hozeah (Azariah) King of Judah, from the years 159-211 according to the Bible, who had reigned for 52 years, according to the Bible, or 43 years, according to [72].

21a. *The Armenian Catholicoses. Nerses IV + Grigor IV.*

90) *St.Nerses IV Schnorhali,* 1166-1173, reigned for 7 years.

91) *Grigor IV Tegha,* 1173-1193, reigned for 20 years. The sum of their reigns equals 27 years.

■ 21b. *Roman emperors, a.k.a. kings of Judah, of the alleged X-XIII century A.D. Henry V = (?).*
The Armenian pair is identified with their duplicate – Emperor Henry V, whose reign began in 1098, ac-

cording to [64], and ended in 1125, according to [76], – 27 years! Precisely the summary reign duration of the Armenian pair. According to another version, Henry V had reigned from 1106. If so, then the Catholicos Nerses is a reflection of the first part of Henry's reign, and Grigor IV is that of the second.

22a. *The Armenian Catholicoses. Grigor VI.*

92) *Grigor V Karavege*, 1193-1194, reigned for 1 year. Neither Roman nor Biblical duplicate available.

93) *Barsegh II of Ani,* Anti-Patriarch, reigned for 1 year which is supposed to have been 1195. Neither Roman nor Biblical duplicate discovered. In both cases, this is probably explained by the fact that Grigor V had only reigned 1 year, while Barsegh II was an Anti-Patriarch, or an usurper, and "covered" by *Grigor VI* who enters the parallel.

94) *Grigor VI Apirat*, 1194-1203, reigned for 9 years.

■ 22b. *Roman emperors, a.k.a. kings of Judah, of the alleged X-XIII century A.D. Lothair = Jotham.* Duplicate – Emperor Lothair II 1125-1138, according to [76], reigned for 13 years. He is also described in the Bible as Jotham King of Judah from the years 211-227, according to [72], had reigned for 7 years according to [72] or 16 years according to the Bible.

23a. *The Armenian Catholicoses. Hovhannes VI.*

95) *Hovhannes VI Medzabaro*, 1203-1221, reigned for 18 years.

■ 23b. *Roman emperors, a.k.a. kings of Judah, of the alleged X-XIII century A.D. Conrad III = Ahaz.* Duplicate – Emperor Conrad III 1138-1152, according to [76], reigned for 14 years. He is also described in the Bible as Ahaz King of Judah of years 227-243, according to [72], had reigned for 20 years, according to [72], or 16 years, according to the Bible.

24a. *The Armenian Catholicoses. Constantine I.*

96) *Hananiah of Sebastia,* Anti-Patriarch, had reigned for 1 year in 1204. Neither Roman nor Biblical duplicate available, since he was an Anti-Patriarch, or an usurper, and "covered" by Hovhannes VI already included in the parallel.

97) *David III of Argagaghni,* co-ruler who had reigned for 1 year in 1204. Neither Roman nor Biblical duplicate available, "covered" by Hovhannes VI for the same reason.

98) *Constantine I of Bartzrberd*, 1221-1267, reigned for 46 years.

■ 24b. *Roman emperors, a.k.a. kings of Judah, of the alleged X-XIII century A.D. Frederick II = Manasseh.*

Duplicate – Emperor Frederick II from 1197 according to [64] till 1250 according to [72], reigned for 54 years. He is also described in the Bible as Manasseh, King of Judah, who had reigned for 55 years – 285 to 340, according to the Bible.

[196] points out the confusion between Frederick I and Frederick II in the mediaeval chronicles. The famous Frederick I was named *Barbarossa,* which is obviously very close to his Armenian nickname *of Bartzrberd*. Moreover, there are no other similar nicknames, neither in Roman nor in Armenian history.

25a. *The Armenian Catholicoses. Hakob I.*

99) *Hakob I of Kla Gitnakan*, 1267-1286, reigned for 19 years.

■ 25b. *Roman emperors, a.k.a. kings of Judah, of the alleged X-XIII century A.D. Charles of Anjou = Josiah.*

Duplicate – Emperor Charles of Anjou from 1254, according to [415], until 1285, according to [196], reigned for 31 years. He is also described in the Bible as Josiah King of Judah who had reigned for 31 years – 342 to 373, according to the Bible. We find ourselves in the middle of the XIII century A.D., that is, in the epoch of the Gothic-Trojan-Tarquinian war.

One should mark the appearance of the combination *Git,* or *Goth,* in the Armenian name *Git-Nakan*. The rather noticeable echoes of the Gothic-Trojan-Tarquinian war will become more apparent over the time of the following several Armenian Catholicoses.

26a. *The Armenian Catholicoses. Stepanos IV taken captive to Egypt.*

100) *Constantine II Pronagortz*, 1286-1289, reigned for 3 years.

101) *Stepanos IV of Rhomkla,* 1290-1293, reigned for 2 or 3 years. In 1292, *taken captive to Egypt!* In 1293, the relocation of the seat to Sis.

■ 26b. *Roman emperors, a.k.a. kings of Judah, of the alleged X-XIII century A.D. Jehoahaz wages war against Pharaoh, becomes dethroned, and dies in captivity.*

We are at the end of the parallel between the Armenian Catholicoses and the Germano-Roman emperors. The finale is marked by a spectacular event – the Armenian Stepanos IV turns out to have been *taken captive to Egypt*. This is the only mention of this kind in the entire rather lengthy list of the Armenian Catholicoses!

What we see in front of us provides substantial evidence for proving the existence of the parallel that we have just considered, simultaneously denoting its end.

We have indeed approached the end of the Kingdom of Judah when, in the epoch of the last kings of Judah, it was invaded by Neco *the Egyptian Pharaoh* and King Nebuchadnezzar. Jehoahaz King of Judah wages war against the Pharaoh Neco, albeit unsuccessfully, *becomes dethroned and dies in captivity* (2 Kings 23). Repercussions of this event have left their mark in the Armenian history of the XIII century A.D.

By the way, the nickname of Stepanos (Stephan) – "of Rhomkla" – sounds very much like the name *Rome – Rhoma*.

We approach the end of the parallel that we have discovered between the Armenian and the Rhomaioi-Roman-Biblical history of the alleged X-XIII century A.D. Let us recall that the actual epoch that these events belong to is most likely the XIV-XVI century A.D. See CHRON6.

To complete the picture, we continue with the list of the Catholicoses until the end, though we were looking for no further duplicates therein as of the XIV century A.D. Most likely, it is only the chronological shift of one century that can manifest itself after that time. We shall leave the analysis to the reader.

27a. *The Armenian Catholicoses. End of the parallel.*

102) Grigor VII of Anavarza, 1293-1307, reigned for 14 years; in 1293, a relocation of the chair to Sis.

103) Constantine III of Caesarea, 1307-1322, reigned for 15 years.

104) Constantine IV of Lambron, 1322-1326, reigned for 4 years.

105) Hacob II of Tarsus, 1327-1341, then discharged, and reigned again from 1355 until 1359, 17 years altogether, or 32 years, if we disregard the lacuna.

106) Mekhitar I of Grner, 1341-1355, reigned for 14 years.

107) Mesrob I of Ardaze, 1359-1372, reigned for 13 years.

108) Constantine V of Sis, 1372-1374, reigned for 2 years.

109) Poghos I of Sis, 1374-13775, reigned for 3 years.

110) Theodoros II of Cilicia, 1377-1392, reigned for 15 years.

111) Gap (lacuna), 1392-1393, occupies 1 year.

112) Karapet I of Keghi Bobik, 1393-1408, reigned for 15 years.

113) Hacob III of Sis, 1408-1411, reigned for 3 years.

114) Grigor VIII Khantzogat, 1411-1416, reigned for 5 years.

115) Poghos II of Garni, 1416-1429, reigned for 13 years.

116) Constantine VI of Vahka, 1429-1439, reigned for 10 years.

117) Hovsep – tried to seize power about 1435.

118) Grigor IX Moussabegian, 1439-1441, reigned for 2 years.

119) Kirakos I of Virap, 1441-1443, reigned for 2 years. In 1441, a relocation of the seat to Etchmiadzin.

120) Grigor X Djelalbeguian, 1443-1466, reigned for 23 years.

121) Karapet of Tonat, Anti-Patriarch, 1446, reigned for 1 year.

122) Aristakes II Athorakal, co-ruler from 1448 to 1466, then reigns alone until 1470; thus, his reign duration equals 4 or 22 years.

123) Zakaria of Akhtamar, 1461-1462, reigned for 1 year.

124) Sarkis II, co-ruler from 1462 until 1470, then reigns alone until 1474; thus, his reign duration equals 4 or 12 years. In 1470-1474, he was called Sarkis II Atchatar.

125) Hovhannes VII Atchakir, co-ruler from 1470 until 1474, then reigns alone until 1484; thus, his reign duration equals 10 or 14 years.

126) Sarkis III Mussail, co-ruler from 1474 until 1484, then reigns alone from 1484 until 1515; thus, his reign duration equals 31 or 40 years.

127) Aristakes III, co-ruler reigned for 1 year in 1484.

128) Thaddeus I, co-ruler reigned for 1 year in 1499.

129) Yeghische II, co-ruler reigned for 1 year in 1504.

130) Hovhannes, co-ruler reigned for 1 year in 1505.

131) Zakaria II of Vagharschapat, co-ruler from 1507 until 1515, then reigns alone until 1520; thus, his reign duration equals 5 or 13 years.

132) Sarkis IV of Georgia, co-ruler from 1515 until 1520, then reigns alone until 1537; thus, his reign duration equals 17 or 22 years.

133) Grigor XI of Byzantium, 1537-1542, reigned for 5 years.

134) Stepanos V of Salmasd, 1542-1564, reigned for 22 years.

135) Michael I of Sebaste, co-ruler from 1542 until 1564, then reigns alone until 1570; thus, his reign duration equals 6 or 28 years.

136) Barsegh, co-ruler, reigned for 1 year in 1549.

137) Stepanos VI, co-ruler, reigned for 1 year in 1567.

138) Grigor XII of Vagharschapat, co-ruler from 1552 until 1570, then reigns alone until 1587; thus, his reign duration equals 17 or 35 years.

139) Aristakes IV, co-ruler, reigned for 1 year in 1555.

140) Thaddeus II, co-ruler, reigned for 1 year in 1571.

141) Arakel, co-ruler, reigned for 1 year in 1575.

142) David IV of Vagharschapat, co-ruler from 1579 until 1587, then reigns alone until 1629; thus, his reign duration equals 42 or 50 years.

143) Melkhisedek I of Garni, co-ruler, reigned for 1 year in 1593.

144) Grigor XIII Sprapion co-ruler, reigned for 1 year in 1603.

145) Sahak (Isaak?) IV of Garni, co-ruler, reigned for 1 year in 1624.

146) Movses III of Tatev, 1629-1632, reigned for 3 years.

147) Philippos I of Aghbak, 1633-1655, reigned for 22 years.

148) Hacob VIII of Djoulfa, 1655-1680, reigned for 25 years.

149) Yeghiazar I, Anti-Patriarch in 1663. Then, from 1682 until 1691 reigned for 9 years as Yeghiazar I of Aintab.

150) Gap (lacuna), 1680-1682, lasts for 2 years.

151) Nahapet I of Edessa 1691-1705, reigned for 14 years.

152) Gap (lacuna), 1705-1706, lasts for 1 year.

153) Alexander I of Djoulfa, 1706-1714, reigned for 8 years.

154) Astouadzatour I of Hamadan, 1715-1725, reigned for 10 years.

155) Karapet II of Zeytoun, 1726-1729, reigned for 3 years.

156) Abraham III of Crete, 1734-1737, reigned for 3 years.

157) Ghazar I of Tchahouk, 1737-1751, reigned for 14 years.

158) Hovhannes of Hakoulissa, Anti-Patriarch, reigned for 1 year in 1740.

159) Petros II of Khotour, *locum tenens* for Ghazar for 1 year (see above).

160) Minas I of Eghine, 1751-1753, reigned for 2 years.

161) Alexander II Karakaschian, 1753-1755, reigned for 2 years.

162) Sahak V of Keghy Ahagin, 1755-1760, reigned for 5 years, but was not anointed.

163) Hacob V of Schamakhi, 1759-1763, reigned for 4 years.

164) Simeon I of Erivan, 1763-1780, reigned for 17 years.

165) Gghoukas I Karine, 1780-1799, reigned for 19 years.

166) Hovsep Hargoutian, 1800-1801, reigned for 1 year, but was not anointed.

167) David V Gorganian, 1801-1804, reigned for 3 years.

168) Daniel I of Sourmari, 1801, then did not reign until 1804, from 1804 until 1808 reigned again for 4 years.

169) Yeprem I of Tzoragueh, 1809-1831, reigned for 22 years.

170) Hovhannes VIII of Karbi 1831-1842, reigned for 11 years.

171) Nerses V of Ashtarak, 1843-1857, reigned 14 for years.

172) Mattheos I Tchouhadjian, 1858-1865, reigned for 7 years.

173) Gueorg V Kerestedjian, 1866-1882, reigned for 16 years.

174) Gap (lacuna), 1882-1885, lasts for for 3 years.

175) Macar I Ter-Petrossian, 1885-1891, reigned for 6 years.

176) Megerdich I Khrimian, 1892-1907, reigned for 15 years.

177) Mattheos II Izmirlian 1908-1909, reigned for 1 year.

The identification of the "ancient" Kingdom of Judah with the Holy Roman Empire of the alleged X-XIII century A.D. The correlation between reign durations and biographical volumes

This parallelism completes Table 9 from CHRON1, Chapter 6, illustrating the dynastic parallelism between the two famous kingdoms. The parallelism is displayed in fig. 6.53 in CHRON1, chapter 6.

First Dynasty.

The "ancient" *kings of Judah* of the alleged years 928-587 B.C. Described in the Bible, 1-2 Samuel + 1-2 Kings, and 1-2 Paralipomenon. According to the Scaligerian chronology, the Kingdom of Judah dates back to 928 B.C. in its origins ([72]). Variants of reigns are taken from the Bible and [72]. With the parallelism we discovered, the Scaligerian 928 B.C. can be identified with 911 A.D.

Second Dynasty.

The dynastic current of the mediaeval *Holy Roman Empire of the German Nation*, of the alleged years 911-1307 A.D. The majority of the Germano-Roman emperors are represented with the durations of their *German* reigns, that is, from the moment of their *German* coronation. Variants of reigns are taken from [76], [196], [64] and [415]. A rigid chronological shift of roughly 1838 years identifies the two dynasties with each other.

For every ruler, the following six numbers are given:

a) Biographical volumes of the kings of Judah, according to the Bible. We used the canonical edition of the Bible published by the Biblical Society. Volumes were measured in lines, but for the purposes of computation convenience, the height of the relevant columns in the Bible was measured in centimeters. Therefore, the table shows volume in centimeters.

b) Reign durations of the kings of Judah, according to the Bible. See dynastic table 9 in CHRON1, Ch. 6.

c) German reign durations in the Holy Roman Empire in the alleged X-XIII century. This means that the emperors of this empire are mainly represented here by their German coronations. See dynastic table 9 in CHRON1, Chapter 6.

d) The biographical volumes of the Germano-Roman emperors, according to E. F. Fyodorova ([875]). We indicate the numbers of pages and lines marking the start and the end of a "biography." In brackets we indicate the initial and the final line of the "biography" in question.

e) The biographical volumes of the Germano-Roman emperors, according to C. Bemont and G. Monod ([64]). We calculated the amount of lines contained in these volumes, indicating the numbers of pages and lines marking the start and the end of a "biography". In brackets we indicate the initial and the final line of the "biography" in question.

f) The biographical volumes of the Germano-Roman emperors, according to Kohlrausch ([415]). We calculated these volumes in lines as well. We indicate numbers of pages and lines marking the start and the end of a "biography". The opening and the closing lines of the "biography" in question are given in brackets.

1) Emperor *Henry I,* 919-936, a.k.a. *Rehoboam* King of Judah:
- a) 34.5 cm = 1 Kings 12:1-24 and 14:21-31, + 53 cm = 2 Paralipomenon 10:1-19, 11:1-16. Total of 87.5 cm.
- b) 17 years.
- c) 17 years.
- d) 59 cm = pp. 107(2)-110(10) ([875]).
- e) 32 lines = pp. 202(2)-202(34) ([64]).
- f) 386 lines = pp. 198(21)-208(26) ([415]).

2) Emperor *Lothair I,* 947-950, a.k.a. *Abijah* King of Judah:
- a) 6 cm = 1 Kings 15:1-8, + 21 cm = 2 Paralipomenon 13:1-22. Total of 28 cm.
- b) 3 years.
- c) 3 years.
- d) 20 cm = pp. 110(10)-111(13) ([875]).
- e) 3 lines = pp. 205(14)-205(17) ([64]).
- f) 4 lines = pp. 211(2)-21(5) ([415]). Note that, although Lothair I himself is not mentioned here, it is still possible to single out an extract describing 947-950, that is, his epoch.

3) Emperor *Otto I,* 936-973, a.k.a. *Asa* King of Judah:
- a) 14 cm = 1 Kings 15:9-24, + 48 cm = 2 Paralipomenon 14:1-15, 15:1-19, 16:1-14. Total of 62 cm.
- b) 35 or 41 years.
- c) 37 years.
- d) 39 cm = pp. 111(13)-114(5) ([875]).
- e) 130 lines = pp. 202(35)-204(24) + pp. 205(25)-207(5) ([64]).
- f) 478 lines = pp. 208(30)-221(13) ([415]).

4) Emperor *Otto II,* 960-983, a.k.a. *Jehoshaphat* King of Judah:
- a) 35 cm = 1 Kings 22:1-29, 22:41-50, + 101 cm = 2 Paralipomenon 17:1-19, 18:1-34, 20:1-37. Total of 136 cm.
- b) 24 or 25 years.
- c) 23 years.
- d) 2 cm = pp. 114(5)-114(7) ([875]).
- e) 16 lines = pp. 207(6)-207(21) ([64]).
- f) 116 lines = pp. 221(16)-224(17) ([415]).

5) The first period of the German reign of Emperor *Otto III*, 983-996, i.e., from becoming king in 983 until his Roman coronation in 996. This period of Otto III can be identified with that of *Joram* King of Judah:
- a) Not described in 1 and 2 Kings, + 20 cm = 2 Paralipomenon 21:1-20. Total of 20 cm.
- b) 8 or 6 years.
- c) 13 years.
- d) 1.5 cm = pp. 114(7.5)-114(9) ([875]).
- e) 16 lines = pp. 207(21)-207(37) ([64]).
- f) 84 lines = pp. 224(21)-226(26) ([415]).

6) The second reign of Emperor *Otto III* starting with the year of his Roman coronation in 996. This period of Otto III can be identified with that of *Ahaziah (Ohoziah)* King of Judah:
- a) 3 cm = 2 Kings 9:27-29, + 11 cm = 2 Paralipomenon 22:1-9. Total of 14 cm.
- b) 1 year.
- c) 1 year.
- d) 0.7 cm = pp. 114(9)-114(9.7) ([875]).
- e) 21 lines = pp. 208(9)-208(29) ([64]).
- f) 16 lines = pp. 226(27)-227(5) ([415]).

7) The third period of Emperor *Otto III* as a Roman ruler of the Holy Empire of the alleged X-XIII century, starting with his Roman coronation in 996 and ending with his death in 1002, identified with *Gotholiah* King of Judah:
- a) 21 cm = 2 Kings 11:1-21, + 26 cm = 2 Paralipomenon 22:10-12, 23:1-21. Total of 47 cm.
- b) 6 years.
- c) 6 years.
- d) 27.5 cm = pp. 114(9.7)-116(5) ([875]).
- e) 40 lines = pp. 208(30)-209(29) ([64]).
- f) 103 lines = pp. 227(6)-229(32) ([415]).

8) Emperor *Henry II,* 1002-1024 + Emperor *Conrad II,* 1024-1039; the Bible describes this pair as one *Joash* King of Judah:
- a) 21 cm = 2 Kings 12:1-21, + 28.5 cm = 2 Paralipomenon 24:1-27. Total of 49.5 cm.
- b) 38 or 40 years.
- c) 37 years.
- d) 37 cm = pp. 116(5)-118(7) ([875]).

e) 67 lines = pp. 209(30)-211(16) ([64]).

f) 304 lines = 106 lines for Henry II, pp. 229(36)-232(26) + 198 lines for Conrad II, pp. 233(8)-238(17) ([415]).

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9) Emperor *Henry III* 1028-1056, a.k.a. *Amaziah* King of Judah:

a) 18 cm = 2 Kings 14:1-20, + 27 cm = 2 Paralipomenon 25:1-28. Total of 45 cm.

b) 29 years.

c) 28 years.

d) 29.5 cm = pp. 118(7)-120(3) ([875]).

e) 38 lines = pp. 211(17)-212(14) ([64]).

f) 144 lines = pp. 238(23)-242(13) ([415]).

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10) Emperor *Henry IV* 1053-1106, a.k.a. *Hozeah (Hoseah)* King of Judah, a.k.a. *Azariah* (?):

a) 39 cm = 2 Kings 17:1-41 (*Hoseah*), + 23 cm = 2 Paralipomenon 26:1-23 (*Hozeah*). Total of 62 or 68 cm. As a matter of fact, this king might have possibly been described in 2 Kings as Azariah of Judah. In this case, 6 cm – i.e., 4 Reigns 15:1-7 (Azariah) can be added to the volume of the description of King Hozeah. Thus, we get a total of 62 or 68 cm.

b) 52 or 43 years.

c) 53 years.

d) 261 cm = pp. 120(3)-135(9) ([875]).

e) 118 lines = pp. 220(13)-223(10) ([64]).

f) 748 lines = pp. 242(17)-262(3) ([415]).

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11) Emperor *Lothair II* 1125-1138, a.k.a. *Jotham* King of Judah:

a) Not described in 2 Kings, + 6.5 cm = 2 Paralipomenon 27:1-9. Total of 6.5 cm.

b) 16 or 7 years.

c) 13 years.

d) 21 cm = pp. 139(6)-140(10) ([875]). Note that, although Lothair II himself is not mentioned here, it is still possible to single out an extract describing 1125-1130, i.e., part of his epoch.

e) 12 lines = pp. 226(20)-226(31) ([64]).

f) 78 lines = pp. 269(28)-271(28) ([415]).

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12) Emperor *Conrad III* 1138-1152, a.k.a. *Ahaz* King of Judah:

a) 20 cm = 2 Kings 16:1-20, + 27 cm = 2 Paralipomenon 28:1-27. Total of 47 cm.

b) 16 or 20 years.

c) 14 years.

d) 3 cm = pp. 140(10)-140(13) ([875]). Note that, although Conrad III himself is not mentioned here, it is still possible to single out an extract describing 1138-1152, which is his epoch.

e) 21 lines = pp. 227(1)-227(21) ([64]).

f) 140 lines = pp. 272(11)-275(35) ([415]).

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13) Emperor *Henry VI* 1169-1197, or his famous contemporary *Frederick I Barbarossa* 1152-1190, a.k.a. *Hezekiah* King of Judah:

a) 96 cm = 2 Kings 18:1-37, 19:1-21, + 126 cm = 2 Paralipomenon 29:1-36, 30:1-27, 31:1-21, 32:1-33. Total of 222 cm.

b) 29 years.

c) 28 or 54 years.

d) 73.5 cm = pp. 140(13)-145(3,5) ([875]).

e) 56 lines for Henry VI = pp. 238(1)-240(23) ([64]) or 392 lines for Frederick I = pp. 227(22)-237(13) ([64]).

f) 86 lines for Henry VI = pp. 294(18)-296(30) ([415]) or 698 lines for Frederick I Barbarossa = pp. 275(36)-294(14) ([415]).

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14) Emperor *Frederick II* 1196-1250, a.k.a. *Manasseh* King of Judah:

a) 23 cm = 2 Kings 21:1-26, + 24.5 cm = 2 Paralipomenon 33:1-20. Total of 47.5 cm.

b) 55 or 45 years.

c) 54 years.

d) 18 cm = pp. 145(3,5)-146(4) ([875]).

e) 268 lines = pp. 243(7)-249(34) ([64]).

f) 432 lines = pp. 297(34)-309(7) ([415]).

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15) Emperor *Conrad IV* 1250-1254, a.k.a. *Amon* King of Judah:

a) Not described in 2 Kings, + 4 cm = 2 Paralipomenon 33:21-25. Total of 4 cm.

b) 2 years.

c) 4 years.

d) 3.5 cm = pp. 146(4)-146(7.5) ([875]). Note that, although Conrad IV himself is not mentioned here, it is still possible to single out an

extract describing 1250-1254, which is precisely his epoch.

e) 4 lines = pp. 249(35)-249(38) ([64]). This is where the documented history of the Holy Roman Empire of the alleged X-XIII century ends in the book [64].

f) 22 lines = pp. 309(12)-309(34) ([415]).

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16) Ruler *Charles of Anjou* 1254-1285, a.k.a. *Josiah* King of Judah:

  a) 59 cm = 2 Kings 22:1-20, 23:1-30, + 67 cm = 2 Paralipomenon 34:1-33, 35:1-27. Total of 126 cm.

  b) 31 years.

  c) 31 years.

  d) 35 cm = pp. 146(7,5)-148(9) ([875]).

  f) 35 lines = pp. 311(14)-312(10) ([415]).

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17) Strife here. No Germano-Roman emperor double. In the Bible, *Jehoahaz* King of Judah:

  a) 6.5 cm = 2 Kings 23:31-34, + 3 cm = 2 Paralipomenon 36:1-4. Total of 9.5 cm.

  b) 1 year.

  c) 0?

  d) 0?

  f) 0?

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18) Emperor *Adolf of Nassau* 1291-1298, a.k.a. *Jehoiakim* King of Judah:

  a) 10 cm = 2 Kings 23:35-37, 24:1-6, + 3.5 cm = 2 Paralipomenon 36:5-8. Total of 13.5 cm.

b) 11 years.

c) 7 years.

d) 11,5 cm = pp. 148(9)-149(4,5) ([875]). Note that, although Adolf of Nassau himself is not mentioned here, it is still possible to single out an extract describing 1291-1298, which was his epoch.

f) 49 lines = pp. 367(12)-368(21) ([415]).

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19) Strife here. No German-Roman emperor double. In the Bible, *Jehoiachin* King of Judah:

  a) 10 cm = 2 Kings 24:7-16, + 2 cm = 2 Paralipomenon 36:9-10. Total of 12 cm.

  b) 1 year.

  c) 0?

  d) 0?

  f) 0?

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20) Emperor *Albrecht I* 1298-1308, a.k.a. *Zedekiah* King of Judah:

  a) 36 cm = 2 Kings 24:17-20, 25:1-30, + 14.5 cm = 2 Paralipomenon 36:11-23. Total of 50.5 cm.

  b) 11 years.

  c) 10 years.

  d) 8 cm = pp. 149(4,5)-149(12,5) ([875]). Note that, although Albrecht I himself is not mentioned here, it is still possible to single out an extract describing 1298-1308, which was his epoch.

  f) 147 lines = pp. 368(26)-372(21) ([415]).

CHAPTER 7

"Dark Ages" in mediaeval history

1.
THE MYSTERIOUS RENAISSANCE OF THE "CLASSICAL AGE" IN MEDIAEVAL ROME

1.1. The lugubrious "Dark Ages" in Europe that presumably succeeded the beauteous "Classical Age"

As we can see from the global chronological map as arranged in the sum of the three shifts, nearly all documents considered "ancient" and describing events that allegedly occurred prior to 900 A.D. in Scaligerian datings are probably phantom duplicates of the originals referring to the events of the X-XVII century A.D. One may question the availability of "space" for the "classical age" in mediaeval history – that is, whether our attempt to place the "ancient" events in the Middle Ages might fail due to its being "filled up" with occurrences that we already know of. This doesn't seem to be the case, as a detailed analysis shows us.

Firstly, the epochs that were deemed different *are identified as one and the same*. Consider, for example, the superpositions of royal dynasties whose similarity had remained previously unnoticed. Secondly, many mediaeval periods in the Scaligerian history are said to be "concealed by tenebrosity." Now we are beginning to understand why. The respective mediaeval documents describing these epochs were deliberately "set backwards in time" by the Scaligerian chronologists. The withdrawal of these documents immersed a great number of mediaeval periods into artificial darkness.

The historians of the XVIII-XIX century gave rise to the peculiar concept that the mediaeval period was that of the "Dark Ages." The "great achievements of the classical age" are said to have faced utter decline and vanished. Scientific thought presumably "rolls all the way back into the Stone Age." The great literary works of "antiquity" are all supposed to have been kept stashed away as dead weight until their resurfacing during the Renaissance ([333], page 161). Moreover, these "antique" texts were allegedly kept by ignorant monks whose prime responsibility was, as we are now told, the destruction of "heathen literature."

The absolute majority of the top ranking clergy is presumably illiterate ([333], page 166). The great achievements of "ancient" astronomy – the eclipse theory, the computation of planet ephemeredes, etc. – are reported to be completely forgotten. And the famous Cosmas Indicopleustes, who is supposed to have lived in the VI century A.D. and researched the movement of the Sun and the stars, honestly believes that the Universe is a box whose centre contains a flat Earth, washed by the Ocean and supporting the bulk of mount Ararat. Apart from this, the lid of the box is studded with stellar nails. There are four angels in the corners of the box that produce wind. This is the level of scientific cosmography of the Middle Ages (see Chron3, Chapter 11:6.3).

Money coinage is allegedly forgotten, the art of

architecture rendered unnecessary, and an "overall cultural degradation" spread far and wide ([333], page 167). And so on, and so forth.

Of course, the Scaligerian mediaeval history mentions certain achievements of the period, but they are usually given commentary along the lines of: "But even these *sudden flashes* of intellectual work represented *random* events *singular* in their occurrence" ([333], page 169). We are being convinced that "ancient" Latin in its brilliance "degrades" in an odd manner and transforms into a clumsy and squalid lingo, which only manages to regain splendour during the Renaissance – and that over a short period of time – and becomes widely used as a scientific language ([333]).

Without a doubt, there are reasons for such a lurid picture if we are to rely upon the Scaligerian chronology. But we want to give another explanation to this hypothetical "deluge of barbarity" that is presumed to have overwhelmed Europe, Asia, and Africa in the early Middle Ages. We are of the opinion that what we see isn't a degradation of "the great legacy of the past" but, rather, the *naissance* of civilization that gradually created all the cultural and historical values, which were cast far back into the past due to the chronological errors that lit a spectral light in the "classical age" and left many mediaeval periods bare.

The contemporary mediaeval history of Rome unravels a great many controversies and blatantly obvious *parallels* with the "Classical age" which, under close surveillance, may well be explained by the distortion of the concept of the role played by the Middle Ages. Let us throw a cursory glance at the history of Rome. Why Rome in particular? The reason is that the Scaligerian history credits the Roman chronology to be of the utmost importance (see CHRON1, Chapter 1).

We shall begin with an intriguing detail. The famous **Chronicles** of Orosius inform us of the fact that "*Aeneas had left Troy and gone to Rome*" (!). Moreover, the "ancient" Orosius adds that he was told this *in school*. Let us explain. Such a voyage of Aeneas, who took part in the Trojan war, makes the Scaligerian history *400-500 years shorter* (also see CHRON1, Chapter 1).

The fragmentary history of "ancient" Greece made a certain impact on the formation of the Roman chronology in the days of yore. The historian N. Radzig points out that "the heroic deeds of Aeneas in Italy

and the fate of his offspring comprised the Roman pre-history of Rome… Initially this pre-history wasn't very long: *it called Romulus the grandson of Aeneas* [this is the root of the 500-year discrepancy with the contemporary Scaligerian history, as mentioned in CHRON1, Chapter 1 – A. F.]; however, later on, when the Roman annalists acquainted themselves with the Greek chronology, they *invented* a whole sequence of Albanian rulers… Proud patrician clans got into the habit of tracing their ancestry all the way back to the companions of Aeneas, and the clan of Julius directly to the son of Aeneas, whose name was arbitrarily altered for some reason". ([719], page 8)

N. Radzig is honestly perplexed by such "ignorant endeavours of the Roman chronographers." However, below we shall demonstrate the amazing parallels in events as well as statistics that identify the classical Trojan War of the alleged XIII century B.C. with the Gothic war of the alleged VI century A.D. that raged in Italy and the New Rome, as well as the Italian war of the alleged XIII century A.D. The Roman annalists were therefore correct in their claims that the Trojan War marks the *actual beginning* of the mediaeval Roman history in the XIII century A.D.

We shall give a brief overview of the mediaeval history of Rome that is based in particular on the fundamental six-volume work of the German historian F. Gregorovius ([196]). The significance of this work lies in the fact that it actually consists of a large number of *mediaeval documents* that have been meticulously compiled by Gregorovius, along with his scrupulous and accurate comments on the matter.

Gregorovius writes that "ever since the decline of the Gothic state [which supposedly occurred in the VI century A.D. – A. F.], the ancient Gothic rule came to absolute ruination. Laws, monuments, and even historical recollections had all fallen into oblivion" ([196], Volume 2, pages 3-4).

The mandatory chronological sublation of secular chronicles from the *mediaeval* Roman history – the *History* of Titus Livy, for example, which had been declared "ancient history" – made Rome a completely ecclesial city from the point of view of the Scaligerian and modern history. F. Gregorovius writes that "*Rome had miraculously transformed into a monastery.*" This mysterious transformation of "secular ancient Rome" (let us remind the reader of the iron legions and the in-

flexible heroes of the days of yore) into the "mediaeval ecclesiastical Rome" had been proclaimed as "one of the greatest and most amazing metamorphoses in the history of humanity." ([196], Volume 2, pages 3-6).

It is significant that almost all of the political and civil institutions that comprise "the quintessence of ancient Rome" according to the Scaligerian history were present at "the rise of mediaeval Rome." Mediaeval evidence of Rome is extremely scarce in the Scaligerian chronology. Gregorovius tells us that "the events of the years to follow remain unknown to us, since *the chronicles of that age are as monosyllabic and blear as the epoch itself,* and they only tell us of disasters and afflictions" ([196], Volume 2, page 21) – all of this coming from the author of a fundamental historical tractate ([196]).

The following is told of the events of the middle of the alleged IX century A.D.: "the historians of Roman history have to contend themselves with the annals of the Frankish chronographers in what concerns this period which contain rather meagre information, as well as Papal biographies that only contain indications of what buildings were erected and what donations made. There is no hope for a historian to present a picture of the city's civil life of the period". ([196], Volume 3, page 58)

Further, we learn that: "a great many ecclesial acts and regestae were kept in the Papal archive… The loss of these treasures [or their arbitrary transfer into "antiquity" – A. F.], that have perished without a trace in the XII or the XIII century (which resulted in *a great gap in our knowledge of the time).*" ([196], Volume 3, page 121)

All of this appears to mean that the overwhelming portion of surviving documents pertinent to the history of the mediaeval Italian Rome belongs to the XI century, or even to the post-XI century period.

F. Gregorovius writes that "if all of these regestae had been in our possession… there is no doubt that the history of the city of Rome between the VIII and the X century [three hundred years, that is – A. F.] would instantly become illuminated by a different, and a much brighter light" ([196], Volume 3, page 131, comment 30).

He writes further:

"*Not a single scribe* can be found who would care to immortalize the dramatic history of the city in writing. Germany, France, and even Southern Italy… have

provided us with a great many chronicles; however, *the Roman monks have been so indifferent to the fate of their city that the events of that epoch remain utterly nebulous*". ([196], Volume 3, pages 125-126)

It is assumed that "at the same time, the papacy carried on with its ancient chronicles with vehemence" ([196], Volume 3, pages 125-126). However, this is only a *hypothesis* of the Scaligerian history.

This Papal chronicle – or, rather, its late version we're being offered today – is *by no means continuous. It demonstrates gigantic gaps.* "The biography of Nicholas I (who is supposed to have lived in the IX century A.D. – A. F) marks the point where the Papal books cease to be kept, and *we shall have many a chance to regret the lack of this source* in our presentation of the history of the city" ([196], Volume 3, page 127).

1.2. Parallels between "antiquity" and the Middle Ages that are known to historians, but misinterpreted by them

The surviving fragments of mediaeval Roman chronicles tell us of the facts that clearly testify to the "Classical" nature of certain events in their modern interpretation. In such cases the historians join their voices in unison and begin to tell us of the revival of ancient recollections, Classical reminiscences, imitations of antiquity, etc. F. Gregorovius, for one, writes that "certain X century Romans that we encounter have very strangely-sounding names. They draw our attention in their *revival of certain ancient artefacts in our imagination*" ([196], Volume 3, page 316). If we're to say the same thing differently, in a simpler manner, it turns out that many mediaeval Romans bore names that are considered "ancient" nowadays. This makes the "Classical Age" just another way of referring to the Middle Ages.

The Scaligerian history often discussed the issue of *the existence of the Senate and the Consulate in mediaeval Rome.* On one hand, these famous political institutions are considered to have been pertinent to "ancient" Rome exclusively, which had allegedly been destroyed in the alleged V-VI century A.D. with the decline of the Third Western Roman Empire; on the other hand, some of the mediaeval chronicles that have reached our time occasionally make references to the existence of a senate, senators, consuls, tribunes,

and praetors in *mediaeval* Rome. Those titles, grades, and offices are clearly "ancient." There's even a "schism" of sorts in the Scaligerian history where one part of the Roman historians considers these "ancient" institutions to have continued existing in the Middle Ages as well. Others – the majority that F. Gregorovius himself adhered to – were certain that the mediaeval Romans were using these "ancient" terms by sheer force of habit, without ascribing the "original meaning" to them, and only keeping them as a "pleasant memento" of the greatness of "ancient Rome."

F. Gregorovius descants upon the same, telling us that "*they* [the mediaeval Romans – A. F.] call upon the ancient graves for help, the ones that already became legends, and invoke the shadows of the consuls, tribunes, and senators that haunt this eternal city throughout all of the Middle Ages *as if they were real* [sic! – A. F.]" ([196], Volume 3, page 349.

Also: "Consul's rank is frequently mentioned in the X century documents" ([196], Volume 3, page 409, comment 20). In the alleged X century "the Emperor [Otto – A. F.] *had tried to revive the long-forgotten Roman customs*" ([196], Volume 3, page 388). In particular, Otto III "bore titles that have been created *in imitation of the titles of the ancient Roman triumphators*" ([196], Volume 3, pages 395-396). Gregorovius has got the following to say about the description of the mediaeval Rome contained in a well-known mediaeval tractate titled *Graphia:* "the future and the past in the *Graphia* are all mixed up" ([196], Volume 3, page 458, comment 7).

Below we find that "this is precisely what we actually see in Otto III, who had passionately introduced the surviving *remnants* of the Roman Empire, such as the ranks, the garments, and the ideas of the days of the Empire's existence into his *mediaeval* state where all of it had looked [from the point of view of modern historians – A. F.] as *patches*… The will to *sanitize the barbaric epoch* with such reminiscing was a *widespread phenomenon* [sic! – A. F.]… The keeping of the priceless Papal book which had been interrupted at the biography of Stephan V was resumed in Rome in the X century [our take is that it was most probably inchoated and not resumed, and that this event occurred a lot later than the X century – A. F.] – that is, in the shape of short tables referred to as "catalogues"… The catalogues only contain the names of the popes,

information about their origins, times of reign, and the odd occasional brief summary of individual events. Nothing provides better evidence of the barbarity of the X century Rome than the famous *Liber Pontificalis* continued in its primary and extremely imperfect form". ([196], Volume 3, pages 458, 427, 431)

Mediaeval chronicles contain a large number of facts that contradict the Scaligerian chronology and prove the existence of the three shifts in the Scaligerian chronological map that we have discovered. Furthermore, Ferdinand Gregorovius, having extensive and detailed knowledge of both "ancient" and mediaeval history of Europe (he had been one of the greatest specialists in the Scaligerian history of Europe, after all), kept on running into *parallels* between "ancient" and mediaeval events, some of which were blatantly obvious, that seemed extremely bizarre to him. Gregorovius points them out, and, possibly feeling vague qualms about them, attempts to provide an explanation. However, such "explanations" most often take the shape of nebulous expatiations concerning the profundity of the "law of historical recurrences." The readers should not be surprised, and, above all, are implored not to pay any attention.

It is, however, most significant that *nearly all of such parallels* discovered by F. Gregorovius *fit perfectly into our scheme of the three chronological shifts of 330, 1050, and 1800 years respectively.* In other words, the historian Gregorovius, who had been raised on the Scaligerian tradition, "discovers" the parallels between the "Classical Age" and the Middle Ages exactly where they are supposed to be according to the general picture of chronological duplicates as described in Chron1, Chapter 6. We shall be citing some of these "Gregorovian parallels" later on.

So, we learn that "Noah [the Biblical patriarch! – A. F.] had founded a city near Rome, and called it with his own name; Noah's sons Janus, Japhet, and Camesus built a city called Janiculus on the Palatina… Janus lived near Palatina, and later built the town of Saturnia near Capitolia together with Nimrod [sic! – A. F.]" ([196], Volume 3, page 437). "In the Middle Ages there had even been a monument at Nerva's forum [in Rome – A. F.] called *Noah's Ark*" ([196], Volume 3, page 461, comment 26).

All of these presumed "absurdities" (a presumption only made within the Scaligerian historical real-

ity tunnel) completely fit the superposition that we have discovered, of the kingdoms of Israel and Judaea onto the Holy Roman Empire of the X-XIII century and onto the Habsburg (could that name have been derived from "New Town," or "Nov-Gorod" in Russian?) empire of the XIV-XVI century. See more on the lifetime of the Biblical Noah and his most probable identity in CHRON6.

Another example of such a "sottise" (according to Scaliger and company) is that "it is well-known that the Franks have considered themselves to have been the descendants of the Trojans" ([196], Volume 3, page 361, comment 28).

In general, Gregorovius points out that "only this *Classical spirit* that had prevailed in the city during all of the Middle Ages can explain a large number of historical events" ([196], Volume 3, page 443). It appears that the first lists of Roman monuments – compiled in the XII century A.D. at the earliest, as we're being told nowadays – are "an amazing mixture of correct and incorrect monument names" ([196], Volume 3, page 447). A typical example of de-facto identification of "antiquity" with the Middle Ages is as follows:

"It [the St. Serge Church – A. F.] had been consecrated to St. Bacchus as well as St. Serge; the name of that saint *sounds strange* for this ancient pagan area; however, in Rome in was hardly exceptional, since amongst the Roman saints [the mediaeval Christian saints, that is – A. F.] we once again find the names of other *ancient gods and heroes*, such as St. Achilles, St. Quirinus, St. Dionysius, St. Hyppolitus and St. Hermesus". ([196], Volume 3, page 447)

All of these mediaeval Christian saints – Achilles, Quirinus, Hermesus and others – have then been arbitrarily transposed into times immemorial, where they have transformed into the allegedly pagan "ancient" gods and demigods: Achilles, Quirinus, Hermesus, etc.

1.3. Mediaeval Roman legislators convene in the presumably destroyed "ancient" Capitol

F. Gregorovius tells us that the history of the famous architectural monuments of Italian Rome cannot be traced further back in time than the XI-XIII centuries A.D. with any degree of certainty at all.

Let us quote an example:

"During a long period of time (after the "Classical" age is supposed to have finished), we don't seem to encounter the name of the Capitol; it simply disappears from the annals of history [apparently, due to the fact that Capitol hadn't been built yet – A. F.]; despite the fact that the *Graphia* tells us that the walls of the Capitol were adorned with glass and gold [which is post-X century information – A. F.], *there is no description of the temple…* the imperial forums, once full of grace, have *drowned in taciturnity…* [which means they haven't been built yet, either – A. F.], apart from the forum of Trajan; the forum of Augustus was encumbered with ruins to such an extent, and had so many trees growing there, that people used to call it *an enchanted garden*". ([196], Volume 3, pages 447-448).

Apparently, the forum of Augustus hadn't been built, either, and the place had been grown over with virgin vegetation.

Complete chaos reigns in the mediaeval names of the monuments of Italian Rome – a perfect hodgepodge of "ancient" and mediaeval names. For instance, "the Vestal temple had once been considered to have been a temple of *Hercules Victor,* and is considered to have been a *temple of Cybele* by the modern archaeologists; however, this goddess shall, naturally [? – A. F.] have to make place for *some other deity,* which, in its turn, shall be *dethroned* after some other archaeological revolution". ([196], Volume 3, pages 469-470)

All of these confused re-identifications and the general welter resemble a helpless game rather than scientific statements with a basis. This shows us how flimsy the foundations of the "archaeological identifications" that we're offered nowadays really are.

F. Gregorovius proceeds to tell us that "for over 500 years this area *remained perfectly obtenebrated* [Capitol and its environs – A. F.]… Only the oral tradition allowed it to attain historical significance *once again* [sic! – A. F.] and become the centre of the city's political activity, when the spirit of civil independence *awoke.* In the XI century the Capitol had already been the centre of all purely civil matters". ([196], Volume 4, page 391)

We cannot help asking about whether any of this really could have happened among the ruins. After all,

the Scaligerian history assures us that Capitol had been destroyed way back in the past, and had stood unaltered all these years "in a semi-obliterated state" ([196], Volume 4).

And further on we also read that "the halidom of the Roman Empire resurrected in the memories of the Romans, animated conventions of the nobility and the populace alike occurred *among the ruins of the Capitol* [sic! – A. F.]… Later on, in the epoch of Benzo, Gregory VII and Gelasius II, the Romans were summoned to the very same Capitol during high-wrought prefect elections, when the consent of the populace had been required for the election of Calixtus II, or when the Romans had to be called to arms. It is possible, that *the city prefect also had lodgements in the Capitol* [slept under the stars? – A. F.], since the prefect appointed by Henry IV had lived here. Furthermore, the litigations also occurred in a palace located in the Capitol [amidst ruins as well, or what? – A. F.]". ([196], Volume 4, page 391).

It goes on like this. The bundle of oddities and absurdities gets ever larger. However, the sole reason for their existence is the certainty of the modern historian that all things "Classical" had turned to dust aeons ago.

Is it possible to assume – even hypothetically – that all of these meetings, conventions, counsels, elections, debates, the discussions of documents and their storage, official state pronouncements, the signings of official papers and so on, occurred amongst old ruins grown over with weeds and reeds, and not in a special building that had been constructed for this very purpose, and precisely in this epoch – the Middle Ages? The destruction occurred a long time later – there were enough "waves of destruction" in the Italian Rome of the XIV-XVI century.

The Scaliger tradition obfuscates the history presented to F. Gregorovius to such an extent that Gregorovius – one of the most serious "documented" historians of the history of Rome and the Middle Ages in general – carries on with his narration apparently unaware of how ludicrous the picture that he offers really is, and to what extent it contradicts common sense.

He writes that "sitting on the prostrated columns of Jupiter or under the vaults of the state archive, amidst shattered statues and memorial plaques, the Capitolian monk, the predacious consul, and the ig-

norant senator could sense amazement and meditate on the vicissitudes of life" ([196], Volume 4, pages 391-392).

Altogether failing to notice the comical impossibility of such legislative assemblies, Gregorovius carries on telling us that "the mitred senators in their brocade mantles came to the *Capitol ruins* with only the vaguest idea of the fact that in the days of yore the statesmen ratified laws here, and the orators gave speeches… No flout is more appalling and horrendous than the one suffered by Rome!… *amongst the marble blocks* [and the senators gathering for sessions in their midst, as we may well add – A. F.] *there grazed herds of goats,* and so a part of the Capitol received the name of Goat Hill… like the Roman forum that became dubbed The Cattle-Run [a senatorial one, perhaps? – A. F.]." ([196], Volume 4, pages 393-39).

Gregorovius cites a *mediaeval* description of the Capitol in order to prove the sad Scaligerian picture of the decline of Rome, which had remained the only original source up until the XII century A.D. or even later ([196], Volume 4, page 394). The most amazing fact is that this old text that occupies an entire page of a large-format modern book *says not a word about destructions of any kind,* describing the mediaeval Capitol as a functioning political centre of mediaeval Rome instead. *The narration mentions luxurious buildings, temples etc.* There is nary a word of caprine herds dejectedly roaming this gilded splendour.

Gregorovius, having scrupulously quoted the entirety of this mediaeval text – one cannot deny him being conscionable as a scientist – couldn't help making another attempt at proselytizing, in his telling the reader that "in the description of the Capitol given by the *Mirabilia* we see it as if it were *lit with the last light of a dying dawn*; we have *no other information* about this epoch" ([196], Volume 4, page 394). And also: "even for these legendary books, everything remains *an enigma* and a matter of *days long gone*" ([196], Volume 4, page 428, comment 16).

It is most expedient to turn to original sources more often and to read them open-mindedly, without prejudice and a priori judgements. We find out lots of interesting things, the ones that the Scaligerite historians prefer to hush up.

In reference to the mediaeval Rome of the alleged X-XI century, Gregorovius points out (for the ump-

teenth time) that "Rome appears to have *returned to times long gone*: it had a *Senate* again, and was *at war with the Latin and the Tuscan cities,* which had united against Rome once again" ([196], Volume 4, page 412).

In the alleged XII century a "Classical revival" is observed yet again. Gregorovius tells us that "Arnold [of Brescia – A. F.] *had been excessively vehement about adhering to the ancient traditions*" ([196], Volume 4, page 415). Apparently, he had *"revived"* the estate of *cavaliers* considered "ancient" nowadays ([196], Volume 4, page 415). Later on, in the alleged XII century, Pope Alexander III "*revives the pagan triumph of the ancient emperors*" ([196], Volume 4, page 503).

F. Gregorovius informs us of the fact that "the legendary name of Hannibal *reappeared as a mediaeval family name* that had been borne by senators, warlords and cardinals for several centuries" ([196], Volume 5, page 122). Hannibal is nevertheless considered an "extremely ancient" character nowadays.

Another "revival of antiquity" is presumed to have occured in the alleged XIII century:

"The Roman populace have developed a new spirit over this time; it marched forth to conquer Tuscany and Latium *as it had done in ancient times,* in the age of Camillus and Coriolanus [allegedly "distant antiquity" nowadays – A. F.] *The Roman banners bearing the ancient S.P.Q.R. initials appeared on battlefields yet again*". ([196], Volume 5, pages 126-127).

A detailed list of the allegedly "revived" and "resurrected" traditions, names, and rites deemed "ancient" can be continued on many dozens of pages, since practically all of the key institutions of "ancient" Rome appear to have been "revived" in the Middle Ages. We limit ourselves to a number of individual examples here. The interpretation of this amazing phenomenon as a "revival," and not naissance, roots itself exclusively in the errors of the Scaligerian chronology.

Nowadays the only original sources on the archaeology and the monuments of mediaeval Italian Rome add up to just two books compiled in the XII-XIII century at the earliest ([196], Volume 4, pages 544-545). We suddenly learn that according to the Scaligerian chronology, the names of Roman monuments given in these mediaeval books are often considered *erroneous* and *chaotic*. We are now beginning to understand that what this really means is that they contradict the Scaligerian history. Could it be that

the old books are in fact correct, unlike the Scaligerian version?

For instance, these texts refer to *Constantine's Basilica* as "the Temple of Romulus" (sic!). This sounds preposterous for a modern historian; however, this mediaeval indication concurs *perfectly* with the identification of Emperor Constantine with King Romulus that we have discovered as a result of a dynastic parallel (see fig. 6.52 in CHRON1, Chapter 6). Apart from such "bizarre" identifications, the mediaeval chronicles contradict the consensual chronology of Scaliger and Petavius every now and then.

1.4. The real date when the famous "ancient" statue of Marcus Aurelius was manufactured

Ricobaldus, for one, claims that *the famous "ancient" equestrian statue of Marcus Aurelius had been cast and erected by the order of Pope Clemens III. However, in this case the event occurred in the XI century,* and not in the "Classical Age" ([196], Volume 4, page 568, comment 74). Let us remind the reader that the historians date this statue to the alleged years 166-180 A.D. ([930], page 91). By the way, according to the parallelism that we have discovered (see fig. 6.45 in CHRON1, Chapter 6), the "ancient" Marcus Aurelius of the alleged years 161-180 is but a "phantom duplicate" of the mediaeval Otto IV of the alleged years 1198-1218 A.D.

The claim that Ricobaldus makes about the statue of Marcus Aurelius (that it was only erected as late as the papacy of Clemens III) makes Gregorovius utter the following rather embarrassed remark: "this is an *erroneous* statement that Ricobaldus makes…" ([196], Volume 4, page 568, comment 74). What is the argumentation that Gregorovius offers? It is rather droll indeed: "how could such a bronze work have been made considering the low development level of fine arts that Rome had managed to attain by that age?" ([196], Volume 4, page 573). In other words, mediaeval Romans "could not manufacture anything of value." The "ancient" Romans that preceded them by several centuries have, on the other hand, been fine craftsmen, and could confidently cast such masterpieces in bronze (see fig. 7.1).

The chronological oddities engulfing this famous statue are so blatantly obvious that they even make

their way into the mainstream press on occasion. This is what our contemporaries write:

"The history of the equestrian statue is truly unusual. It contains many riddles, and has grown over with legends. *For instance, its author and previous location in ancient Rome remain unknown…* It was discovered *by accident in the Middle Ages* in one of the Roman squares… The statue had *erroneously been mistaken for a representation of Constantine* [?! – A. F.]" (See the issue of the *Izvestiya* newspaper dated 16 February 1980).

According to Gregorovius, this explanation was proposed by the historian Theo, who "points out that *the equestrian statue of Marcus Aurelius had been confused with the statue of Constantine, and thus managed to survive the Middle Ages.* Such errancy is possible in Barbarian times" – as Gregorovius proceeds to expostulate – "but could it have been possible that the figure of Constantine could not be told from that of Marcus Aurelius in the times when the **Noticia** had been written?" ([196], Volume 1, page 49, comment 32)

The Scaligerian history has even got an "explanation" of sorts for the fact that "ancient masterpieces" have survived the twilight of the Middle Ages despite the militant church presumably having destroyed the pagan legacy. We are told that in the daytime the ignorant mediaeval monks destroyed pagan statues and "ancient" books, in order to secretly reconstruct them at night, copying the "legacy of the ancients" meticulously in order to carry it through the mediaeval tenebrosity to the luminous peaks of the Renaissance.

In the alleged XIII century we see a period of efflorescence in the arts which presumably represents ruthless pillaging of the "ancient" constructions and their transformation into mediaeval ones. For instance, we are now told that the mediaeval Romans used "ancient sarcophagi" for their own entombments. Apparently, they had none of their own, since they did not know how to build them; the knowledge had been lost, and there were money shortages. According to the Gregorovian interpretation, new and original mausoleums – ones, that is, that didn't resemble the "ancient" ones (the way Gregorovius imagined them) – only began to appear towards the end of the XIII century, and these were dubbed "mediaeval" with great relief. However, Gregorovius pro-

Fig. 7.1. An "ancient" statue of the emperor Marcus Aurelius. According to F. Gregorovius ([196]), Ricobald used to claim that the famous "ancient" equestrian statue of Marcus Aurelius was cast and mounted *by an order of Pope Clemens III*. However, this period falls on the *end of the XI century*, and not the "antiquity". Picture taken from [958], page 9.

ceeds to voice his surprise at the fact that "*not a single monument of any Roman celebrity from the first part of the XIII century remained in Rome*" ([196], Volume 5, page 510). This should not surprise us. According to our reconstruction, the foundation of the Italian Rome as a capital city took place in the XIV century A.D. at the earliest (see CHRON5).

Incidentally, the mediaeval cardinal Guglielmo Fieschi, who allegedly died in 1256, "lays in an *ancient* [sic! – A. F.] marble sarcophagus, whose carvings in relief picture a *Roman wedding* – a peculiar symbol for a cardinal!" ([196], Volume 5, page 510). The amazement of Gregorovius is perfectly justified. Could the mediaeval cardinals really have been so poor as to be forced to use "ancient" sarcophagi,

offhandedly shaking out the remains of their ancestors? It is considered sacrilege, after all. Common sense tells us that the matter here lies in the contradiction between the planted Scaligerian chronological concepts and true specimens of mediaeval art that were later declared "ancient" (as in "very old indeed").

The senatorial mausoleum in Arceli is a most curious artefact. This "monument *appears to identify antiquity with mediaeval forms;* a marble urn with Bacchic relief carvings… serves as a foundation for a sarcophagus embellished with inlays and a Gothic superstructure" ([196], Volume 5, page 511). The amazement of Gregorovius is truly ceaseless.

Let us formulate a question: *where did the powerful clans of the Guelph and Gibelline aristocracy reside in mediaeval Rome?* It is hard to fathom. Apparently, we are told that they lived *among the ruins of the ancient steam baths.* This is precisely what the historians of today are forced to assume in their attempts to unravel the oddities of the Scaligerian chronology.

This is what F. Gregorovius tells us:

"*Powerful clans* owned the slopes of Quirinal, and they built their fortifications near the forum of Imperial times… among those have been… the Capocci, who have *found lodgings in the thermae* [in the steam baths – A. F.] of Trajan, as well as the Conti, whereas the nearby thermae of Constantine [steam baths again! – A. F.] housed the fourth castle of Colonnus… The enormous ruins of the forums built by Augustus, Nerva and Caesar have been easily transformed [? – A. F.] into a fortress which was erected by the Conti as a citadel reigning over the entire city". ([196], Volume 5, pages 526-527)

Gregorovius, albeit obliged to follow the Scaligerian chronology, cannot squirm out of having to admit that there is no genuine evidence of the existence of this gigantic and allegedly "ancient" fortress *before* the mediaeval Conti – it simply had not existed! He writes that "there is *no proof* that it had stood for centuries and only been enlarged by the Conti" ([196], Volume 5, page 527). Doesn't this directly imply that Conti had most probably built this castle as his fortress in the Middle Ages, and its "extreme antiquity" was declared a lot later? This was done by the historians and archaeologists of the XVII-XVIII century when the Scaligerian chronology began to shift authentic mediaeval constructions into the distant past.

1.5. Could the "ancient" Emperor Vitellius have posed for the mediaeval artist Tintoretto?

Let us formulate the following concept that may strike one as somewhat unexpected at first. It is possible that the XVI century painter Tintoretto (1518-1594) could have drawn the "ancient" Roman emperor Vitellius from nature.

The catalogue titled *The Five Centuries of European Drawing* contains a drawing by the well-known mediaeval painter Jacopo Tintoretto ([714], page 52). He lived in 1518-1594 ([1472], pages 23-24). The drawing is dated to approximately 1540 A.D. The name that it is catalogued under draws one's attention instantly: "Etude of the head of the so-called Vitellius" ([714], page 52). See fig. 7.2. Let us remind the reader that Vitellius is considered to have been an "ancient" emperor of Rome who had reigned in the alleged year 69 of the new era ([72], page 236). Thus, according to the Scaligerian chronology, Tintoretto and Vitellius are separated by an interval roughly equalling 1470-1500 years. The modern commentary to this rather famous drawing is very noteworthy:

"Tintoretto had either a mask or a marble replica of an *ancient* bust in his studio, that had been *considered a portrait of the Roman emperor Vitellius in the XVI century*. The *original* had been *given to the Venetian Republic* by the cardinal Domenico Grimani *as a present* in 1523, and is currently part of the exposition of the Archaeological Museum of Venice (inventory number 20). *Modern archaeology* that dates this artefact as belonging to the epoch of Adrian (roughly 178 A.D.), *excludes the possibility of identifying the portrait as that of Vitellius,* who had reigned in the years 67-68. However, Tintoretto had kept this sculpture under this very name, and the testament of the artist's son Domenicus proves this explicitly mentioning the "head of Vitellius."… More than twenty etudes of this head are known that were done by Tintoretto himself and his apprentices". ([714], page 187).

The XVI century opinion had been that the bust really portrayed the Roman emperor Vitellius. As we have seen, the real history of the bust only began in 1523, when it entered the possession of the Venetian republic. It may have been drawn in the XVI century either from the death-mask of the emperor, or from nature – namely, the body of the recently deceased

Vitellius. Tintoretto's drawing clearly depicts someone who had just died, or is asleep. It is only natural that the Scaligerian history deems it perfectly impossible to place the "ancient" Vitellius in the XVI century. It would therefore be interesting to try dating this bust to the XVI century within the paradigm of the New Chronology for comparison, especially considering the dynastic parallels that we have discovered. The historians consider Vitellius to have been an emperor of the Second Roman Empire ([72], page 236). As we already know, this is a phantom duplicate of the Holy Roman Empire of the X-XIII centuries (fig. 6.23 and 6.24 in CHRON1, Chapter 6), which, in turn, is a carbon copy of the Habsburg (New Town, or Nov-Gorod?) empire of the XIII-XVII centuries A.D. for the most part (see figs. 6.21 and 6.22 in CHRON1, Chapter 6).

The "ancient" Vitellius is considered to have been a short-term governor, and the immediate precursor of the "ancient" Vespasian. He is supposed to have reigned in 69 A.D. ([72], page 236). Therefore, he travels forward in time as a result of said dynastic superpositions, and turns out to have been a mediaeval ruler of the first half of the XVI century; as can be seen from fig. 6.22 in CHRON1, Chapter 6, the end of his reign and his death fall roughly on the year 1519. It is significant that, as mediaeval historians tell us, the bust that must have portrayed the recently deceased Vitellius only appeared on the historical scene around 1523, when it had been given to the Venetian republic as a present ([714], page 187). Thus, the two dates correlate perfectly well: the "ancient" Vitellius dies around 1519, and a bust is made which the cardinal gives to the Venetians in 1523, four years later.

Everything falls into place. Apparently, the bust of Vitellius portrays a real mediaeval ruler of the first half of the XVI century. Tintoretto the painter and his apprentices paint Vitellius as a recently deceased famous contemporary of theirs. The latter saponaceous addition – "so-called" – added by the historians of the Scaligerian tradition, needs to be crossed out of the name of Tintoretto's drawing, leaving it with the shorter and more correct "Etude of the head of Vitellius."

If we're to consider the possibility of *minor* veers and fluctuations in the mediaeval chronology, it might turn out that Vitellius had died a few years later than 1519, so Tintoretto could have drawn him *from nature,* while one of his colleagues was making an in-

Fig. 7.2. The etude of the head of the Roman emperor Vitellius done by the famous mediaeval painter of the XVI century Iacopo Tintoretto. According to the Scaligerian chronology, emperor Vitellius and painter Tintoretto are separated by a period of roughly 1470-1500 years. Taken from [714], page 52.

travital "ancient" bust of Vitellius. The apprentices of Tintoretto naturally trained for their task by first drawing a bust being inspired by the drawing done by their mentor – who, we feel worth repeating, may have been present to witness the famous emperor's death.

Another peculiar detail has to be mentioned. The lower part of Tintoretto's drawing bears the legend "1263" (see fig. 7.2) – that is, dated as 1263. But Tintoretto lived in the XVI century. Modern historians mention this circumstance as well, albeit without commenting on it: "At the bottom in the centre one sees the number 1263 drawn with a pencil" ([714], page 187). We are confronted with an important fact here. The artist Tintoretto, having done the drawing around 1540, dated it to 1263. However, usually all painters date their works to the time of their creation. Tintoretto thus transcribes the year 1540 as 1263. This

shows us, which is exactly what we claim, that there have been various mediaeval chronological traditions that differ from the current one. For instance, the number 1263 could have been used to refer to the year 1540. If we interpret it according to the modern tradition, we shall get a much earlier date, which would make the drawing about 277 years older. This is probably what Scaligerian historians usually did in such situations; however, this time they had to "let the drawing stay" in 1540, since Tintoretto is linked to the XVI century by various independent evidence.

1.6. The amount of time required for the manufacture of one sheet of parchment

We shall conclude with another useful observation. Many of the classical "ancient" texts are written on parchment or papyrus – however, they're written in *a perfect acrolect.* On the other hand, many really old mediaeval texts are written in a clumsy and brief manner, which is quite natural. Primitive language requires time in order to become literary language. Furthermore, really ancient texts contain words written in nothing but consonants comprising semantic skeletons of words, with vowels either altogether missing, or replaced by small diacritical signs. This is the reason for the existence of the vocalization problem for many ancient texts, namely, the Biblical ones – it translates as the necessity to find just the right vowels in order to restore the original. Apparently, due to the scarcity and high cost of writing materials in antiquity, the scribes were frugal with them, and condensed the text, leaving nothing but consonants. One naturally comes to think that a polished literary style implies a long evolution of culture, and also the availability of writing materials, since style takes practice to evolve. Paper, for instance, is rather cheap (although this has not always been the case). However, there was no paper in "antiquity." As we are being told nowadays, the "ancient" classics used parchment exclusively. Just how available had parchment been?

The manufacture of one sheet of parchment requires the following (see [544], for instance):

1) skinning a young calf no older than 6 weeks, or a young lamb;

2) macerating the skin in running water up to 6 days;

3) scrubbing the membrane off with a special scrubber;

4) loosening the wool via souring the skin in a damp pit and subjecting it to ash and lime for 12-20 days;

5) scraping off the loosened wool;

6) fermenting the clear skin in oat or wheat bran in order to remove excessive lime;

7) tanning the skin with special extracts to make it soft after drying;

8) eliminating the roughness by pumicing the chalked skin.

This is the procedure required for the manufacture of *every* leaf of parchment. This made both parchment and papyrus luxuries, which had been the case until the very discovery of rag-paper before the Renaissance.

Let us open the work of the "ancient" Titus Livy. He begins his narration ornately and grandiloquently:

"Shall my writing of the history of the Roman people ever since the foundation of the capital be worth the effort? I do not know it well, and even if I did, I would have been too timid to utter it aloud. This endeavour, as I can see perfectly well, is far from original, and has been attempted by many; also, the new writers that keep on appearing think they may either add something new factually, or excel the austere antiquity by the art of enunciation…" ([482])

We are being assured that such a free-flowing and elaborate style had been used in the alleged I century B.C. for the writing of 142 (or 144, according to different sources) books by Titus Livy. Developing a style as confident as his must have required writing *lots of drafts.* How much parchment (and how many calves and lambs) would it require? Our take is that the explanation is simple – the creation of all these "ancient" books took place in the Middle Ages, when paper was already widely known.

1.7. The "ancient" Roman Emperor Augustus had been Christian, since he wore a mediaeval crown with a Christian cross

In fig. 7.3 we can see the well-known mediaeval Hereford map, dated to the end of the alleged XIII century ([1177], pages 309-312). Its physical size is rather large – 1.65 metres by 1.35 metres. It is as-

Fig. 7.3. The famous mediaeval Hereford map allegedly created towards the end of the XIII century. Its diameter is about 1.3 metres. In the bottom left-hand corner one sees the "ancient" Roman emperor Augustus sitting on a throne. On his head there is a crown with a Christian cross. See a close-in on the next illustration. Taken from [1177], page 311.

Fig. 7.4. The bottom left-hand corner of the Hereford map showing the "ancient" Roman emperor Augustus sitting on his throne. We can clearly see a crown with a *Christian cross* on the emperor's head.

Fig. 7.5. A fragment of the Hereford map. We can see a mediaeval crown with a Christian cross on the head of the "ancient" Octavian Augustus. Taken from [1177], page 206.

Fig. 7.6. A Christian crown with a cross on the head of the "ancient" Roman emperor Octavian Augustus. Taken from [1177], page 206.

Fig. 7.7. An "ancient" statue of the emperor Octavian Augustus from the Vatican museum, most probably dating from the XVII century the earliest. Serves as a "visual learning aid" to the Scaligerian history textbook. Taken from [304], Volume 1, page 489.

sumed that this map is based on the *History* by Paul Orosius, who is supposed to have lived in the IV century A.D. ([1177], page 311). As we understand, this map must have really been created in the XVI century at the latest.

In the bottom left corner of this map we can see the famous "ancient" Roman emperor Augustus. He is handing out his edict demanding the creation of a description of the World to three geographers (see [1177], page 206, and fig. 7.4). Modern historians make the following comment: "on the left of the map we read that the measurements of the world have been commenced by Julius Caesar. In the bottom left corner we see a picture of the emperor Augustus holding his edict in his hands" ([1177], page 309).

The fact that what we see on the head of the "ancient" Roman emperor Augustus is a mediaeval crown with *a Christian cross* (it looks very much like a Papal tiara as well, see figs 7.5 and 7.6) is perfectly astonishing within the reality tunnel of the Scaligerian history. Generally, the entire appearance of the famous Roman emperor doesn't resemble his likeness in the "ancient history teaching aids" for the Scaligerian history whose mass production era in Western Europe peaked in the XVI-XVIII century, the least bit. In fig. 7.7 we can see an example of such a "propaganda" statue of Augustus which is kept in the Museum of the Vatican nowadays ([304], Volume 1, page 489). Octavian Augustus is represented in an austere and heroic manner here, doubtlessly an example to inspire the youths. This "ancient" statue must have been manufactured in the XVII century at the latest. On the Hereford map the very same Roman emperor Augustus is represented in a completely different manner, *in a crown with a Christian cross, a beard, and wearing typically mediaeval clothing.* As we now understand, there is nothing strange about it. The map is correct, and this ruler couldn't have lived earlier than the XIII century A.D.

2.
THE "ANCIENT" HISTORIAN TACITUS AND THE WELL-KNOWN RENAISSANCE WRITER POGGIO BRACCIOLINI

Today it is considered that the famous "ancient" Roman historian Tacitus lived in the I century A.D. ([833], Volume 2, pages 203, 211). His most famous work is the *History.* In the Scaligerian chronology, the books of Tacitus disappeared from sight for a long time, fell into oblivion, and only resurfaced in the XIV-XV century A.D. This is what the Scaligerian history tells us:

"Mediaeval authors of the XI-XIII centuries usually demonstrate *no immediate knowledge* of Tacitus, he is only known by proxy of Orosius… In the XIV century Tacitus becomes known better. The Montecassino manuscript had been used by Paulinus of Venetia (in 1331-1334)… and later on Bocaccio… Then it… came to the well-known Florentine humanist Niccolo Niccoli, and is also kept in Florence currently, in the Medicean Library… Our tradition of the last books of the *Annals* and *History* ascends to

Fig. 7.8. A portrait of Poggio Bracciolini allegedly dating from the XV century taken from his book titled *De varietate fortunae.* The modern commentator has the following to say about it: "This fantastic miniature depicts Poggio, one of the most famous adventurers of the entire XV century who had researched the Classical past. Poggio Bracciolini is walking down a street surveying the ruins of Rome" ([1374], page 92.

Fig. 7.9. A close-in of Bracciolini's portrait allegedly dating from the XV century. Taken from [1374], page 92.

this manuscript for the most part. Only the Italian manuscript of 1475 that is currently kept in Leiden must have had some other source. In the 1420's, the Italian humanists begin to look for Tacitus' manuscripts in Germany. The history of this search remains unclear in many ways due to the fact that the owners of the freshly-found texts often withheld their acquisitions, especially if they were made illegally. In 1425 the eminent humanist and Papal secretary Poggio Bracciolini received an inventory of a number of manuscripts that contained several minor works of Tacitus from a monk from the Hersfeld Abbey… Whether the manuscript had really been from Hersfeld or from Fulda, or whether Poggio had really received it, as well as the possible date of this event – all of this remains a mystery. In 1455 the manuscript or its copy was already in Rome, and provided the basis for the manuscripts that have reached our day". ([833], Volume 2, page 241).

We have thus been told the following:

1) According to the Scaligerian chronology, Tacitus lived in the alleged I century A.D., presumably around the years 58-117 A.D. ([797], page 1304).

2) However, his *History* had not been known in the Middle Ages.

3) The biography of the *History* of Tacitus that we have at our disposal can only be traced as far back from our time as the XIV-XV century A.D.

4) *Nothing is known* of the fate of the *History* of Tacitus *before the XIV century*. Therefore, a hypothesis is born that the books of Tacitus may have been *mediaeval* in their origin and referring to *real mediaeval events* of the X-XIV century A.D. However, they may have been edited in the XVI-XVII century.

This summary would have been sufficient. However, let us pay attention to an interesting fact. The academic account of the fate of Tacitus' books that we have quoted from [833] is written neutrally and demurely, and contains nothing that could surprise us. Except for the odd *gap of a millennium and a half* between the moment the book was written and its surfacing in the XV century A.D.

This arid text really conceals some rather peculiar circumstances blearing the entire history of the discovery of the books written by the "ancient" Tacitus. Modern historians aren't too keen on recollecting these facts, since the latter lead to a number of con-

fused questions and serious doubts about the correctness of the datings of the events described in the books of Tacitus.

Let us give an account of what really happened in the XV century. We shall study the history of how the famous *History* by Cornelius Tacitus was discovered, according to the following works: [1195], [1379], and [21]. Towards the end of the XIX century the French expert Hochart and the English expert Ross have independently proclaimed the *History* of Cornelius Tacitus to have actually been written in the XV century by the eminent Renaissance humanist Poggio Bracciolini. In other words, *they accused Bracciolini of premeditated forgery.*

The publication of the works by Hochart and Ross initially caused a great scandal in the historian community. However, their opponents were forced to give over with the discussion, since they had nothing of substance to counter the evidence of Hochart and Ross; they resorted to the stance of complete obmutescence instead. This is a common method for such adversaries. The modern commentary to [833] is a perfect example, since it doesn't mention the research of Hochart and Ross with a single word.

The analysis performed by Hochart and Ross was an important one. Let us state straight away that nowadays when we possess information that had been unknown to Hochart and Ross, we should say that we cannot agree with their conclusion about the *History* of Tacitus being a forgery. The facts that we have discovered and the new concept of the short chronology suggest that it was based on a lost *original* – which was, however, describing real *mediaeval* events and not some distant antediluvian epoch. However, this text reached us in a more recent edition, possibly done in the XVI-XVII century.

Hochart and Ross discovered distinct *relics proving the History of Tacitus to be mediaeval in its origins.* Hochart and Ross had only been wrong concerning one thing – namely, the interpretation of their own results. Remaining perfectly unaware of the inveracity of the Scaliger-Petavius chronology, they considered the facts they discovered to prove the *History* a sham; however, from our point of view the very same facts may indicate that the *History* of Tacitus was a genuine historical text describing real events of the XIV-XV century A.D. However, it could have under-

gone a transformation in the hands of the partisan "caring editors" of the XVI-XVII century.

Let us consider the Renaissance atmosphere that the "ancient" manuscripts were "surfacing" in.

Poggio Bracciolini is considered to have been one of the most spectacular writers of the XV century Renaissance. An old portrait of his can be seen in figs. 7.8 and 7.9. He is the author of top-bracket historical and moralistic tractates. "In what concerns theological issues… he can speak with a language that would have been considered belonging to one of the Holy Fathers by anyone if it hadn't been for Bracciolini's signature" ([21], pages 358-363). He is the author of the historical study guide of Roman monuments and the famous *History of Florence,* which is a work that resembles the chronicle of Tacitus.

"This brilliant imitator had fully been a universal mastermind of his century. The critics equated him with the greatest Renaissance authors… Many found it possible to define the first half of the Italian XV century as the "Age of Poggio"… Florence built an intravital statue in his honour that belonged to the chisel of Donatello…

A rather splendid way of living had cost Poggio Bracciolini dearly… and put him in constant need of money. The search, preparation, and copy-editing of ancient authors were an additional source of income for him. In the XV century… this had been a *very lucrative activity.* With the aid of the Florentine scientist and publisher Niccolo Niccoli (1363-1437)… Poggio Bracciolini had founded a studio of sorts that occupied itself with redacting ancient texts, having engaged a large number of partners and counteragents, very educated ones, but most of them had been marked by obloquy… The first findings were made by Poggio Bracciolini and Bartholomeo di Montepulciano in the epoch of the Constantan council… in *a forlorn and humid tower* of the St. Gallen monastery… "*in a forlorn and humid tower where a prisoner would not be able to survive three days*" they managed to find a pile of ancient manuscripts – the works of Quintillian, Valerius Flaccus, Asconius Pedianus, Nonius Marcellus, Probus, and others. The discovery created more than a sensation – it initiated an entire literary epoch". ([21], pages 358-366).

Some time later Bracciolini "discovered" fragments "from Petronius" and the *Bucolic* by Calpurnius. The circumstances of these findings remain nebulous.

Apart from the originals, Bracciolini also traded in copies, which he sold for great sums of money. For instance, having sold a copy of a manuscript by Titus Livy to Alphonse of Aragon, Poggio made enough money to buy a villa in Florence.

"He charged Duke D'Este a hundred ducats (1200 francs) for the letters of St. Jerome, and that with great irritation… Poggio's clients were the Medici, the Sforza, the D'Este, the aristocratic families of England, the Duchy of Burgundy, cardinals Orsini and Colonna, rich people like Bartolomeo di Bardi, universities, which… either began to set up libraries, or have been busy extending their old book storages". ([21], pages 363-366).

Let us now regard the history of the discovery of Tacitus' books.

The main copies of the works by Tacitus – the so-called First and Second Medicean Copies – are kept in Florence, in a book storage which had Poggio amongst its founders. According to the Scaligerian chronology, these copies are the prototypes of all the other ancient copies of Tacitus.

The first printed edition of Tacitus is supposed to have appeared in the alleged year 1470 from the Second Medicean copy, or a copy thereof that is supposed to have been kept in the St. Marcus library in Venice. "However, it had disappeared from there, or maybe hadn't been kept in the library in the first place" ([21], pages 366-368).

"The two Medicean copies… *contain the entirety of the historical works of Tacitus that have reached our days*" ([21], pages 366-368).

The Scaligerian chronology is of the opinion that Tacitus was born between 55 and 57 A.D. "The year Tacitus died remains unknown" ([833], Volume 2, pages 203, 211). Thus, it is presumed that Tacitus lived in the I century A.D.

After that, his name disappears for many centuries, until the Renaissance epoch ([833]). Hochart and Ross have collected all of the references to Tacitus made before Poggio's discovery in the XV century. It turns out there are very few such references, and they are all general and vague enough that they could refer to people who have nothing in common with the author of the *History.* Thus, even in the Scaligerian chronology there

is no real information about Tacitus – the author of the *History* – that would predate the XV century.

How did the "discovery of Tacitus" really occur? "In November 1425 Poggio notified Niccoli in Florence from Rome that "some monk" was offering him a batch of old manuscripts… including 'several works of Tacitus unknown to us'" ([21], page 382). Niccoli agrees upon the deal immediately. However, the actual purchase takes several months for some reason.

"Poggio procrastinates, giving different excuses… He gives a rather meandrous answer to Niccoli's inquiry that only makes clear the fact that he had not been in the possession of the Tacitus' book yet… In what concerns the monk, Poggio blatantly lies and appears confused: the monk is allegedly a friend of his, but for some reason failed to have visited Poggio while in Rome… the books were in Hersfeld, but had to be collected in Nuremberg, etc."([21], page 382).

Niccoli demanded the book catalogue "discovered" by Poggio, being rather irritated. It turned out that "there were no works of Tacitus in the catalogue"!

"Such strange rigmarole of miscomprehensions that look clearly artificial marks the years 1427 and 1428" ([21]). Finally, Poggio notifies Niccoli in 1428 that the mysterious monk had arrived in Rome again – but without any book!

"The almost quinquennial procrastination led to the fact that Poggio's discovery had been made public prior to having been actually made, and many strange rumours surrounded it. The latter made Niccoli worry greatly, to which Poggio replied: "I know all the songs that are sung in this respect… so this is what I'll do: once Cornelius Tacitus arrives, I shall hide him well from strangers." One would think – as Hochart justly remarks – that the most natural protection of the manuscript from vicious rumours would be making it public for the scientists, explaining all the ways, means, and secrets of its appearance. Poggio, on the contrary, promises to palter yet again…" ([21], pages 374-382).

Hochart and Ross have found that "in a much later edition of his letters to Niccoli, Poggio, having lost track of the dates of his Tacitus-related correspondence of the years 1425-1429, had for some reason *forged the dates* of 28 December 1427 and 5 June 1428 in two of the letters that were made public" ([21], pages 374-382).

In these letters Poggio asks Niccoli to send him (?!) another copy of Tacitus that had allegedly already been in Niccoli's possession. Comparing the dates of the correspondence and the texts of the letters, Hochart claims the mysterious "second copy" to have been nothing else but the First Medicean copy that had allegedly been discovered many years after!

Hochart is of the opinion that "*the letter dates are faked,* they have been composed post factum after Niccoli had made Tacitus public in order to validate the reputation of the first… copy [the so-called Second Medicean one – A. F.] that had entered the collections of several palatine libraries, and prepare the way for the second copy" ([21], pages 374-382). Today's historians are of the opinion that these two copies had been discovered in a reverse order.

Amphitheatrov, whom we often quote here, wrote the following:

"Studying the history of the origins of the First Medicean Copy [the second to have been discovered – A. F.]… one cannot fail to notice the recurrence of the legend that had engulfed the copy of Niccolo Niccoli 80 years ago… a northern monastery figures here again, as well as some mysterious, unnamed monks. Some German coenobite brings the first five chapters of the *Annals* to Pope Leo X. The Pope is delighted, and presumably designates the monk as the editor of the work. The coenobite refuses, pleading semi-literacy. One clearly sees the resurrection of the legend about the provisioner of the Second Medicean Copy [the first to have been discovered – A. F.] and the Hersfeld monk… the legend calls Arcimboldi the intermediator in this deal… however, Arcimboldi doesn't mention this with a single word, despite the fact that he is supposed to have received 500 sequins from Leo X in order to pay for it – that amounts to 6000 francs, an entire fortune considering the cost of money [this makes chronology irrelevant! – A. F.]. All of these mysterious monks with no name, origin, and place of residence are the continuers of the falsification system started by Poggio Bracciolini in the eyes of Hochart. No one ever sees them or knows anything about them, whilst today one of them brings a lost decade of *Titus Livy* from Sweden or Denmark, tomorrow another one comes from Corbea or Fulda with a work of Tacitus, etc. – they always come from the North that is far away and hard to reach, and they

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Fig. 7.10. The first page of the *Historiarum ab Urbe condita* by Titus Livy published in the alleged XV century. The picture probably portrays the author himself. The entire ambience is clearly mediaeval. Taken from [1485], ill. 349.

Fig. 7.11. A close-in of a fragment portraying a mediaeval writer, most probably, Titus Livy himself. Taken from [1485], ill. 349.

always bring exactly the goods that are sought after and that the book market of the century is starved for" ([21], pages 374-382).

The study of Poggio's correspondence leads to stronger suspicions. The authors of the letters either fail to mention the findings, or give mutually exclusive versions.

"Bayle tells us [already in the XVIII century – A. F.] that Pope Leo X wanted to find the missing chapters of Tacitus so much that he promised an *indulgence of sins* for them as well as money and power. Is it surprising that they were found with haste? [Chronology is of little relevance here – A. F.]. Therefore, both parts of the Tacitus' codex are of equally *mysterious origins.* Hochart assumes that the relation of legends and mystery that surrounds them indicate a common origin and family, namely, that they have been *forged in the Roman studio of the Florentine Poggio Bracciolini".* ([21], pages 374-382).

Hochart and Ross provide information that speaks unequivocally about Poggio's penchant for transformation. For Poggio Latin is a mother tongue. "He doesn't write in any language but Latin, and how he does it! His imitational flexibility makes him the Prosper Mérimée of the XV century… when the reader wants it, Poggio becomes Seneca, Petronius and Titus Livy; he can write like anyone, being a true chameleon of word and spirit" ([21], page 385).

The analysis of the books by Tacitus shows serious discrepancies between their content (in what concerns the history and the geography of "ancient" Rome) and the consensual Scaligerian version of "ancient" Roman history.

"A great list of contradictions is cited by Gaston Boissier… Having listed a great number of mistakes [have they really been mistakes? – A. F.] that couldn't have been made by a I century Roman [according to Scaligerite historians – A. F.], Hochart points out the ones that give the author away as *someone adhering to the XV century traditions and Weltanschauung".* ([21], pages 387-390).

This is an important moment. For Hochart, Ross, Gaston Boissier and other critics of Tacitus all of this signifies the *History* to be a forgery. Being raised on the Scaligerian history and certain of the fact that "the real Tacitus" must have lived in the I century A.D., they cannot interpret the XV-century relics found in the

text of the *History* by Tacitus in any different way. For us, there is no contradiction here. It suffices to suppose the following: the "History" of Tacitus refers to real events of the XIII-XV century A.D. Tacitus, being a XV century author, naturally "adheres to the XV century traditions and Weltanschauung"; thus, the "misses" found by the historians become evidence of the fact that Tacitus' *History* is *genuine,* albeit with the condition that we transfer the time period that it covers into the Middle Ages.

At the same time, Hochart and Ross have found some extremely peculiar circumstances of the unearthing of Tacitus' *History.* They consider these to be indications of forgery; our take is that they indicate a tendentious editing of the real text of the *History* by Poggio Bracciolini. However, it is possible that Tacitus had been a nom de plume used by Poggio Bracciolini. He could really have described the "ancient" Roman events that occurred in the XIII-XV century A.D. based on some genuine documents that he managed to lay his hands on. See for yourselves:

"His [Poggio's – A. F.] sojourn in London was marked by greatly frustrated hopes for Beaufort's generosity… In 1422… *Piero Lamberteschi offers him a project of some historical work that is supposed to have been based on Greek sources and done in the utmost secrecy over the period of three years*, for which Poggio shall receive a fee of 500 golden ducats. "Let him pay me six hundred, and I'm game" – writes Poggio, leaving Niccoli to take care of the matter. "The task that he offers pleases me greatly, and I hope to produce something worthy of reading." A month later he writes: "if I see… that Piero backs up his promises with deeds, it shall not just be the Sarmatians that I shall study, but the Scythians as well… *Keep the projects that I'm telling you about secret.* If I shall indeed go to Hungary, it should remain unknown to everyone except for a few friends".

In June: "Rest assured that if I'm given enough time… I shall write something that shall please you… When I compare myself with the ancients, I believe in myself. If I really get to it, I shan't lose my face before anyone…" His subsequent location remains a mystery. According to Corniani, he had really lived in Hungary for some reason. Tonneli tells us that he went straight to Florence. Whether his mysterious deal with Lamberteschi reached any results at all re-

mains an enigma as well. Lamberteschi's name disappears from Poggio's correspondence, which Hochart explains by the fact that Poggio himself was the editor of his collected letters.

Even if the deal had fallen through and come to nothing, what possible residue could have been left by this episode? The following: "Lamberteschi was offering Poggio the creation of some secret historical work. The secrecy was planned to be great enough to make Poggio work in Hungary while everyone would think him to have still been in England. For this work he would have to study the Greek authors… and compete with the ancient historians, which he both feared and yearned for. And, finally, all the demands for secrecy that he had been ready to comply with demonstrate that the deal, albeit literary and scientific, had been a murky one". ([21], pages 393 ff).

Lamberteschi had a moral right to confront Poggio with such a suggestion, since the latter had already been caught red-handed at the *manufacture of a forgery*. Several years before, Poggio had published the *Commentaries of Q. Asconius Pedianus* via Niccoli.

"The original for these *Commentaries* hasn't been seen by anyone, and all the copies have been made by Niccoli from another copy that Poggio had sent him from Constance. It was a great success, despite the fact that… the world of science soon sensed that something was wrong… The success of the sham Asconius Pedianus had ensued in an entire series of forgeries bearing the name of the same fictitious author, but they were all too rough, and immediately got exposed as fakes. Poggio… just happened to have been more artful than the others…

Prior to his involvement in the Tacitus business, he tries to sell some amazing copy of Titus Livy to Cosmas Medici and Leonello D'Este – again in an atmosphere of mystery, with a faraway monastery on some North Sea island, Swedish monks and the like somewhere in the background. It is improbable that we're speaking of an actual oeuvre being forged, but a forgery of a copy may well have taken place. It is known that Poggio had been a master of Lombardian handwriting, which the manuscript that he tried to entice the princes with had been written in… however, something went wrong there, and the precious copy had disappeared without a trace… It is significant that over this period the usually prolific Poggio fails to write anything of his own…

However, he spends lots of time educating himself – systematically and unidirectionally, apparently training himself for some serious task of great responsibility concerning the Imperial period in Roman history. Niccoli barely manages to send him the works required: Ammianus Marcellinus, Plutarch, Ptolemy's *Geography,* etc". ([21], pages 394 and ff).

Hochart is of the opinion that Poggio had been alone when he began the forgery, but was probably soon forced to engage Niccoli as well. They must have planted the so-called Second Medicean Copy first, holding the First one back hoping to "skin the same steer twice." However, the market had soon been addled by a great number of exposed forgeries. Poggio refrained from risking it the second time. The First Copy must have entered circulation by proxy of his son Giovanni Francesco after he had made away with the fortune of his father.

Apart from the works mentioned, the Poggio-Niccoli syndicate had put the following "Classical" texts into circulation:

The complete Quintillian, some tractates by Cicero, seven of his speeches, Lucretius, Petronius, Plautus, Tertullian, some texts of Marcellinus, Calpurnius Seculus, etc.

The market became agitated after the finding of Tacitus. In 1455 "Enoch D'Ascoli had found Tacitus' *Dialogue of Orators, Agricola's Biography,* and *Germany*, (a monastery in the north yet again) whose language and character differ from the *History* and the *Annals* significantly… The *Facetiae* ascribed to Tacitus appeared on the market, and the sham took a long time to expose" ([21], pages 350-351).

Let us reiterate – Hochart and Ross insisted that the *History* of Tacitus was a sham exclusively because of their unswerving trust in the Scaligerian chronology. Rejecting it and transferring "ancient" Roman events into the XIII-XV century A.D. cardinally changes our attitude even to such events as Poggio's mysterious involvement in the discovery of Tacitus' books.

Finally, let us cite an ancient miniature from the *Historiarum ab Urbe condita* by Titus Livy that was published in Italy in the alleged XV century ([1485], page 264). The miniature is on the very first page of the book (see fig. 7.10). The inscription below says "Titi Livii…" What we see on the miniature is a typically mediaeval interior of the house of a writer who

Fig. 7.12. A Christian cross on the page of a book by the "ancient" Titus Livy. Taken from [1485], ill. 350.

is working on a book (see fig. 7.11). The artist must have tried to draw the author of the oeuvre, namely, Titus Livy. However, the historians prefer to assure us that it isn't the "ancient" Titus Livy, but, rather, an anonymous humanist writing some book. Modern historians archly comment that "On top of the first page of the text we see a writer who finishes his work… The picture shows a humanist scientist in his study" ([1485], page 264). However, most probably, the picture represents the author of the book, or the mediaeval writer Titus Livy. He may have been a contemporary of Poggio, or Poggio Bracciolini himself, who had been a humanist scientist after all.

What one has to note in this respect is that on the pages of the books by the "ancient" Titus Livy and other "Classical authors" one keeps coming across mediaeval symbolism, Christian crosses and coats of arms, for instance (see fig. 7.12). The modern commentators naturally noticed this phenomenon a long time ago. For instance, the current edition of the book by Titus Livy is commented upon in the following matter: "The beginning of Book 21… one sees a coat of arms with a cross and some angels" ([1485], page 265). However, today the commentators prefer to assure us that all these visible late mediaeval relics have been introduced into the "ancient" books by the artists just in order to please the mediaeval book-owners. The real explanation is most probably a different and more natural one – namely, that the mediaeval Christian artists used the

mediaeval Christian symbols in order to illustrate a mediaeval book of a late mediaeval author who was describing contemporary mediaeval events.

3.
THE MEDIAEVAL WESTERN EUROPEAN CHRISTIAN CULT AND THE "ANCIENT" PAGAN BACCHIC CELEBRATIONS

According to our reconstruction, the "ancient" Dionysian (Bacchic) pagan cult prevailed in Western Europe in the Middle Ages, that is, in the XIII-XVI century, and not in "distant antiquity." This may have been one of the forms of mediaeval Western European Christianity. Can we find support for this theory in the original sources that have reached our time? We can, and rather substantial support at that.

N. A. Morozov in his analysis of ecclesial history has paid attention to the known, albeit oftentimes withheld, fact of the *openly Bacchic practise of Christian officiations* in mediaeval Italy and France, where liturgies often transformed into orgies, convents would frequently serve as houses of ill repute, etc.

What does the Scaligerian history tell us about mediaeval Western European monasticism? Let us turn to the book by Alexander Paradisis titled **The Life and Activity of Balthazar Cossa (Pope John XXIII)** ([645]).

"Nothing remained of the reclusion and the piety of the first centuries of Christianity, the decadency in the church and its morals attained grandiose proportions… The nuns' clothing didn't help austerity, either, since it served to emphasize their natural beauty and gracefulness… Nearly all Italian monasteries [according to Rodocanachi] allowed male visitors… As for Venetian monasteries – Casanova is not the only source of information in what regards those; St. Didier writes that "nothing attracted as much interest in Venice as the monasteries." Noblemen have been frequent visitors there, too. Since all of the nuns were beautiful and clean-limbed, none of them went without a lover. The care of the dominae about the morals manifested as aiding the nuns in finding more elaborate ways of meeting their lovers and providing necessary alibis. During the Venetian carnival (which would last almost half a year over there), convents would turn into dance halls and become filled with masked men… The dresses have

Fig. 7.13. "The Abode of the Jolly Friars" – a Dutch "caricature" of the alleged XVII century depicting monks indulging in drunken revelry. The "caricature" bears the legend "Such is the Way to the Stars". Taken from [492], Volume 1, page 223.

been narrow, fitting tight around the waist, with large scoop necklines which demonstrated the white and voluptuous bodies of the nuns." (see Rodocanachi (E.), *La femme Italienne, avant, pendant et après la Renaissance*, Paris, 1922.)

Charles Louis Pölnitz writes that the Venetian nuns curled their hair, wore short dresses that failed to cover their svelte legs, and that their bosoms were only covered when they sang in church choir. The garments worn by the Roman nuns also weren't exactly characterized by demureness; as for the Florentine nuns, the prior of a friary who had visited Florence writes that they resembled mythical nymphs rather than "brides of Christ" (see Pizzichi, *Viaggio per l'alta Italia,* Firenze, 1820). There were theatres at many monasteries where it was allowed to give performances, however, only the nuns could take part in those. The nuns of Genoa weren't exactly known for continence, either. One of the Papal edicts aggrievedly stated that "the sisters from the convents of St. Philip and St. Jacob roam the streets of Genoa, committing whatever ribaldries their hotspurred imaginations dictate" ([645], pages 160-162).

Finally, the church began to persecute this Bacchic form of the Christian cult in the West.

"The dissoluteness of the nuns in the Bolognese convent of John the Baptist had been so great that the authorities were forced to disperse the nuns and close down the convent. The nuns from the convent of St. Leonard were given into custody of the St. Laurence convent which had gained prominence due to its austere and harsh regulations, being called "the tormentor of the nuns"… The amount of nuns persecuted by the justice had grown by the day. Every Bolognese convent had a nickname: "the convent of the dolls'" "the convent of the gossipers," "the convent of the repenting Magdalenes," "the convent of the wenches," "the monastery of the Messalinas," etc. (see Frati (Lodov.), *La vita private di Bologna nel Medio Evo*, Florence, 1898)…

The eminent humanist Giovanni Pontano tells us that in Valencia the Spaniards had free access to the convents, and that it was hard to differentiate between these holy tabernacles and houses of ill repute. Settenbrie, who studied the last collection of Masuccio's works, writes that the book *The Conjugality of*

Fig. 7.14. A "caricature" of Pope Leo X and his debauched life. Copper engraving dating from the XVI century. Taken from [492], p. 181.

Monks and Nuns had been withdrawn from circulation, and entered the list of the books forbidden by the Catholic Church, while its author was anathematized" ([645], pages 162-164).

Let us stop for a moment and think. A natural question arises, namely, that of the essence of the Christian cult in Western Europe prior to the introduction of the rigid sanctions of the XVI-XVII century. Did it resemble modern Christianity? Nowadays we are often told that the mediaeval clergy frequently spent time in bacchanals. We have all heard of the alleged lechery of many mediaeval monks who are supposed to have corrupted the original ideals, which were intrinsically intemperate. See figs. 7.13 and 7.14, for instance.

An unprejudiced study of mediaeval documents shows this mediaeval Christian cult to have been practically identical with the one we consider the ancient Bacchic, Dionysian cult. N. A. Morozov cites plenty of data showing that, for instance, official prostitution was an integral part of the mediaeval Western European Christian liturgy. Another example is the love-cult prevalent in a number of mediaeval temples located on the territory of modern India. Accordingly, there exists the possibility of point of view differing from the official modern standpoint, one which would interpret the *distinct relics of the Bacchic in Christian rituals of the Middle Ages* as the corruption of archetypal Christianity. These "ancient relics" persisting in the Middle Ages strike us as odd nowadays since they contradict the Scaligerian chronology. A change of the latter and the dislodgement of "antiquity" into the Middle Ages instantly eliminates the seeming contradiction.

The Scaligerian history contains many relics of the mediaeval Bacchic-Christian liturgies. According to the experts in the history of religions, the Western European Christians of the Middle Ages had (see, for instance, the review given in [544]) religious rituals including nocturnal congregations called "agapes," or "nights of love." Despite the efforts of the late mediaeval and modern commentators to convince us that these Christian "love suppers" involved nothing but "comradely libations" and "platonic cordialities," the initial meaning of the word "agape" reveals something completely different. As N. A. Morozov duly re-

marks, the correct Greek word for fraternal love is "philia," whereas "agape" is solely used for erotic love.

Therefore the "agapes" have most probably merely been the way Christians referred to the mediaeval Western European bacchanals of the Dionysian cult with all of their orgiastic attributes – the attributes deemed "extremely ancient" nowadays. What the Scaligerian chronology presents as an exception must have been the rule for the Western European Christian church of the Middle Ages. For instance, the numerous references to "Papal and Episcopalian lewdness" simply indicate just how widespread the Christian bacchanal cult was in the Middle Ages. This may have been a result of a distortion of the strict Christian rites of the XI century. Let us recollect that the pagan bacchanals were described by the "ancient" Titus Livy in his famous *History of the City*. And the dynastical parallels that we have discovered identify the "ancient Rome" of Titus Livy with the epoch of the XI-XIII century, and also partially over the Habsburg (New Town, or Nov-Gorod?) epoch of the XIV-XVI century (see figs. 6.19, 6.20, 6.21, 6.22, 6.23, 6.24, 6.52 and 6.52 in Chron1, Chapter 6).

Apparently, the necessity of curbing the Bacchic cult eventually presented itself. N. A. Morozov puts forth a hypothesis that this Christian-Bacchic practice of religious Dionysian orgies in the *Western* church may possibly have caused a wide propagation of venereal diseases in Western European countries ([544], Volume 5). We shan't discuss the likelihood of this hypothesis, since it's well beyond the scope of our work. It is however possible that the Western European church of the XV-XVI centuries eventually had to return to the original, ascetic and somewhat austere style of XI century Christianity in order to mitigate the effect of negative social aftermath of the Bacchic rites. This may have been one of the primary reasons for religious reform, as well as for the rigid celibacy edicts. This reform was later arbitrarily placed in the XI century A.D. and ascribed to "Pope Gregory VII," or "Pope Hildebrand" ("Ablaze as Gold"), who, according to our reconstruction, is a mere reflection of the XI century Jesus Christ. One takes it that many events of what we know nowadays as "Hildebrand's biography" actually belong to the more recent periods of the XIV-XVI century.

Naturally, doing away with the "ancient" Bacchic or Dionysian cult was far from an easy task due to its great appeal, accumulated social consequences (venereal diseases, etc.) notwithstanding. Nowadays "Pope Hildebrand" is the very person who is said to have given great attention to this problem during the religious reform of the alleged XI century, which is the time period to which we nowadays ascribe the rigid edicts about the expulsion of those holy fathers who continued their married lives. This decision caused an uproar, since almost all of the Roman clergy was married. As N. A. Morozov pointed out:

"The natural facet of human existence had suffered defeat in this tragic matrimony conflict, and rigid monastic asceticism became victor due to the influence of the Gospel according to Matthew – the actual celibacy edict must have been caused by a wide propagation of venereal diseases among the clergy as well as the laics, since it is hard to explain and justify such an innovation." ([544], Volume 5)

The opposition was crushed, although it took years of struggle.

The necessity of crushing the orgiastic Christian cult entailed the establishment of the Inquisition for the initiation of hard-line reforms in both clerical and secular life of Western Europe. We should point out that the *Eastern Orthodox Church* and Russia in particular have never seen such open and wide dispersion of *Bacchic* practices. This is why there was no Inquisition in the Orthodox Church. The transition to the stricter modern form of the cult in the Western church may have been caused by the negative social after-effects of the Bacchic liturgies.

However, N. A. Morozov had been persistent in regarding the Orthodox church as the heir of the *Western* Latin church, by and large. We consider this to be *another grave mistake of his.* The reason for this error is clear to us now: N. A. Morozov erroneously considered the Western church to have been much *older* than the Orthodox church in general, and the Russian church in particular, since, according to the Scaligerian outlook, the formation of the Orthodox Church in Russia occurred as late as the X-XI century, whereas in Morozov's opinion the Western church had been formed in the IV-V century A.D.

However, nowadays we are beginning to understand that both the Western and the Orthodox Church, and the Russian church in particular, ap-

Fig. 7.15. The title picture from a book on witchcraft by Pretorius dating from 1668. A propagandist representation of a "sabbat of the witches". Taken from [492], Volume 1, page 95.

Fig. 7.16. "Bacchanal" by Dosso Dossi. Kept in the Castel Sant'Angelo National Museum in Rome. Taken from [138], page 80.

peared *simultaneously* – in the XI-XII century, q.v. in the new statistical chronology in CHRON1, Chapter 6. Apparently, the Orthodox and the Latin church were of the same origin, and have subsequently been developing in cardinally different ways. The very name of the Orthodox (as in conservative, or ancient) Church indicates the possibility of the Orthodox practice being closer to the proto-cult of the XI century than the Latin-Catholic liturgy.

The mediaeval descriptions of the infamous "diabolic sabbats" in Western Europe must have been based on the same archetypal "agape" Bacchanals as mentioned above, but these have already been declared "a creation of the devil" (see fig. 7.15). Let us remind the reader that dissolute orgiastic excesses had been a notable feature of the agapes or sabbats (according to the Scaligerian history). Quite naturally,

the new "reformed" Western European church conveniently delegated the responsibility for the agapes (or sabbats, or Bacchanals) to "the devil" in order to smother all recollections of the recent Bacchic Christian past in the congregation. The people's own history was thus ruthlessly severed and attributed to a "different religion", or even to "the devil". After that, it was further removed into an antediluvian age labelled "antiquity." In fig. 7.16 one can see one of the numerous and rather eloquent pictures of a mediaeval "ancient" Bacchanal – the famous oeuvre by Dosso Dossi bearing that very title. Further, in fig. 7.17, one sees a relief from an "ancient" Attic sarcophagus made in the Middle Ages that makes effigy of a Bacchanal feast in the honour of Dionysius. The famed "Bacchanal" by Rubens, painted around 1615, can be seen in fig. 7.18.

Fig. 7.17. A Dionysian feast. A relief from an "ancient" Attic sarcophagus. Taken from [304], Volume 1, page 103.

Fig. 7.18. "Bacchanal" by Rubens. Dating from around 1615. Taken from [188], sheet 44.

Fig. 7.19. The illustrations on top represent fragments from the capital of the Strasbourg cathedral. A bear is carrying an aspersorium, a wolf follows him with a cross, followed in turn by a hare bearing a torch etc. Further we see: a) a miniature from a mediaeval moralistic Bible (No 166 from the Imperial Library); b) mediaeval "Christian-Bacchic" subjects still adorning some Western European cathedrals. Taken from [1064].

The history of the Bacchic Christian cult in Western Europe must have been a long one. We shall give a few quotes from the rather rare œuvre of Champfleury titled *Historie de la Caricature au Moyen Age (The History of Caricature in the Middle Ages)*([1064]). Caricature usually serves to reflect reality by hyperbolizing some of its facets in order to draw attention to them.

Champfleury writes: "The mediaeval cathedrals and monasteries have housed strange kinds of entertainment [as seen from the stance of the consensual concept of the Middle Ages that was inflicted upon us – A. F.] during big church feasts in the Middle Ages and the Renaissance epoch. It isn't just the common clergy that takes part in the dancing and the singing, especially during Christmas and Easter, but even the top ranking ecclesial dignitaries. The monks from the friaries danced with the nuns from nearby convents, and the bishops joined the merrymaking." ([1064], page 53. Quoted in [544], Volume 5)

Champfleury proceeds to cite the most modest example, presenting it as a caricature [!], which is a picture of a supper taken by monks together with "their ladyloves" from a XIV century *Bible* (which is a fact we feel worthy of emphasizing), see fig. 7.19 taken from [1064], The National Library, Paris, No. 166. But how could this "caricature," if it really is one, wind up in the Bible, a holy book? The Holy Writ is hardly the place for jests and witticisms, especially considering the fact that the other miniatures from this edition of the Bible do not give the illustrator away as a farceur. The miniature depicts a typically Bacchic scenario: a monk and a nun are entwined in a passionate embrace in the foreground, and the same actions are performed by a larger group in the background. Other similar mediaeval artwork can be seen in fig. 7.19, the phallic symbolic of the Indian god Shiva-Rudra in fig. 7.20, and other examples in figs. 7.21 and 7.22.

A Dutch "caricature" of the mediaeval Christian cult can be seen in the *History of the Papacy* by S. G. Lozinsky, for instance (fig. 7.23). A crowd of parishioners bursts into a church following a priest, while a crowd is being rampantly joyous on the square in front of the church.

The number of such "caricatures" in mediaeval manuscripts that have reached our age is great enough. Incidentally, Pope Pius II, for one, was the author of

Fig. 7.20. A stone effigy of Shiva Lingamurti. A phallic image of the Indian god Shiva-Rudra. Taken from [533], Vol. 1, page 222.

*A bas-relief from the dome of the portal of
the Notre Dame of Paris (XII c.)*

The capital of the Magdeburg Cathedral

*The capital of the nave from the Saint-Hilaire
de Melle church in Poitou*

*A wooden sculpture
from Malestroit (Brittany)*

*A bas-relief
from the church
in Poitiers*

*A sculpture from
the Saint-Gille church
in Malestroit (Brittany)*

Fig. 7.21. Mediaeval "Christian-Bacchic" subjects that can still be observed in some Western European temples. For instance, the obscene (in modern understanding) pictures from the dome of the portal of the Notre Dame in Paris, France, and the ones from the capital of the Magdeburg Cathedral. A named woman is riding a goat, and a monkey is playing the guitar. Otte, *Manuel de l'Archéologie de l'art religieux au moyen age,* 1884. Taken from [1064].

The coussinet of a church window in Blois

A bas-relief from the Saint-Gervais-
Saint-Protais church

A bas-relief from the Saint-Fiacre church, Faouët (Brittany)

A church portal sculpture in Plöermel
(drawing by M. Bouet)

Fig. 7.22. Mediaeval "Christian-Bacchic" subjects that can still be observed in some Western European temples. Another example – a picture of a young woman tweaking her husband's nose, a sculpture on the portal of the Ploërmel church. Taken from [1064].

"numerous erotic poems and an extremely obscene [by current standards – A. F.] comedy titled *Chrysis*" ([492], Volume 1, page 156). It would also be apposite to remind the reader of the "Song of Songs," part of the Biblical canon with explicit erotic references and descriptions galore. Of course, the theologians of our age cagily interpret those as an "allegory" of sorts.

Champfleury in his attempt to make the monastic life of Western Europe in the XIII-XVI century fit modern morals and inculcated concepts of religious life and "monastic ideals" of the epoch, tries to convince us that all such phenomena in mediaeval art aren't to be regarded as *illustrations of contemporary reality,* but rather as an admonishment against such actions ([1064]). However, it is most odd, since the "admonishment" is pictured in a most enticing manner indeed. Is it possible to conceive of someone who

would try to restrain the public from debauchery with the aid of pornographic editions? This would most probably have the opposite effect. Furthermore, if these were "admonishments," one would expect to see depictions of unpleasant after-effects of such actions. However, none such are present!

Such illustrations in religious literature only make sense if they are a rendition of quotidian phenomena from the life of the mediaeval clergy – events considered normal by everyone, in other words. Had the painter wanted to express his reprehension of the subject matter, he would have shown this carousal in some unappealing light, with demons dragging sinners into inferno, the revolting aftermath of diseases, etc. Instead of this, several mediaeval Bibles contain illustrations of Bacchanal dances, and ones looking perfectly "ancient," at that. The capital headings are

Fig. 7.23. Mediaeval Dutch "caricature" of the Roman church. Taken from [492], Volume 1, page 17.

enwreathed in grapevines, with little angels climbing them – spitting images of allegedly "extremely ancient" cupids. And so on, and so forth. We are referring to our personal acquaintance with certain ancient Bibles that are kept in the Moscow Planetarium Library, for instance, or those from the Rare Book Museum of the National State Library in Moscow.

According to Champfleury, it was as early as the VII century A.D., 700 years after the naissance of Christianity, that the Counsel of Chalon-sur-Saône forbids women to sing obscene songs in churches ([1064]). The date is given as VII century in the Scaligerian chronology; according to our results, all of this occurs in the XV-XVI century, which coincides with the time of the formation of the Inquisition in the West. Gregory of Tours protests against the monastic masquerades in Poitiers that occurred during the historically ecclesial "feasts of the mad," "feasts of the innocent" and "feasts of the ass."

Champfleury writes that: "it was as late as [the alleged date of – A. F.] 1212, that the Paris Council prohibited the nuns to partake in the "frantic celebrations" in the following form: 'The frantic celebrations where the phallus is worshipped are to be condemned everywhere, and we forbid partaking to monks and nuns specifically'" ([1064], page 57, quoted in [544], Volume 5, page 658). The ban didn't seem to help much, since much later, in the alleged year 1245, the reformist bishop Odon reported, after having visited the monasteries of Rouen, that the nuns there take part in forbidden pleasures en masse ([1064], page 57. Quoted in [544], Volume 5, page 658).

The "feasts of the innocent" greatly resembled the Church "feasts of the mad," or *festi follorum* (possibly renamed from *festi phallorum*). Apparently, the label "innocent" referred to people unaware of the difference between the allowed and the forbidden. Both feasts may have been the same old Christian agapes and bacchanals named differently. According to Champfleury, they existed in Besançon as late as the years 1284-1559 (in the Scaligerian chronology), until the reformed church outlawed them in that area as well. King Charles VII forbids these religious "feasts of the mad" again in 1430, in the Troyes Cathedral ([1064], page 58, quoted in [544], Volume 5). One sees how much labour it took the Western European church to weed out the deeply rooted Bacchic-Christian cult of the XIII-XV century.

Fig. 7.24. A stone sculpture from the museum of the Spanish cathedral in Santiago de Compostela allegedly dating from 1100. We see an erotic depiction of a naked woman. Photograph taken in June 2000.

Fig. 7.25. A Bacchic sculpture of a female from the museum of the Santiago de Compostela Cathedral in Spain. Different aspect. Photograph taken in June 2000.

Champfleury writes the following:

"Many a time, studying the ancient cathedrals, and trying to unravel the secret reason for their ribald ornamentation, all of my own explanation seemed to me as comments to a book written in a language that is alien to me… What could one possibly make of the bizarre sculpture that one sees in the shade of a column in an underground hall of the mediaeval cathedral in Bourges?" ([1064], quoted in [544], Volume 5, page 661, see fig. 7.19)

The sculpture in question is an effigy of human buttocks protruding from the column in a very erotic manner, done meticulously and with great expression. How could the monks and the parishioners of the times before the era when this sculpture became a tourist attraction from the days of yore, have abided it in the temple that they attended every day?

Another example is the stone sculpture allegedly dated 1100 that is now a showpiece in the museum of the Santiago de Compostela Cathedral in Spain

(see figs 7.24 and 7.25). We see a naked woman in a very explicit position. The museum plaque tells us that the sculpture had been inside this very cathedral prior to being made an exhibit. Then, during its reconstruction, it was taken off its original mounting and placed in the museum.

Attempts to explain away all of these mediaeval sculptures and images (of which there are quite a few left) as "caricatures" of the clergy carved in stone on the walls of holy temples, very simply don't hold water. Champfleury proceeds to ask us:

"Can one think of an imagination paradoxical enough to determine the correlation of such an improbable jape with the holy place that houses the carving? What authority did it take to let the sculptor carve such details with impunity?… On the walls of several ancient Christian temples we find, with great surprise, images of human genitalia compliantly displayed amidst the objects used for holy liturgy. The lapicides demonstrate great innocence in carving such pornographic sculptures, that resemble an echo of the Classical symbolism… These… phallic relics of the past that one finds in darkened halls [where the Bacchanals took place – A. F.] are especially numerous in Gironde. Léo Drouyn, an archaeologist from Bordeaux, showed me some highly peculiar specimens of brazen sculptures put on display in the ancient churches of his province that he conceals in the depths of his files and folders." ([1064], quoted in [544], Volume 5, page 661)

N. A. Morozov was quite correct in pointing out that excess shame deprives us of valuable scientific information. Scaligerian historians, in remaining taciturn about the Christian genital symbolism present in a number of mediaeval temples, have slowed the potential for comparison of artefacts of the "Classical Age" with mediaeval ones. Serious, thoroughly illustrated books on the phallic cult would pour some bright light on the matter and expose the Weltanschauung of the Christian-Bacchic cult devotees of the Middle Ages.

Most probably, all of these drawings and sculptures are the furthest thing from anti-ecclesial mockery, and serve the same invitatory purpose as foamy beer steins painted on the doors of German pubs. Naturally, all of this made sense only prior to the large-scale repressions of the new evangelical church and

the Inquisition of the XV-XVI century against the old Western European Bacchic Christian cult.

"Classical" pornographic effigies (those from the excavations of "ancient" Pompeii, for instance) are directly related to their Christian counterparts. Once again, the misconceived "shamefulness" keeps the scientific public from learning of those extremely interesting source materials. V. Klassovsky tells us that:

"The pictures that depict explicitly erotic and ithyphallic scenes that the ancients liked so much are kept under lock and key… In the house of the dissolute women… *someone had scraped off the obscene frescoes with a knife at night…* As of late, all of the Pompeian paintings and sculptures that contradict the modern concept of decency are kept *in the secret department* of the Bourbon museum where no visitors are allowed except for those possessing the special permission of the high officials that they have to demonstrate at the door. Obtaining such a permission by legal means is far from easy." ([389], pages 75-76)

However, in 1836 a catalogue was published that contained engravings of some of the exhibits from this secret department ([1278]); this catalogue is an antiquarian rarity nowadays. Let us also mention that, according to Humphrey Davy, "the Pompeian painters and the Italian painters of the Renaissance epoch used *identical* paints" (quoted in [389], page 70).

Houses have been found in Pompeii – one of which is considered a hotel nowadays – that have stone phalluses in front of the entrance. The connexion between the phallus and the Christian cult is not only present in the Western European temples of the Middle Ages. "In Hieropolis there were gigantic phalluses carved out of granite, of 180 feet and higher; they used to be placed at the temple gates" ([389], page 122). V. Klassovsky was of the naïve opinion that these gigantic stone phalluses served "for the edification of the parish" [?] ([389], page 122). Most probably, the carving had been a sign, or a facia of sorts. Compare with a similar stone effigy of the Indian Shiva Lingamurti; what one sees here is the phallic symbol of Shiva-Rudra.

If the obscene mediaeval artwork is nothing but signs whose primary purpose is to inveigle the public to partake in the Christian entertainment as was practised in Western European temples up until the XVI century – and occasionally later yet – what could the images of witches, demons, etc. that they incor-

porate possibly signify? The more recent ones, with demons dragging sinners to hell, are, of course, meant to intimidate. But what would be the meaning of those where the devil is playing the guitar, and naked women riding goats and asses are carried away by the momentum of sensuality? What could be the import of the stone apes dancing lewd roundels? Such are the stone sculptures on the chapiters of the Magdeburg Cathedral. Or, for instance, the bas-relief from the portal dome of Notre Dame de Paris allegedly dating from the XII century, that contains obscene imagery of naked women copulating with asses, goats, and each other – a tangle of human bodies and demons entertaining male and female members of the parish alike with their sexual callisthenics.

We should also remind the reader of the extremely well-developed erotic cult in India. Some of the Indian temples are covered with intricate erotic sculptures from top to bottom. Also, what could the sculpture from the portal of the Ploërmel church possibly mean, the one plainly visible to the public and depicting a young wife tweaking the nose of her husband who is wearing a nightcap? See figs. 7.19, 7.21 and 7.22. A Dutch "caricature" of the mediaeval Roman church can also be seen in fig. 7.23.

Champfleury, who cites all of these pictures and sculptures, and a great deal of others to boot, *does not provide a clear answer* to all these questions. However, the meaning of the last sculpture, for instance, is crystal clear. "Such a picture is far from being an inappropriate caricature; one would rather think it a sign quite appropriate for the entrance to a legal disorderly house for married women [located in a temple – A. F.]" ([544], Volume 5, page 666).

In [544], Volume 5, one encounters argumentation in favour of the theory that the Western European Christian temples of the XII-XVI century combined certain distinctives consistent with the liturgy presented to us in late Christian literature, with those of brothels from which it would have been hard to distinguish them in the Middle Ages. Thus, the initially austere Christianity of the XI century gave birth to the orgiastic and Bacchic Christian cult. After the separation of the churches from the brothels (which didn't happen in some areas of India until the XIX century), the latter became semi-legal institutions resembling their modern counterparts. All of the above men-

tioned imagery on the walls and over the entrances to the XII-XV century temples could only have seemed appropriate for as long as the temples served as places of erotically-flavoured entertainment honouring the vivacious "ancient" gods, and where the Eucharist chalice also served an orgiastic purpose. Far from the abodes of pious meditation that we deem them to be nowadays.

One finds it appropriate to make the following remark in this respect: according to the Scaligerian chronology, nearly all the mediaeval Roman Christian churches have allegedly been built "on the sites of ancient Pagan temples." These "ancient predecessors" have for some reason shared the same purpose, and even *the same name* as the "more recent" Christian temples ([196]). The mediaeval church of St. Dionysius, for instance, was allegedly built on the site of the "*ancient* pagan temple of Dionysius," etc. From our point of view, the picture is perfectly clear. What we see here is the same old effect of the Scaligerian chronology. Having declared its own recent Bacchic past "erroneous" for one or another objective reason, the Western Christian Church in its new reformed phase of the XV-XVI century had simply renamed all of its recent Christian-Bacchic gods new Evangelical saints, occasionally even keeping their names intact, since the parishioners had been accustomed to them.

One might ask the obvious question about whether we indeed are right, and the Bacchanals are merely a form of the mediaeval Christian cult of the XII-XVI century, the strict edicts outlawing this cult introduced by the Inquisition in the XV-XVI century finding their reflection in the "ancient" bans of the Bacchanals. Is it really so? Are there any "ancient" documents that forbid the "ancient" bacchanals? There are indeed, and they occasionally match their mediaeval relatives of the XV-XVI century word for word.

This is what the historians tell us about the "Classical Age": "*The Graeco-Roman decadence that began to infiltrate the lives of all the Roman estates*… in 186 [the alleged year 186 A.D. – A. F.) manifested in one alarming symptom – *secret Bacchus cults*… these cults have spread *across all of Rome and Italy*" ([304], Volume 1, page 362). Considering the Roman chronological shift upwards by roughly 1053 years, we get the Scaligerian date of 186 A.D. actually standing for a date approximating 1239 A.D., since 186 + 1053

Fig. 7.26. A bronze plaque outlawing bacchanals. Copied from the "ancient" original kept in the Royal Imperial Museum of Antiquities in Vienna. Taken from [304], Volume 1, page 363.

= 1239. It turns out that the wide propagation of the Bacchic cult really falls on the XIII century A.D., which concurs well with the information concerning the pervasion of the mediaeval orgiastic cult of the XII-XVI century. If this happens to really be a manifestation of the two chronological shifts of 1383 years (a sum of 1053 and 330), the "ancient" events as mentioned above roughly fall on the middle of the XVI century, which fits our reconstruction even better.

What did really happen later in "antiquity?"

"The authorities have commenced an energetic investigation, and it turned out that the members of this cult exceeded 7,000 people in their numbers. *Many have been seized and done away with quick and severe executions.* . . A large number of the women that took part in the criminal cult have been handed over to their relations for the execution, and if none of their kin could bring themselves to execute the *death sentence*, they would be claimed by the henchman.

A *most valuable relic* of the time is given to us by an important governmental edict of the Senate in its original edition. The Roman Senate *forbade all manner of manifestation* of the Bacchic cult on the territory of the United Roman State *under pain of death*… The Senate's edict *forbidding Bacchanals explicitly* had been carved on a copper plaque and had been sent to all of the districts in such a fashion in order to be put up in public places for everybody's information. One of such plates was unearthed in a rather secluded place, the ancient Bruttian country." ([304], Vol. 1, pp. 362-363)

We cite this "ancient" document in fig. 7.26. According to our reconstruction, this "ancient" decree is one of the imperial Inquisitional prohibitions of mediaeval Bacchanals issued in the XV-XVI century, which had been found in 1640, right about the time the Scaligerian chronology was nascent. It had immediately been declared "ancient" and attributed to the distant past.

4.
PETRARCH (= PLUTARCH?) AND THE "RENAISSANCE OF ANTIQUITY"

4.1. How Petrarch created the legend of the glory of Italian Rome out of nothing

According to our reconstruction, the "Classical Age" is merely another name applied in the Scaligerian chronology to the mediaeval epoch of the XI-XV century A.D. As we have already mentioned, the Italian Rome had apparently been founded as a capital as late as the XIV century of the *new* era, and not in the VIII century B.C. as the Scaligerian chronology tells us. It would thus be most interesting to regard the history of the mediaeval Rome from the point of view of this reconstruction. Nowadays we are told that the Italian Rome had entered "the age of decline" ([196]) in the epoch of the XIII-XIV century. Our take is that there is really a very simple explanation. Before the XIV century A.D., Rome, if it had existed at all, had been a rather small town; this is why the mediaeval documents that have reached our age fail to see anything worthy of mentioning. The historians of a later age, raised on the Scaligerian chronology, began to interpret this mutism as evidence of "the utter decline of the Roman capital and all of its past splendour."

According to our reconstruction, in the early XIV century the small Italian town of Rome was officially decreed (on paper!) to be the capital of "the Great Ancient Rome." To this end, the events which had really occurred in a completely different Rome – the Rome on Bosporus, the City of the Czars, Constantinople, *a truly great city of the Middle Ages* – were transferred to the Italian Rome (again, only formally, on paper). A large part of Constantinople's history was severed and attributed to the Italian Rome. Interestingly enough, we are in a position to give a more or less precise assessment of when this "surgical transplantation of history" really took place. Let us turn to the XIV century history.

In 1974 the world celebrated 600 years since the death of Francesco Petrarch (1304-1374), the first prominent writer of the Middle Ages who, according to Leonardo Bruni, "had been the first who… could understand and bring into light the ancient elegance of the style that had been *forlorn and forgotten* before"

([927]). The actual persona of Petrarch is nowadays perceived as mysterious, vague and largely unclear, and reality often becomes rather obfuscated. But we are talking about the events of the XIV century here! The true dating of the texts ascribed to Petrarch often remains thoroughly unclear.

Already an eminent poet, Petrarch entered the second period of his life – the period of wandering. In the alleged year of 1333 he travelled around France, Flanders and Germany. "During his European travels, Petrarch became directly acquainted with scientists, searching the libraries of various monasteries *trying to find forgotten ancient manuscripts and studying the monuments to the past glory of Rome*" ([644], page 59). Nowadays it is assumed that Petrarch became one of the first and most vehement advocates of the "ancient" authors who, as we are beginning to understand, were either his contemporaries, or preceded him by 100-200 years at the most.

In 1337 he visited the Italian Rome for the first time ([644], page 59). What did he see there? Petrarch writes (if these are indeed his real letters, and not the result of subsequent editing), "Rome seemed even greater to me than I could have imagined – especially the greatness of her ruins" ([644]). Rome in particular and XIV century Italy in general had met Petrarch with an utter *chaos* of legends, from which the poet had selected the ones he considered to fit his *a priori* opinion of "the greatness of Italian Rome." Apparently, Petrarch had been among those who initiated the legend of "the great ancient Italian Rome" *without any solid basis*. A significant amount of real mediaeval evidence of the correct history of Italy in the Middle Ages was rejected as "erroneous." It would be of the utmost interest to study these "mediaeval anachronisms" considered preposterous nowadays, if only briefly.

According to mediaeval legends, "Anthenor's sepulchre" was located in Padua ([644]). In Milan, the statue of Hercules was worshipped. The inhabitants of Pisa claimed their town to have been founded by Pelopsus. The Venetians claimed *Venice to have been built of the stones of the destroyed Troy*! Achilles was supposed to have ruled in Abruzza, Diomedes in Apulia, Agamemnon in Sicily, Euandres in Piemont, Hercules in Calabria. Apollo was rumoured to have been an astrologer, the devil, and *the god of the Saracens*! Plato was considered to have been a doctor, *Ci-*

Fig. 7.27 The Pyramid of Cestius in Rome. The pyramid's height is 27 metres. It is assumed that it was erected in the XII century nowadays; we are told that the Pretor Caio Cestiu Epulon is buried here. The pyramid is presumed to be "homage to the Egyptian fashion". Taken from [138], page 41. Petrarch, on the other hand, used to claim that the grave belonged to the "ancient" Remus.

cero a knight and a troubadour, Virgil a mage who blocked the crater of the Vesuvius, etc.

All of this is supposed to have taken place in the XIV century or even later! This chaos of information obviously irritated Petrarch, who had come to Rome already having an a priori concept of the "antiquity" of the Italian Rome. It is noteworthy that Petrarch left us no proof of the "antiquity of Rome" that he postulates. On the contrary, his letters – if they are indeed his real letters, and not later edited copies – paint an altogether different picture. Roughly speaking, it is as follows: Petrarch is convinced that there should be many "great buildings of ancient times" in Rome. *He really finds none of those.* He is confused and writes this about it:

"*Where* are the thermae of Diocletian and Caracallus? *Where* is the Timbrium of Marius, the Septizonium and the thermae of Severus? *Where* is the forum of Augustus and the temple of Mars the Avenger? *Where* are the holy places of Jupiter the Thunder-Bear-er on the Capitol and Apollo on the Palatine? *Where* is the portico of Apollo and the basilica of Caius and Lucius, where is the portico of Libya and the theatre of Marcellus? *Where* are the temple of Hercules and the Muses built by Marius Philip, and the temple of Diana built by Lucius Cornifacius? *Where* is the temple of the Free Arts of Avinius Pollio, where is the theatre of Balbus, the Amphitheatre of Statilius Taurus? *Where* are the numerous constructions erected by Agrippa, of which only the Pantheon remains? *Where* are the splendorous palaces of the emperors? One finds everything *in the books*; when one tries to find them *in the city*, one discovers that they either *disappeared* [sic!] or that *only the vaguest of their traces remain*". ([644])

These countless inquiries of "where" this or the other object might be, especially the final phrase, are amazing. They indicate clearly that Petrarch came to the Italian Rome with an a priori certainty that the great Rome as described in the old books is the *Italian* Rome. As we are now beginning to understand, these

books most probably were referring to the Rome *on the Bosporus*. However, in the early XIV century or even later, it was *ordered to assume* that the ancient manuscripts referred to the *Italian* Rome. Petrarch had to find "field traces" of the "great Roman past" *in Italy*; he searched vigorously, found nothing, and was nervous about this fact.

However, the letters attributed to Petrarch contain traces of a Roman history that differs considerably from the history we are taught nowadays. For instance, Petrarch insists that the pyramid that is now considered to be "the Pyramid of Cestius" is really the *sepulchre of Remus,* see fig. 7.27. Could Petrarch have been correct? Really, the Scaligerian history doesn't know the location of the grave of the "ancient" Remus. Since this pyramid was built in the alleged XII century, q.v. in [138], page 41, it would be logical to assume that the "ancient" Remus couldn't have lived before the XII century A.D. – which is a far cry from the didactic dating of the VIII century B.C.

The real parochial Italian Rome of the XIV century surprised the poet greatly, since it strangely failed to concur with his a priori impressions based on the interpretation of the ancient texts which he considered correct. This most probably means that he had rejected other evidence contradicting this "novel" opinion. The gigantic Coliseum, for instance, proved to be the castle and the fortress of a mediaeval feudal clan, and the same fate befell such "ancient" constructions as the mausoleum of Adrian, the theatre of Marcellus, the arch of Septimius Severus, etc. Plainly speaking, all of the "ancient" buildings turned out to be mediaeval. This presents no contradiction to us; however, for Petrarch, who apparently already perceived Rome through the distorting prism of the erroneous chronology, this must have been extremely odd.

Apparently, we have thus managed to pick out the moment in the Middle Ages when the creation of the consensual erroneous version of the history of Italian Rome began. This couldn't have preceded the first half of the XIV century – although we should add that it is possible that all of these events occurred significantly later, namely, in the XVI-XVII century.

According to Jan Parandowski, "*Petrarch's arrival marks a new era in the assessment of the state of the great city's decline.* Petrarch had been the first person of the new era whose eyes *filled with tears* at the very sight of the destroyed columns, and at the very memory of the forgotten names" ([644]). Having wiped off the tears, Petrarch became quite industrious in what concerned the creation of the "true history" of the Italian Rome. He searched for statues, collected Roman medals, and tried to recreate the topography of Rome. Most of Petrarch's energy was however directed at finding and commenting on the oeuvres of the "ancient" authors. The list of books that he allegedly owned survived until our days, the list that he compiled himself in the alleged year of 1336 A.D., on the last page of the Latin codex that is now kept in the National Library of Paris. Whether or not Petrarch had been in the possession of the original works of the authors, remains unknown. The following names are mentioned in the list:

Horace, Ovid, Catullus, Propercius, Tibullus, Percius, Juvenal, Claudian, Ovid, the comedians Plautus and Terentius; the historians Titus Livy, Sallustius, Suetonius, Florus, Eutropius, Justin, Orosius, Valerius Maximus; the orators and philosophers Quintillian, Varro, Pliny, Apuleius, Aulus Gellius, Macrobius, Vitruvius, Marcian Capella, Pomponius Mela, Cassiodorus, Boetius. As well, the names of a large number of holy fathers are listed.

We ask the following questions:

Can we trust in Petrarch's ownership of these volumes?

How was the list dated?

Did Petrarch actually hold any of the oeuvres written by the abovementioned authors in his hands, or did he just collect the names?

Do we interpret Petrarch's statements correctly nowadays? After all, they reach us via a filter of the Scaligerian editors of the XVI-XVII century. We perceive them through the glass of a distorted chronology. Petrarch's letters are to be studied again, if they really are his and haven't been written or edited on his behalf a great while later. One also has to emphasize that Petrarch didn't specifically occupy himself with the dating of the texts he found. He was looking for the "works of the ancients" – apparently without questioning whether they preceded him by a hundred years, two hundred, or a thousand. Let's not forget that a hundred years, let alone three hundred, is a long period of time.

With the growth of his income, Petrarch *founded a*

special workshop with scribes and secretaries, which he often mentions in his letters. Everyone knew about his infatuation with collecting old books. He mentions it in every letter he writes to his every friend. "If you really value me, do as I tell you: find educated and trustworthy people, and let them rake through the bookcases of every scientist there is, clerical as well as secular" ([644]). *He pays for the findings bounteously.* And they keep coming to him from all directions. He makes some important discoveries himself – thus, in the alleged year of 1333 he finds two previously unknown speeches of Cicero's in Liège, and in 1334, Cicero's letters to Atticus, Quintus and Brutus in Verona ([927], [644]). Let us remind the reader that according to the mediaeval legends, *Cicero was a knight and a troubadour,* q.v. above.

"Petrarch had reasons for considering himself to be responsible for the *revival* of interest in the philosophical works and essays of the great Roman orator" ([927], pages 87-88). Petrarch wrote: "as soon as I see a monastery, I head that way in hope of finding some work by Cicero." The history of how he "discovered" the Cicero's lost tractate titled *De Gloria* is very odd indeed. Its existence became known from a letter to Atticus that is attributed to Cicero. Petrarch claimed that he had allegedly discovered this priceless manuscript, but gave it to his old friend Convenevola. Who is supposed to have *lost* it.

Nowadays Petrarch's endeavours are usually written about with great pathos:

"It had really been the first one of those glorious expeditions rich in discoveries that shall be undertaken by the humanists of the generations to follow, who have journeyed like Columbus… in their search for parchments gobbled by numerous rats" ([644]). Cicero's letters were allegedly discovered by Petrarch in the Chapter Library of Verona, where *no-one had been aware* of their existence. For some reason, *the original was soon lost by Petrarch, and he demonstrated a copy instead.*

R. I. Chlodowsky wrote that:

"Petrarch proved a naturally born philologist. He had been the first to study the oeuvres of the ancient Roman poets, comparing different copies and using data provided by the neighbouring historical sciences… It had been Petrarch the philologer who had destroyed the mediaeval legend of Virgil the mage and sorcerer, and accused the author of the *Aeneid* of a number of anachronisms; he had deprived Seneca of

several works that were ascribed to him in the Middle Ages, and proved the apocryphal character of Caesar's and Nero's letters, which had *a great political meaning* in the middle of the XIV century since *it gave authority to the Empire's claims for Austria*". ([927], pp. 88-89).

This is where the really important motives become clear to us – the ones that Petrarch may have been truly guided by in his "archaeological endeavours." These motives were political, as we have just explained. We have ourselves been witness to countless examples in contemporary history when "science" was used as basis for one political claim or another. This makes chronology largely irrelevant. However, today when the characters of that epoch have long left the stage, we must return to the issue of just how "preposterous" the letters of Caesar and Nero were, and what was "wrong" in the mediaeval legends of Virgil.

The poet's attitude to the ancient documents was far from critical analysis. Petrarch's declarations of "antiquity" may have been made for meeting the conditions of some political order of the Reformation epoch in Western Europe (the XVI-XVII century). The order had been made to create a dichotomy between "barbaric contemporaneity" and "beauteous antiquity". See CHRON6 for details. At any rate, one clearly sees that either Petrarch or someone else acting on his behalf was creating the mythical world of antiquity without bothering about the exact epoch when Cicero's speeches were written, and whether it had preceded that of Petrarch by 200 years, or 1400. It is possible that all of this activity really took place in the XVI-XVII century and not the XIV, during the Reformation in the Western Europe, and had archly been shifted into the XIV century and ascribed to Petrarch so that it would gain the "authority of antiquity." The reality of the XVI-XVII century, which Petrarch cites as the antithesis of "ancient civilization," was later baptized "feudal barbarism."

4.2. Petrarch's private correspondence with people considered "ancient characters" nowadays

We proceed to encounter facts that seem to defy all reason. Apparently, *Petrarch writes a letter to Titus Livy* ([644], [1340]). The commentators of today try to assure us that this *private letter* written by the me-

Fig. 7.28. A portrait of Petrarch (Plutarch?) from a book titled *De Remediis utriusque Fortunae* allegedly dating from 1388 (Milan, Italy). The commentary given by historians is as follows: "An initial to the first chapter of the first book with a portrait or Petrarch" ([1485], page 252). Taken from [1485], ill. 330.

Fig. 7.29. Another portrait of Petrarch (Plutarch?) from *De Remediis utriusque Fortunae* allegedly dating from 1388 (Milan, Italy). The historians tell us that we see "the beginning of the second book with a miniature depicting Petrarch over a bookrack in his studio" ([1485], page 252. Taken from [1485], ill. 331.

diaeval Petrarch to the "ancient" Titus Livy is but a manifestation of the poet's exalted imagination, since poets are supposed to be fantasy-prone in general. We are told that Petrarch communed with characters from the "distant past" as if they were his contemporaries. His letters to the heroes of the "distant past" are thus not to be taken literally. What is the truth here? Could such a letter simply mean that Petrarch and Titus Livy were contemporaries, and that the XIV century original had later been somewhat altered by the Scaligerian editors of the XVI-XVII century epoch in order to "sever" Livy from Petrarch and "send" the former into a distant epoch? Petrarch is supposed to have made remarks of great pathos, such as "O, why did destiny deny me life in your age… in my sweetest dreams I see myself living amongst these greatest of men, and not the thieves and rogues [sic! – A. F] that surround me nowadays" ([644]). And further on: "ancient studies have always been… a matter of great interest and importance to me, and I have pursued them with great zeal, for the time I live in had always seemed loathsome to me, and so… I have al-

ways wanted to have been born in any other age and forget about this one, and have always tried to let my soul live in different epochs" ([644]).

This letter to Titus Livy is far from being the only such example. Modern Petrarch scholars point out a peculiar facet of his epistolary legacy that they fail to comprehend. Petrarch wrote quite a few letters to his contemporaries, and it turns out that in his Latin correspondence he tried, as we are now being convinced, to *deliberately obfuscate mediaeval reality, referring to "antiquity" instead.* We proceed to learn that Petrarch used *ancient* names and nicknames – Socrates, Lelius, Olympius, Simonide, etc. His letters have an air of antiquity about them in the modern interpretation of the Scaligerian chronology. That is to say, he wrote as if he had "lived in the Classical Age." We are told nowadays that he deliberately Latinised his letters to make them seem explicitly ancient. He allegedly even *obscured* current events from sight, "dressing them in ancient garments".

We have the following comment to make. Apparently, the pages of Petrarch's letters, even after being

"caringly" edited in the XVI-XVII century, demonstrate to us the true epoch of the XIV century – which, as we see, was the "Classical Age" that the Scaligerian chronologers hastened to send into distant past. This makes their heirs of today resort to theories about Petrarch being *deliberate* in his attempts to make mediaeval contemporaneity "resemble antiquity." That is to say, he isn't supposed to be taken literally.

We shall summarize, reiterating that there had most probably been no false fronts here. Petrarch wrote letters to his contemporaries whose names were "ancient" because he and his colleagues were living in the "Classical Age," which may really have fallen on the first half of the XIV century or even later, and all the "ancient characters" bearing such names as Titus Livy, Socrates, Lelius, Olympius, etc. are Petrarch's *true contemporaries*. This point of view eliminates many "oddities" from his biography.

Furthermore, Petrarch wrote a series of biographies titled *The Lives of Famous Men.* This appears to be a kind of "repetition" of the work of the "ancient" Plutarch titled *Comparative Biographies.* One wonders whether Plutarch might have merely been a different name of Petrarch's? It is well known – see more on this in Chron5 – that the sounds "R" and "L" were often subject to flexion in old texts, which may have made the name of Plutarch sound like Prutarch, which sounds similar to the name Petrarch. Thus, Petrarch may well have gathered a doppelganger on the pages of the mediaeval chronicles, who was exiled into the distant past under the name of Plutarch.

Nearly all of Petrarch's heroes are to be found among the eminent statesmen of the "ancient" Republican Rome, namely, the "ancient" Junius Brutus, Horace Cocles, Camillus, Manlius Torquatus, Fabricius, Fabius Maximus, Cato the Elder, Scipio Africanus. Nowadays it is assumed that Petrarch's sources had been the works of Titus Livy, Suetonius, Justin, Florus, and Caesar. Is this really so? Could Petrarch – or Plutarch – have merely written a series of biographies of his *contemporaries*? In other words, all of the "ancient" characters listed above must have lived in the epoch of the XII-XVI century. And it was only much later that the Scaligerite editors of the XVI-XVII century raked through these mediaeval biographies, inserting remarks that transferred them into the distant past, which may have created an "ancient" reflection of the mediaeval Petrarch by the name of Plutarch.

Finally, we shall cite two portraits of Petrarch (or Plutarch?) from a mediaeval book allegedly dated at 1388 ([1485], pages 252-253), seen in figs. 7.28 and 7.29. It is therefore possible that more or less accurate graphical representations of the ancient "Plutarch" have reached our age.

5.
"ANCIENT" GREECE AND MEDIAEVAL GREECE OF THE XIII-XVI CENTURY

5.1. The history of the mediaeval Athens is supposed to be obscured by darkness up until the XVI century

In what concerns integrality, the history of mediaeval Greece has even got more problems than that of Italian Rome. Since Greek chronology is largely determined by the history of Athens, we shall give a brief account of the Athenian chronology without considering other Greek cities here. Let us consider the fundamental work of F. Gregorovius titled *The History of the City of Athens in the Middle Ages* ([195]), where many mediaeval documents on the history of Greece are collected. A propos, the "ancient" history of Greece lacks a source that would resemble the *History of the City* of Titus Livy in fundamentality and the span of time that it encompasses. This is why the Scaligerian history of Greece has to be reconstructed from a number of chaotic fragments that were put into a sequence via tying them to the Roman chronology ([195], [196]).

As is the case with the history of the absolute majority of "ancient" cities, the history of Athens is characterized by an "ancient" period of splendour and prosperity, and subsequent emergence into the mediaeval darkness that the city begins to come out of as late as the XV-XVI century – even later than the Italian Rome.

We shall begin with the most remarkable utterance of F. Gregorovius:

"In what concerns the actual city of Athens, its fate in this epoch [the Middle Ages – A. F.] is covered by such *impenetrable darkness* that it even led to the naissance of the horrendous opinion which does sound

Fig. 7.30. Parthenon in the Athenian Acropolis. Its XIX century condition. Taken from [304], Volume 1, page 150.

rather plausible, namely, that the city of Athens had *grown over with trees and weeds* between the VI and the X century, and ended up *burnt to the ground by the barbarians*. There is some firm evidence of the existence of Athens in the darkest era, but hardly anything can serve as *more surprising proof* of the city's *complete disappearance* from the historical horizon than the very fact that one has to *prove the actual existence* of what used to be one of the *greatest* cities in a country that is historical for the most part". ([195], page 41.)

This is coming from none other than F. Gregorovius, who tried to collect everything that was left from the mediaeval history of Athens in his work ([195]).

This amazing information about the fate of Athens in the Middle Ages had first been formulated with clarity by Falmerayer in the XIX century. In order to explain such an enigmatic "catastrophe" as the disappearance of the entire "splendorous ancient Greece," he suggested that the Avaro-Slavs had "slaughtered the entire populace of the ancient Greece" ([195], page 41). However, there are no documents whatsoever that would prove this "slaughter." ([195])

F. Gregorovius proceeds to tell us that:

"From the VII century and on Greece becomes so *unimportant for history* that the names of the Italian towns… are mentioned a lot more often by the Byzantine scribes than those of Corinth, Thebe, Sparta, or Athens. All of that notwithstanding, *there isn't a single word from any scribe that would mention the city of Athens conquered or destroyed by invaders*". ([195], page 42).

It is assumed that there is no information whatsoever about Athens in the period of the V-X century A.D. in the Scaligerian history. F. Gregorovius tells us that "the city [of Athens – A. F.] became desolate and poor, its naval supremacy and political life had become *as lacklustre as life in the entire Hellas*" ([195], pages 2-3). Also, "the foundation for the glory of the modern [mediaeval – A. F.] town is provided by honey-traders, and not sages… Sinesius *doesn't write a single word* about the famous monuments of the city in his letters from Athens" ([195], page 22). Most probably due to the fact that they haven't been built yet.

Also: "The twilight that engulfed Athens and Hellas grew ever dimmer… political life had become non-

Fig. 7.31. Parthenon in the Athenian Acropolis. Its modern century condition. Taken from [930], page 60.

existent, trade and industry hardly galvanized any Greek cities at all, except for the spry marketplace of Thessalonica" ([195], pages 26-27).

The famous "ancient" Parthenon amazingly turns out to be a mediaeval Christian church. See figs. 7.30 and 7.31. The historians try to "explain" this fact in the following way: "Blessed Virgin Mary already began

her victorious war for Athens with the ancient Pallas… The Athenians had built a splendid church [in the alleged X century – A. F.] having mounted this figure [of the Christian Holy Mother, Virgin Mary – A. F.] upon it and called it Athenaia" ([195], page 24). In other words, we are being told that Virgin Mary was baptized Athena!

Fig. 7.32. A reconstruction of the inner sanctum of the Parthenon with a statue of Athena by the "ancient" Phidias. The reconstruction was done by H. Ralender. Taken from [304], Volume 1, page 153.

Fig. 7.33. The "ancient" Athena from the Parthenon. According to the historians, this marble figurine that was discovered in Athens in 1880 "represents a copy from the colossal effigy of the goddess that used to stand in the Parthenon". Taken from [304], Volume 1, page 152.

Furthermore, the historians proceed to tell us that "oral tradition calls the figure of the Holy Mother Athenaia [Athena – A. F.]; this name later began to be used for referring to the "Panagia Atheniotisse" figure that had been revered highly in the mediaeval temple of Parthenon" ([195], page 25, also see fig. 7.32). Apart from finding that the *"ancient" Athena was identified with the Christian Holy Mother of God,* we find out that the *"ancient" Parthenon* had been built in the Middle Ages as a *Christian temple* dedicated to the *Christian Virgin Mary = Athena.* As we are now beginning to understand, Athena was just another name given to Virgin Mary. The classical "ancient" figure of Athena Parthenos, or the Athena of Parthenon, can be seen in fig. 7.33.

F. Gregorovius carries on: "The noblest of human cities *immersed into its darkest Byzantine age with utter hopelessness…* the New Rome on the Bosporus became to look at the fallen Greece, a former leader, with growing despise, as well as *the small provincial town of Athens*" ([195], pages 27-28).

Also:

"In what concerns the fate of the Athenian monuments – they have remained in obscurity for the most part… *for centuries the Greeks have wallowed in the ruins of their ancient history…* some of the most beautiful ancient constructions have tempted the Athenian Christians to *transform them into churches.* We know nothing of where the first transformation of an ancient Athenian temple into a Christian church occurred. *The history of the Athenian churches is extremely unclear*" ([195], pages 29-31).

The following is told about the "ancient" Parthenon: "The Christian religion had made *the holiest place of the ancient goddess* on the Acropolis [the temple of Parthenon – A. F.] *serve its ends* almost *without causing any harm* to it… the entire history of transformation of ancient beliefs and holy places into Christian ones knows *no other example of* such *easy* and *complete* transformation as Athena Pallas had to undergo in order to become the Christian Blessed Virgin Mary… the Athenian populace didn't even have to change the nicknames for its divine virgin protectrix, since *the Blessed Virgin Mary retained the ancient name of Parthenos*" ([195], page 31).

However, the hypnotic suggestion of the Scaligerian chronology is strong enough to restrain Grego-

rovius the historian from drawing any conclusions from the fact that the "ancient" Athena Pallas is identical to the Christian Mother of God, Virgin Mary. Let us draw this conclusion ourselves. We have really just been told that the history of "Classical" Greece and its "ancient" deities is but a reflection of the mediaeval Greek history of the XII-XVI century and its Christian deities.

As was the case in Italian Rome, many "ancient" temples in Athens were "turned into" Christian churches in the Middle Ages. In addition to this, the names of these mediaeval churches are "for some reason" exceptionally close to those of the "pagan shrines" that "occupied the sites of these churches" at some point in time. For example, "the Church of *St. Dimitrios*… became identified as the temple of *Demeter* [by modern archaeologists – A. F.]" ([195], page 34). This example is a most typical one ([195]).

We eventually find out that "the miraculous Erechteum temple was transformed into a *Christian church* during an age that remains unknown to us" ([195], pages 46-47). Apart from this, "*the entire Acropolis became a holy place of the Blessed Virgin Mary*" ([195], page 36). Documented history only seems to reflect the Parthenon starting as the temple of the Virgin Mary. All attempts at tracing its history further back run into considerable complications ([195]).

Mediaeval Athens only appears in the mediaeval arena after many centuries of presumed oblivion as a small Byzantine fortification "reconstructed" by Justinian in the alleged VI century A.D. on territory populated exclusively by the Avaro-Slavs ([195], pages 36-40). *There is not a single trace of the "ancient Hellenic Greeks" here*. Moreover, according to an old document allegedly dated from the X century A.D., the Avaro-Slavs had "made it [the Peloponnesus – A. F.] so alien to the Byzantine empire, that there is not a single Romaean bold enough to set foot there" ([195], pages 40-41).

We learn the following about the Athens of the alleged VI-VII century: "we have *no factual proof* about the existence of *either schools or public libraries* in Athens. The same obscurity covers the *mechanisms of civil rule* of the city of Athens in this epoch" ([195], p. 48).

Why did "Classical thought" evaporate from Greece? Where did the "Classical Greeks" go? Why had the famous "ancient" military naval potential of Athens disappeared? This potential was as a matter of fact "revived" in the XII-XIII century, the crusade epoch, as was the potential of the mediaeval Venice, or the "ancient" Phoenicia.

According to the documents, the Byzantine emperors who ruled Greece in the Middle Ages were far from persecuting sciences. There are no facts to indicate the existence of the Inquisition in Byzantium (([195])). The "closure" of the famous Academy in Athens occurred "without a sound," as Gregorovius tells us with some embarrassment in [195], Chapter III. There were no global military coups or genocides in this epoch, either.

It is significant that the very term "Hellenes" appears very late in documented history: "It is only in the XV century that Laonic Chacocondil of Athens gives his fellow countrymen the name of "Hellenes" [after the alleged centuries of oblivion – A. F.]" ([195], page 51).

One feels like asking the reasonable question of whether the Hellenes who originally inhabited Greece were really virtually wiped out by the Slavs, as the Scaligerian history tells us? Could it be instead that the Avaro-Slavs who lived there in the late Middle Ages became Hellenised? The theory of Slavs gradually taking over the "Classical Greeks" is based on nothing but guesses made by the Scaligerian chronology. On the other hand, Shafarik, the Byzantine historian of the alleged X century, explicitly states that "*nowadays almost all of Epirus and Hellas, as well as the Peloponnesus and Macedonia are populated by the Scythians and the Slavs*" ([195], page 54, also comment 5). F. Gregorovius adds that "due to the existence of such evidence from the part of the Byzantines, the population of the ancient Greek lands by the Slavs should be considered a historical fact" ([195], pages 54-55).

Slavic names for cities, rivers, mountains, etc. cover the entire history of mediaeval Greece in abundance – Volgasta, Goricy, Granicy, Krivicy, Glokhovy, Podagory, etc. ([195]). "The names of areas, rivers and mountains show that Elis, Arcadia and Laconia have been populated by the greatest amount of the Slavs" ([195], pages 57-58). It was only in the XVI-XVII century that the Graeco-Hellenic names started to appear, the ones declared extremely ancient in the XVII-XVIII century.

It was only afterwards, starting with the alleged VIII century A.D., that Constantinople began to grad-

ually take this faraway province in hand. "The country had to be conquered anew; Greece was treated as an enemy country" ([195], page 62). Empress Irene sent troops to Greece in the alleged year of 783. "Stauracius returned… with plenty of loot, as if he were coming back from a conquered land… *Neither Corinth, nor Thebe, nor Athens are even mentioned*" (ibid). In the alleged VIII century *Greece served as an exile for political criminals.*

It is only in the alleged VIII century A.D. that Greece enters the real political arena as a country of revolts and mixed populace that was Slavic for the most part ([195], pages 62-63). However, "after the fall of the empress Theophano, Athens, as well as the rest of Hellas, *leaves the historical scene to such an extent that one can barely find mention of the town's name anywhere*… The Slavs who have rooted themselves in Peloponnesus provided the Byzantines with the main reason to mingle in Greek affairs" ([195], page 66).

"In the middle of the [alleged – A. F.] X century, Hellas as well as Peloponnesus may have struck emperor Constantine as… countries that *fell into barbarism*; the Frankish conquerors of the XIII century have found *Slavic residents* in Morea" ([195], page 71). We keep moving forwards in time using the Scaligerian chronology of Greece, and continue to fail to encounter any substantive information about the country.

F. Gregorovius frankly writes the following about the Greece of the alleged VIII-X century:

"*Neither history, nor tradition break the silence that the fate of the glorious city is bathed in.* This quietude is so impenetrable that the historian that *looks for signs of life* [sic! – A. F.] of the famous city during the centuries in question *rejoices at the sight of the most exiguous pieces of information*, such as the mention of St. Luke visiting Athens in the hagiography of the thaumaturge". ([195], pages 74 and 76).

It is only as late as the XV century that Greece and Athens emerge from the "darkness." Greece gains special importance in the crusade epoch, beginning with the alleged XII-XIII century. Possessing a good haven in Piraeus, and being in league with Venice, Athens becomes the key city of the region ([195]). A propos, there are quite a few reasons to identify the mediaeval Venice with the "ancient" Phoenicia, q.v. in [904] and [908]. Athens broke the equilibrium that reigned in Greece by gaining prominence; Peloponnesus op-

posed such a swing in influence, which led to prolonged wars on the territory of Greece which the crusaders and the Normans took part in [195]. It is significant that this is the period of the Middle Ages in which falls the astronomical dating of the eclipse triad mentioned in the famous *History* by Thucydides – the work describing the "ancient" Peloponnesus wars. Nothing is known about the wars that broke out on the territory of Greece in the XII-XIII century according to the Scaligerian chronology.

An unimaginable scantiness of information on mediaeval Greece is most probably explained by the fact that many of the principal mediaeval sources of the epoch, such as the works of Thucydides, Xenophon, etc. have been arbitrarily transferred into "antiquity" by the Scaligerian chronology. The mediaeval history of XI-XV century Greece thus became covered in "blind spots," gaping abysses and "dark ages."

It is important that "*the chronological dates in Greece are only given in the Christian era starting with 1600* [sic! – A. F.], and in decimal (Arabic) notation at that" ([195], pages 100-101). We have thus been told that the modern chronological system only began to function in Greece as recently as the *seventeenth* century of the new era.

Rather meagre chronological landmarks provide us with very little data, as it turns out. F. Gregorovius notes that:

"The effect that time and the weather had on these *scarce inscriptions* had made their interpretation considerably harder… *they fail to do so much as shed light on the history of the city of Athens in the Christian epoch*… The historian researching the mediaeval past of the city of Rome is in a much better situation is this respect [we have mentioned the problems of Roman chronology already – A. F.]… The chronicle of the dead carved in stone is *altogether absent* in Athens". ([195], page 101).

"Unlike Rome, we encounter no marble effigies of dead bishops and monastery priors, senators, judges and citizens in Athens; *a few tombstones, a sarcophagus or two without any statues at all, and a few inscriptions comprise all of the relics of times gone by to remain in Athens*" ([195], page 101). As well as a few "ancient ruins" to boot.

There are several contradictory versions concerning Athens in the XII-XIV century in the Scaligerian

history, each of which assesses the role of the city differently. According to one of them, it was still covered in *impenetrable darkness* as well as the rest of Greece ([195]). Another version has it that this is the period when Athens gradually began to gain prominence as a large cultural centre. The English chronicler Matthew Paris informs us that in 1202 several Greek philosophers who had allegedly reappeared in Athens after many centuries of oblivion, arrived in the English court and engaged in theological dispute ([195], page 111). Later on English scientists, among others, studied in Athens (*ibid*).

5.2. Greece and the Crusades

Crusades have not just been great religious and military endeavours – they have also had stupendous secular importance. The "Latin crusade," for instance, was initiated not just by Innocent III, but also by the Europeans who possessed great secular power as well – including the French, the Belgians and the Germans ([195]). Among the initiators were such names as Count Baldwin of Flandres, Geoffrey of Villehardouin, Marshal of Champagne, Count Hugues de Saint Paul, Louis de Blois and many others. All of them have been the top ranking members of European aristocracy ([195], page 129). The crusades were transformed utterly – from a holy endeavour into one of the most secular events of the Middle Ages.

The crusades created a mosaic of feudal states in the territory of Greece. The role of the mediaeval Latin states in Greece is usually assessed as largely negative in the Scaligerian history ([195]). On the one hand, it is considered that the barbaric and ignorant conquerors buried the great "ancient" legacy of Greece. On the other hand, the same F. Gregorovius who had just accused the crusaders of barbarism, makes the sudden statement that "it is to the Latins that it [Greece – A. F.] owes the discovery of contemporary history – which, however, turned out almost just as farraginous as that of antiquity" ([195], page 138).

Since the Republic of St. Mark, for instance, proved unable to take possession of the entirety of the Greek lands, it offered them to its noblemen to divide between themselves as inheritable fiefs ([195], page 150). These events may have reflected in Russian history as the difficulties encountered by the imperial admin-

istration during the divide of the vast lands of Novgorod and the trophies brought back by the Russian army in the XV century under Ivan III The Terrible. See more about this in CHRON6.

"The Venetian noblemen have longed for adventure, and set forth to sail the Greek seas fancying themselves as the Argonauts of the XIII century" ([195], page 150). These mediaeval journeys may have provided the basis for the subsequent "Classical Greek" Argonaut myth poetized by the "ancient" blind Homer. This is the conclusion that one comes to after a study of the global chronological map of chronological shifts, q.v. above.

It is important that the history of the Frankish state in the territory of mediaeval Greece is only known to the Scaligerian history of the XII-XV century with lots of gaps and blind spots due to the "insufficiency of historical documentation" ([195], page 158). The only thing that's known is that "Feudalism… was powerful, and could create a viable… and durable state" ([195], page 158). According to F. Gregorovius, "that was the time when tales and legends became reality" ([195], page 164). This must have been the mediaeval epoch when "ancient" Greece flourished. Many "ancient Greek events" are thus mediaeval occurrences that took place in the Balkans, in particular, in the territory of Bulgaria.

"The princely court of Geoffrey II of Villehardouin… possessed the reputation of a school for exquisite manners" ([195], pages 167, 182). Genoese traders settled in Thebe and in Athens, and came to compete fruitfully with their Venetian colleagues ([195], page 184). Literature and the arts flourished as well; however, according to the Scaligerian history, nothing reached our age ([195]). Our version is that all of this was thrown back into "antiquity."

Nowadays it is considered that the title of the Duke of Athens had *first* been introduced during the mediaeval Frankish rule in Greece. On the other hand, according to the Scaligerian history, *this very title* had existed in "antiquity" as well ([195], pages 188, comments 4 and 5).

It is likely that the next heyday of "ancient" Greece and the Balkans falls in the epoch of the XV-XVI century after the fall of the Byzantine Empire in 1453, as a result of its being conquered by the Ottomans = Atamans. However, let us get back to the Frankish epoch.

The historian Ramon Muntaner, a contemporary

of Dante's, relates the following fact, apparently being perfectly unaware that it contradicts the Scaligerian history blatantly. However, the latter came into existence after Muntaner's age, in the XVI-XVII century. "One of the Trojan outposts had been located on Cape Atraki in Asia Minor, near Isle Tenedos, a place that the nobility of Romania… made frequent pilgrimages to… for the adoration of the divine effigy. One day *Helen, the wife of the Duke of Athens* went there guarded by a hundred knights. *Paris, the son of the Trojan king, noted her*, killed all of the knights in the hundred, and *abducted the beautiful duchess*" ([195], page 188, comment 6). Thus, the mediaeval chronographers have been of a significantly different opinion on what concerned "ancient" events and their chronology, than Scaliger and his adherents.

If we turn our attention to the chronological map on fig. 6.43 in Chron1, Chapter 6, we shall see that the mediaeval prototype of the Trojan war falls in the middle of the XIII century a.d. Which means that Muntaner was perfectly right in his relating the events of the Trojan war as occurrences of the epoch of *knights and dukes.*

"The condition of the Frankish states in the early XV century Greece can be described as favourable in general" ([195], page 188, comment 34). One shouldn't imagine this epoch as a period of constant wars and military campaigns. Peace reigned for most of the time, and trade flourished. "The Latins must have felt… safe in Greece; a splendid knightly life evolved, which can be proved… by the existence of a parliament… in May 1305, in Corinth… on the isthmus where *in ancient times the Games of Poseidon took place in the holy pine grove… the knights now engaged in jousts, dedicating their deeds of bravery to beautiful women*… the clamorous festivities lasted for twenty days" ([195], page 188, comment 34).

It is significant that the Frankish barons "adorned their constructions with *Greek* [sic! – A. F.] inscriptions" ([195], pages 204-205). Some of them may have been declared "extremely old" nowadays. The Scaligerian historians themselves point out the numerous parallels between the "ancient" and the "mediaeval" events in Greece. F. Gregorovius, for instance, mentions the well-known battle at Cephissus dated as 15 March of the alleged year 1311 a.d. It is described in practically the same words in both the mediaeval sources of the

XIV century and the "ancient" biography of Emperor Sulla written by the "ancient" Plutarch (Petrarch?). Nowadays both Sulla and Plutarch are dated as belonging to "days long gone." However, both the "ancient" and the mediaeval descriptions of the battle are practically identical: the geographical localization of the battle, the opposing sides, and the victor ([195]). F. Gregorovius cannot help noticing the parallel here: "The banks of Cephissus saw the recurrence of the fate of the troops of Mithridates which had once been chased into these very swamps by Sulla" ([195], page 198). Let us point out that this parallelism concurs fully with the global chronological map falling into the sum of the three shifts.

The Frankish states in the territory of XII-XIV century Greece may be (at least) a partial reflection of the *Ottoman* states of the XV-XVI century that appeared in Greece and the Balkans after the fall of Constantinople in 1453 and the birth of the Ottoman = Ataman Empire. "Greek antiquity" may have similar Ottoman-Balkan roots going back to the epoch of the XV-XVI century.

It is significant that the history of the Frankish states in the territory of Greece hadn't been studied until the XIX century. According to W. Miller, "these archives only provide us with a skeleton of the romantic drama that Greece served as theatre for during 250 years [in the alleged XIII-XV century – A. F.], the one where the leading roles were played by a motley crowd of Burgundian nobility as well as German knights, the Catalonian filibusters… the Florentine plutocrats… and, finally, the princesses and noblewomen from the oldest families of France" ([1274], quoted in [544], Volume 4, page 750).

We are further told that in the XII century the "ancient" Parthenon functions as a Latin temple of the Athenian *Virgin Mary, "as if it had just been built"* ([1274], page 16, quoted in [544], Volume 4, page 805). The famous XIII century statue of the *Catholic Virgin Mary* stands in the mediaeval Parthenon as if playing the role of the duplicate [!] of the famous "ancient" statue depicting the pagan "Virgin of Athens by Phidias" (see figs 7.32 and 7.33), whose loss is lamented greatly by the Scaligerian history ([544], Volume 4, page 806).

Modern historians are of the opinion that "in 1460 Muslim rulers added a *prayer-tower* to the Parthenon,

Fig. 7.34. The general view of the reconstruction of the "ancient" Athenian Acropolis. The reconstruction was performed by H. Ralender from the surviving ruins. Taken from [304], Volume 1, pages 148-149.

turning the ancient temple of Athena Pallas *into a mosque*" ([198], page 14). However, as we are beginning to understand nowadays, it is possible that the Parthenon had originally been a Christian temple where the elements that were subsequently separated and declared exclusively Muslim, Orthodox, or Catholic, still existed in fusion with each other. Thus, a high belfry may well have been baptized the "minaret of the Parthenon."

Another "ancient" temple that was active in the XIII century – also seemingly built only recently – was dedicated to the Holy Mother of God, and is called "the ancient Erechtheion Temple" nowadays ([1274], page 17, quoted in [544], Volume 4, page 807).

The same XIII century sees the temple of St. George, which is called "the ancient temple of Theseus," operational and active. Its "doubtless antiquity" had been estimated as recently as the XVII century ([1274], page 17, quoted in [544], Volume 4, page 807).

The entire Athenian Acropolis is perfectly functional in the XIII century as an active fortress protecting Athens. In fig. 7.34 one sees a later theoretical reconstruction of the Acropolis performed by H. Ralander. It was relatively recently that the fortress has been declared "extremely ancient." The ruins of the Acropolis can be seen in fig. 7.35 the way they were in the XIX century. See similar examples in [1274] and [544], Volume 4.

F. Gregorovius tells us that "The famous Byzantine George Gemisto (Pleton) – the ancient Hellene born again… the fantastical admirer of the ancient gods – lived at the court of Theodore II" ([195], pages 308-309).

According to the historians, that was the time when the "concept of Hellenism" came to existence, whose main goal was the unification of the mediaeval Greeks against the Ottoman = Ataman conquerors ([195]).

Fig. 7.35. General view of the ruins of the Athenian Acropolis from its southern side. Its XIX century condition. Taken from [304], Volume 1, page 160.

We are also told that "The total absence… of foreign chroniclers in Athens and Hellas in general is most woeful indeed. Since the Byzantine chronographers didn't consider the Hellenic history worthy of attention, the Hellenes were the only one that their descendants could turn to for this kind of information" ([195], page 326).

We also find out that the genesis of "ancient" Greek history can be traced to Florence of the alleged XIV century. "The Strozzi and the Medici… have been philhellenes, they have invested their riches into… Greek literary studies… Cosimo conceived of the plan to revive the academy of Plato in Arno" ([195], page 330). The head of this undertaking was *Pleton*, the double of the "ancient" Plato in both name and occupation (see CHRON1, Chapter 1). It is assumed that the propagation of "ancient" Greek literature across Europe started in Florence.

5.3. The history of Greek and Athenian archaeology is relatively short

Archaeology first came to Athens in 1447 – the XV century! Furthermore, there is hardly any information left in what concerns those "origins." In the XV century Ciriaco d'Ancona arrived in the city. He is also known as Ciriaco de Pizzicolli nowadays ([198], page 14). He was the first to "introduce Western science into the world of the Athenian ruins… he thus occupies an honorific place" ([195], page 331). He created the *first* catalogue of inscriptions and local monument names. *However, these documents perished* ([195], page 339). Modern historians are only familiar with the data obtained by Ciriaco *from paraphrases done by later authors of the XV-XVII century.* "The notebooks [of Ciriaco – A. F.] were *destroyed in a blaze* in 1514, as it is assumed. There is

only one fragment that is written by his own hand" ([198], page 14).

F. Gregorovius tells us the following: "After the passage of some time, the initial names of most Athenian monuments have been forgotten… the fantasy of certain archaists… tried to link them to the names of great men of the past" ([195], pages 340-342).

The ruins of the "ancient" Olympion used to be called a *basilica* in the Middle Ages, since, according to F. Gregorovius, "*nobody knew* [sic! – A. F.] that these were the ruins of the famous Olympian temple. Ciriaco calls this colossal wreck… the palace of Adrian, *as the Athenians did*" ([195], pages 340-342). The latter apparently were wrong; only the historians of the subsequent generations managed to "learn the truth" and "correct" the allegedly ignorant inhabitants of mediaeval Athens.

Gregorovius also tells us that "as early as 1672 Babine had no idea as to the correct location of the Temple of Zeus in Athens… in a few years… Spone would be similarly confused… The Stoa ruins were fancied as the palaces of Themistocles or Pericles; the walls of the Odeon of Herod Atticus – as the palace of Milthiades, the ruins of other *unidentified* buildings – as the residences of Solon, Thucydides, and Alcmeones.

As early as 1647… Pointel was shown the ancient ruins of the palace of Pericles; the tower of the winds was called the tomb of Socrates. The memories of Demosthenes were associated with the monument to Lisicrates… this monument of the choir patrons… was called… the Lamp of Demosthenes…

The Academy, the Lycaeum, Stoa, and the Epicurean gardens… were gone without a trace. In the times of Ciriaco, some group of basilicae, or large ruins, was called "Academy"; nowadays, this site is impossible to locate…

Plato's "didascalion" in "the garden" had also been shown; it may have been a tower in the Ampelokipi gardens… there were legends about the schools of a certain Caisarini on this hill… the Lycaeum or the Didascalion of Aristotle would be located in the ruins of the Dionysian theatre…

Stoa and the Epicurean School have been *moved* as far as the Acropolis, to the large buildings that *possibly* constitute part of the Propylaea, and the Nike temple… had *seemingly been taken for*… the school of Pythagoras.

To the West of the Acropolis the school of the Cynics was shown, as well as the school of the Thespians that *wound up in its vicinity in defiance of all comprehension*. The ruins by Kalliroe *turned out to be* the remnants of the scene of Aristophanes." ([195], pages 340-342)

We shall cease with quoting. This list goes on for several pages. The general picture of *archaeological chaos* and confusion in the history of Athens is perfectly clear. And all of this happens *in the XVI-XVII century A.D.*

Byzantium fell in 1453. The last of the Franks defended the Acropolis for some time; however, the Ottoman warlord Omar, infuriated by the resistance of this stronghold, ordered the Acropolis and its environs *to be shelled* (!), which resulted in the demolition of the Acropolis, its temples, etc. [195]. This powerful destruction, which claimed many beautiful monuments of the XIII-XV century, created many ruins in the territory of Athens that have subsequently been declared "ancient" – see figs. 7.30, 7.31, and 7.35.

After the Ottoman conquest in the XV century Athens become *obscured by darkness* yet again. "The historian studying Athens and Greece in the period of Turkish rule has *as formidable a task before him as it is mirthless*. What he sees before himself is a *desert*" ([195], page 362). It is possible that the XV-XVI century documents describing the events in Greece and the Balkans, which belonged to the Ottoman empire in the XV-XVI century, were destroyed after the defeat of the Ottomans and their withdrawal from the Balkans. The Ottoman period in the history of Greece thus became immersed in utter obscurity.

"The West… had become reconciled to the decline of Greece, and *had almost completely forgotten it*… Already in 1493 a German humanist had considered it sufficient to make the following passing remark in his chronicle: "the city of Athens used to be the most glorious one in all of Attica; only a few traces of its existence remain"" ([195], pages 364-365).

Finally, towards the end of the XVI century, "the need of the scientists for possessing veracious and exact information about the fate of the splendorous town could be formulated by just one question, that of *whether Athens still existed*. The person to ask this question was Martin Kraus, a German philhellene… this is how his name became *immortalized*. Martin

Crusius… *rediscovered* Athens. In 1573 he had written a letter to Theodosius Zygomalas, the chancellor of the Patriarch of Constantinople, asking him to tell whether the mother of all knowledge had indeed reached complete decline, as German historians claimed; whether the great city of Athens could really have *vanished* and whether it were true that *nothing remained of it* but *a few fishermen's huts* standing on its former site.

The answer of the illuminated Byzantine, together with the letter from the Akarnan Simeon Cabasilas that followed… proved *the first exact information* that reassured the German scientist in what concerned the city's existence; it was *the first dim light* shed on its monuments and their condition, as well as the *obscure vegetation of its inhabitants*". ([195], pages 364-366).

Obscure vegetation or not, the inhabitants, according to the Scaligerian history, still kept the tradition that the Parthenon had been built by the "ancient" architects Ictinus and Kallicrates in the time of the famous orator and warlord Pericles, the leader of the democratic party that had allegedly originated in Athens as early as the V century B.C., and expired of the plague together with its dux in the alleged year 429 B.C. However, the month when this is supposed to have happened remains unknown.

All knowledge of "ancient Greece" remained rudimentary up until the beginning of the XVII century. In 1607, for instance, the **Geographical Atlas** of H. Mercator and J. Hondius was published. It contained a map of Greece, with the following written on its reverse, among other things: "Back in the days of yore Athens gave the world well-educated scientists who wrote books on all subjects of all sciences, which were kept in Athenian libraries, public and private. However, nowadays *no one in either Greece or any other barbaric country studies or even understands belles letters and science*. It is *impossible* to find a town that would have an academy… the people of Greece remember *nothing* of their history nowadays" ([90], page 71).

Scientific Athenian archaeology developed *as late as the middle of the XVII century* – that is to say, when the Scaligerian chronology had already been in existence. Archaeology first reached Athens by the agency of the Dutchman Jaan de Maer ([195], page 366). Nevertheless, "as late as 1835, a German scientist… had voiced the opinion that after Justinian, Athens had been a *wasteland* for four centuries. In comparison to the Roman studies, the archaeology of Athens was about *two centuries late*…

Only immediate acquaintance with the matter could destroy the superstition *that Athens didn't exist anymore*, which was rather widespread in Europe: the French Jesuits and Capuchins are to be credited for it, since they were the first to come to Athens in 1645." ([195], pages 364-66)

In the second half of the XVII century, the French monks drew the first (!) plans of the city. That was the moment when the uninterrupted and more or less scientific studies of Athens really began. This happened in the environment where the Scaligerian chronology had already existed for the most part; therefore, the historians of the XVII-XVIII century who began the reconstructions of Greek history based their research on the Roman chronology, ipso facto distorting the history of Greece.

5.4. The tendentious distortion of the image of mediaeval Athens in the "restoration works" of the XIX-XX century

Let us now divert our attention to the moment in the XIX century when the Europeans had achieved a hard and final victory over the Ottomans, and come to the territory of Greece in general and Athens in particular. One would wonder what they saw, in the Athenian Acropolis, for instance? They witnessed the most natural things of all. It turned out that Athens (including the Acropolis) had been full of *Ottoman buildings, towers and temples.* Many of them were damaged in the Ottoman wars of the XVII-XVIII century. For instance, we are nowadays told that "when war broke out between Venice and the Ottoman empire, a shell from a cannon hit the Parthenon, where the Turks kept their ammunition. It detonated, and many of Phidias' sculptures were shattered" ([198], page 19).

However, it isn't exclusively the Ottomans who are portrayed as culprits responsible for the majority of destructions that occurred in the territory of Greece. Lord Elgin, for instance (fig. 7.36), and the Italian painter Lusieri, who headed the International Commission for the Restoration of Athens, uttered loud public lamentations about "the state of the surviving

statues being truly deplorable… which is to be blamed on the *Turkish garrison* of the Acropolis; some of the Statues were *smashed to bits* by the Ottomans for the production of shells [? – A. F.]. The actual ancient Parthenon remained untouched for the most part even after the explosion of 1687, and was baptised 'the ancient idol temple' by the Turks, who had periodically ransacked it in search of lead" ([198], page 19). That is to say, the benevolent and righteous West Europeans have gone out of their way in order to keep the "ancient" Greek masterpieces for posterity – masterpieces which, as we are beginning to understand, were created there by none other but the Ottomans in the "Mongolian" period of the XIV-XVI century.

Modern accusations of the Ottomans that incriminate them in a total destruction of Greece are hardly wholly justified. Some of the destructions may have occurred during the Ottoman = Ataman conquest of the XV-XVI century, of course; however, a lot had obviously perished in the "liberation wars" against the Ottomans in the XVII-XVIII century. As we have already learnt, *the famous Parthenon, for instance, had been destroyed by the Venetians, and not the Ottomans* (see above and in [198], pages 15-16).

Let us now regard the preservation of the ancient legacy of the past in the interpretation of the civilized XIX century West Europeans. Having thrown a cursory glance over the Acropolis, for instance, they would claim with absolute certainty that some of the constructions had doubtlessly been "ancient Greek" –and the others, ugly, barbaric-Ottoman. Nowadays we possess no knowledge of just how the noble lords and dainty artists separated "antiquity" from the Middle Ages. Most probably, their judgement was quite simple. Everything that bore visible signs of Christianity or Islam was declared a distortion of the classical city of Athens. The belfries, minarets, Christian crosses, Ottoman crescents, Slavic and Arabic inscriptions, "irregular" sepulchres, etc. were clearly "travesties." Everything else was confidently declared "ancient."

After the separation of the "untainted" buildings from the "corrupt" ones, the second stage soon commenced. The buildings that could be authoritatively declared priceless, Greek, and ancient would naturally have to be preserved for posterity, to serve as tourist attractions for everyone in the whole world. As for

Fig. 7.36. A portrait of Lord Elgin. Modern historians say the following about this picture: "the nonchalant posture of the young lord is filled with self-assurance which had allowed him to claim some of the greatest treasures of Greece as his own – primarily, the sculptures from the Parthenon and some other constructions from the Acropolis – and ship them to England. His Lordship was ailing greatly sometime later, having become covered with sores (possibly as a result of treating syphilis with mercurials) and lost his nose almost entirely. He became so ill-looking that the very sight of him invoked pity" ([198], page 19).

the ugly and preposterous Ottoman constructions – those were to be blown up immediately so as not to spoil the refined classical shapes of antiquity revived.

In the XIX century, a wave of the noblest destructions archly dubbed "restorations" swept over the entire Acropolis. Incidentally, "Heinrich *Schliemann, the discoverer of Troy*, had been among the numerous restorers [of Athens – A. F.]… He *financed the demolition* of the 21 metre tall tower built on the site of the Propylaea in the Middle Ages since *he had understood that the tower distorted the harmonious outline* of the entire Acropolis" ([198], page 99). We shall give a detailed account of Schliemann's actual "dis-

Fig. 7.37. A rare photograph of the Parthenon's environs dating from 1869. It is reported that this territory had already been "slightly cleared" from the Ottoman buildings ([198], page 34). However, one can still observe the last Ottoman tower on the right. Taken from [198], pages 34-35.

Fig. 7.38. A close-in of a photograph dating from 1869. A mediaeval tower can be seen in the distance, to the right from the Parthenon. It isn't there today, since the Western European restorers were forethoughtful enough to demolish it. Taken from [198], page 35.

Fig. 7.39. A rare photograph dating from the 1860's. This part of the Acropolis owes its condition to the destruction of the Ottoman=Ataman bastions that once stood here ([198], page 38). One sees the fundament of the Athena Nike temple and the mediaeval tower behind it, whose demolition occurred somewhat later. There isn't so much as a trace of the Ottoman tower nowadays. Taken from [198], pages 38-39.

Fig. 7.40. A close-in of a fragment of an old photograph dating from the 1860's. It is clearly visible that the mediaeval Ottoman tower and the "ancient" foundation of the Athena Nike temple have identical masonry and are built of the same kind of stone. These constructions obviously belong to the same epoch. Taken from [198], page 39.

covery" of Troy, and tell the reader what exactly it was that he had unearthed, in CHRON2.

And so it came to pass that the Ottoman buildings, towers and other constructions were destroyed on a great scale, zealously, and with the feeling of total impunity, primarily in Athens. Some of the rarest photographs reflecting the state of the Acropolis in the XIX century are still in existence, and they can show us the final stages of this "scientific restoration." In fig. 7.37 we can see a panoramic photograph of the Parthenon's environs in 1869. The commentary given by historians is as follows: "On the landscape snapshot made by Stillman in 1869 we can see the Parthenon in the Acropolis with only a small part of the Turkish dwellings, which have covered the ancient relic from top to bottom, cleared away. The restoration of the temple and the methodical liquidation of ground layers had not yet begun" ([198], page 34).

As we understand nowadays, a lot had been demolished before that, and therefore couldn't be photographed. However, we can see a tall Ottoman tower on this old photograph, to the right of the Parthenon. Nowadays it doesn't exist anymore. The restorers had destroyed it after 1869 in order to keep the classical landscape with its harmony of lines, as we are told nowadays. Other vulgar Ottoman fortifications have also been destroyed, q.v. below.

Another valuable photograph of the 1860s can be seen in fig. 7.39. The historians comment as follows: "the foundation of the small temple of Athena Nike (top right-hand corner on the right photograph) was only unearthed in 1835, when *the Turkish bastion had been destroyed*. The square mediaeval tower behind the temple *would be demolished in 1875, in order to reconstruct the ancient image of this part of town*" ([198], page 38).

However, the close-up of a fragment of the photograph that can be seen in fig. 7.40 makes it plainly visible that the masonry of the mediaeval tower is identical to that of the "ancient" temple foundation. One gets the idea that all of this was erected around the same time by the same masters who had used similar construction materials – around the XV-XVI century. Why would the Ottoman tower have to be demolished then, and the foundation of the nearby temple left intact? One would think it needed to be pulled down as well, since it was just as mediaeval as

the tower. Apparently, the sole reason for this was the existence of some columns upon the mediaeval foundation, which were simply declared "ancient" and classical ipse dixit.

Furthermore, the demolition of the Ottoman tower had been an absolute necessity, since its proximity to the "ancient" foundation with identical masonry posed a danger for the Scaligerian history. Any unprejudiced observer would have the right to ask the historians about the difference between the mediaeval constructions and the ancient ones, and they would have nothing to say in reply.

After the destruction of all the buildings that had obvious mediaeval, Christian, or Ottoman indicia, the ones remaining could not be compared to anything anymore. All the dangerous questions became impossible when the debris of the Ottoman buildings and fortifications had been pulled away. The old photographs of these parts aren't really available to that many people. The German, English and French restorers ([198]) were thus certain of their impunity, and didn't have to worry about anyone asking them the reasons why the "ancient" and the mediaeval buildings were made of the same stone and in a similar manner.

A few years later the Athenian guides have all started to assure the tourists that the city has "always been like this." It isn't difficult to understand the guides, since that was how the historians had taught them.

The scale of the "restoration works" in Athens was truly impressive. In figs. 7.41 and 7.42 one can see another rare old photograph taken in 1865. The comment of the historians is as follows: "on this snapshot of the Acropolis made in 1865 one can observe the uneven trenches going from top to bottom that remained *after the Turkish buildings had been pulled down and shipped away*. The Propylaea and *the mediaeval tower that hadn't been demolished yet* can be seen on the left" ([198], page 40). In fig. 7.43 we see a close-up of a photograph fragment showing this mediaeval Ottoman construction that was pulled down shortly afterwards.

We also came across a photograph of the Athenian Acropolis taken in 1896 during the Olympic Games in Athens (see fig. 7.44). One still sees the tall Ottoman tower on it, *rising higher than the Parthenon*. This means there were still many remnants of Ottoman buildings in the Acropolis towards the end of the XIX century, and considerable ones at that.

Fig. 7.41. A rare photograph of the Acropolis dating from 1865. One sees the aftermath of the demolition of a large number of Ottoman buildings. Great piles of stone and rubble flow over the walls of the fortress in some places. One sees the mediaeval tower, still intact, on the left. Taken from [198], pages 40-41.

Fig. 7.42. A close-in of a photograph dating from 1865. We see the Propylaea, and an Ottoman fortification next to it, as well as piles of rubble from the buildings demolished by the caring restorers. Taken from [198], page 40.

Fig. 7.43. A close-in of a photograph dating from 1865. The mediaeval Ottoman tower clearly belonged to the same group of buildings as the Propylaea. Nevertheless, it hadn't survived to our day. Taken from [198], page 40.

In fig. 7.45 we can see a modern bird's-eye view of the Acropolis. It is plainly visible that the entire surface of the rock had once been occupied by buildings of some sort. Only the remnants of their foundations remain. The "restorers" of the XIX century have left nothing but a few buildings intact – the ones they declared "ancient" – namely, the Parthenon, the Propylaea, and some others. The remaining, and clearly predominant, part of the constructions obviously failed to satisfy them – most probably due to their indisputably mediaeval or Ottoman origins. They have been nonchalantly demolished and taken away. The landscape contours became harmonic, according to the frank and somewhat cynical statement made by Schliemann ([198], page 99). The remnants of the foundations were, with some foresight, left intact, since these silent stones barely seen above the ground couldn't tell anything to anyone anymore, and were declared "very old indeed" on the spot. The awed tourists have been visiting them ever since the end of the XIX century. They would be told that the great Plato used to sit and meditate on "this very stone," whereas the legendary Demosthenes would deliver his inspired orations standing on another one nearby. The tourists posture happily, and take countless photographs.

The tendentious "restoration" of Athens continued well into the XX century. "The Acropolis *only* assumed its modern world-famous shape *after* the Greek engineer Nikolaos Balanos had started his work here in the late XIX and early XX century" ([198], page 99). He had done a great body of work; however, we learn that his "reconstruction" of the Parthenon, for instance, had very little to do with the original image of the temple. "Thanks to Balanos, Parthenon had regained its primary shape by 1933, to the extent feasible by that time, and began to look the way it had *presumably* 250 years ago, although the opinions of the scientists as to whether such an achievement should be commendable were *polarized.* As early as 1922, Anastasios Orlandos, the personal assistant of Balanos, had *protested against the reconstruction of the colonnade*… and publicly ceased all relations with his superior. Others have accused Balanos of wanting to *build* [and not reconstruct – A. F.] an imposing evidence of the glory of the Periclean Athens, *not caring too much about the information concerning the true shape of the temple.*

Fig. 7.44. A picture taken from 1896 depicting the subsequently demolished Ottoman tower on the Acropolis. *It was taller than the Parthenon.* Taken from [340], page 40.

What Balanos had really done was to use the first pieces of marble he could find for the reconstruction, *without paying much attention to the original locations of the stones*. Furthermore, if the shape of the fragments failed to satisfy him, Balanos *would cut them the way he needed* so that they would fit his master plan" ([198], page 104). As we can see, Balanos basically built the surviving fragments of the Parthenon anew, guided by his subjective concept of "antiquity."

There is good evidence of the blatantly tendentious "reconstruction" of the Acropolis by Balanos, who had based his work on the Scaligerian chronology. Exempli gratia, he thought it a travesty to reconstruct the parts of the Parthenon that the historians had considered a Moslem mosque ([198]). Everything is perfectly clear. The Scaligerian chronology considers it a crime to so much as assume that *the Parthenon had originally been a Christian temple, and was subsequently transformed into a mosque.* All the evidence of the Parthenon having served as a Christian or

Fig. 7.45. A modern view overlooking the Acropolis. It is plainly observable that the "ancient" buildings left intact by the restorers comprise a visible minority of the entire architectural group that had occupied the entire top of the rock in the Ottoman epoch. Apparently, most of the buildings were too obviously Christian, dating from the XV-XVI centuries. This is why they had to be demolished "so that the ancient landscape could be restored". Taken from [198], pages 100-101.

Islamic temple that we cite above is declared to be a result of its "barbaric reconstruction in the Dark Ages" by modern historians.

However, nowadays we may be seeing the signs of changes for the better. A couple of years ago, the eminent architect Manolis Korres, who took charge of the Parthenon's restoration, declared his intention to reconstruct the "Parthenon mosque." It is needless to say that he immediately faced strong opposition on the part of the historians. It is said that "the greatest debates arose in regard to the plans of Korres to keep the relics of some of the changes done to the Parthenon over the many centuries. For instance, he intends *to make the Muslim mosque erected inside the temple partially visible*" ([198], page 102). As far as we know, the attempts of Korres to make the Parthenon

look the way it did in the XIV-XVI century, even partially, haven't led to anything as to yet.

We shall conclude with a minor, but most edifying example which clearly demonstrates that many of the modern "restorations" are to be treated with caution. In fig. 7.46 we can see the famous composition depicting Laocoon that was "found near Rome during the Renaissance" ([198], page 12). It is supposed to be a marble copy of the alleged I century A.D. made from an original presumably dated II century B.C. Antediluvian times, in other words. Nevertheless, the style and the quality of the composition greatly resemble the works of Michelangelo, for instance; that is to say, they look very much like the works of art created in the Renaissance epoch.

It is also considered that the composition show-

Fig. 7.46. A reconstruction of the statue of Laocoon allegedly dating from the XVI century. The right hands of all three statues are raised. This is most probably an original made in the XVI century, and not a reconstruction on any sort. Taken from [198], page 13.

Fig. 7.47. A 1960 "reconstruction" of the statue of Laocoon. Modern restorers broke off all three raised statue arms. The largest received some fragment instead of the arm which was authoritatively declared "the spitting image of the ancient original". Taken from [198], page 12.

ing Laocoon is a XVI century reconstruction ([198], page 13). However, it was most probably simply made in the XVI century.

Let us pay attention to the fact that the *right arms of all three statues are raised.* This may have had some meaning – religious, for instance. It is difficult to say anything certain about it nowadays. However, the most interesting fact concerns what we observe in fig 7.47, which shows another photograph of the same composition that had already undergone "restoration" in 1960 ([198], page 12).

What we see is that the modern restorers broke off the right arms of all the statues for some reason. Two of them now have useless stumps instead. As for the central statue, the largest one, it received some curved fragment in lieu of an arm after long scientific considerations. Historians claim it to be the very fragment that they needed so much, one that had remained buried in the ground for many centuries. It is supposed to have been found in the "Vatican storage rooms" ([198], page 11). Modern historians finally

managed to recognize it amongst thousands and thousands of similar fragments without the merest shadow of doubt, and have confidently declared it to be the missing right arm of Laocoon – a much more congruous one than the arm that he had possessed for three centuries, ever since the XVI century. The incongruous arm had then been assertively sawed off, as well as half of the snake, see figs. 7.46 and 7.47. The sawed-off bits were probably thrown away as useless rubbish, with the congruous fragment taking their place. Obviously, an article had to be written in order to provide scientific basis for the absolute necessity of such an improvement. However, the historians have involuntarily disclosed that *in order to make the found fragment fit they had to damage the actual statue of Laocoon.* The cautious commentary runs as follows: "the extended arm had been replaced by the newly-found genuine fragment… *it took a marble inset* to meet the due proportions" ([198], page 13).

In our opinion, it is very hard to perceive all of this activity as scientific research.

6.
STRANGE PARALLELS IN THE SCALIGERIAN HISTORY OF RELIGIONS

6.1. Mediaeval Christianity and its reflection in the Scaligerian "pagan antiquity"

Let us give a brief account of the situation in what concerns the history of ancient religions. We are being convinced nowadays that every chronological epoch possessed individual religious cults of its own, with hundreds and even thousands of years between them. The XIX century historians and ethnographers have performed a great deal of comparative studies of global religions and cults. It was discovered that certain religions separated by centuries and even millennia in the Scaligerian chronology have a great number of "parallels" between them, or even coincidences, as amazing as they are complete. This indisputable fact spawned a great number of theories postulating influences, naturalization, infiltration, etc. However, all of these latter-day speculations are based on the Scaligerian chronology exclusively. A chronological change shall lead to the revision of the prevailing point of view on the genesis and formation of religions. We shall just cite a few typical examples of parallels in order to explain the peculiar effect of "duplicate religions" that we observe. This effect is most probably a child of the Scaligerian chronological shifts.

The so-called "Celtic monument" that was discovered in 1771 is nowadays considered to be an effigy of some pagan pre-Christian Gaulish god of the woods ([966], Vol. 2, p. 465; see fig. 7.48). However, what we see above the head of this deity is a carving that clearly says ESUS. That should very plainly stand for "*Jesus.*" However, the pressure of the Scaligerian chronology made the historians claim this to be "a totally different Jesus." Just some pre-Christian god bearing the same name, nothing more. See also [544], Vol. 5, p. 683.

Arthur Drews, an eminent specialist in comparative history of religions, used to claim that nearly all of the principal allegedly pre-Christian "ancient" religious cults are really nearly identical parallels (and, by our reconstruction, merely later reflections, repercussions and modifications) of the Christian cult of Jesus Christ ([259] and [260]). He wrote that he had "ascribed… great meaning to the mythological *par-*

Fig. 7.48. A "Celtic" monument found under the choir loft of Notre Dame de Paris in 1771 which is now an exhibit of the Cluny Museum. One clearly sees the semi-obliterated but still quite visible inscription saying ESUS, or Jesus. However, the archaeologists consider this deity to be some pagan Gaulish god of the woods, pre-Christian and "very ancient". Taken from [966], page 465.

Fig. 7.49. The allegedly Mesopotamian Assyro-Babylonian king Ashur-Nazareh-Khabal who had allegedly lived around 930 B.C. Taken from [508]; see also [544], Volume 4, page 673, ill. 139. However, the "ancient Assyrian king" has a Christian cross on his chest, very much like the ones worn by modern Orthodox eparchs.

Fig. 7.50. The allegedly ancient Phoenician goddess Astarte ([508] and [544], Volume 4, page 673, ill. 140). However, she has a sceptre with a Christian cross in her hand.

Fig. 7.51. An allegedly ancient Gaulish figurine of the "ancient" Frankish god Jupiter. All of his clothing is nevertheless covered in Christian crosses. See [508] and [544], Volume 4, page 674, ill. 141.

Fig. 7.52. The "ancient" Egyptian goddess Isis breast-feeding her son who holds a Christian ankh in his hand. Taken from [544], Volume 4, page 675, ill. 143.

allels between Christianity and paganism. Anyone who cannot see the commonly known relation between the resurrection story told by the gospels and the rites of the religion of Attis-Adonis-Osiris etc., anyone who claims that "there is nothing remotely resembling" entombment and resurrection in the myths of Attis and Adonis, anyone who tries to prove the death of Jesus to have been different from the way his cousins from Asia Minor had died… anyone who fails to recognize Mary Magdalene and other Maries that stood vigil near the cross and at the casket of the Saviour in the Indian, Asianic, and Egyptian mother goddesses named Maia, Mariamme, Marithale… Marianne… Mandane, the mother of Cyrus the "Messiah," the "Great Mother" of Pessinunt, the grieving Semiramis, Mariam, Merris, Myrrah, Myra (Mera) and Maya… should 'jolly well keep away from the issues of religious history' [as Weis puts it]." ([259], page 150)

A. Drews cites many spectacular parallels identifying the holy family of Jesus Christ with other "holy families" of Asiatic gods allegedly preceding the new era by many centuries. If we step aside from the Scaligerian chronology, we shall see that all of these parallels indicate the *simultaneity* of these cults, whose differences are merely a consequence of the ethnic distinctives of their localization. All of them probably hail back to the same common source – that is, they are a reflection of the life and the deeds of Jesus Christ in the XI century A.D. The XIX-XX century historians who have discovered these parallels, but remained bound by the erroneous Scaligerian chronology, had to turn everything on its head. As a result, they have interpreted the parallels as "late Christianity" drawing heavily upon the numerous "ancient cults" and failing to produce anything original worthy of mentioning.

In fig. 7.49 we can see a picture of the allegedly Mesopotamian Assyro-Babylonian king Ashur-Nazareh-Khabal, who had allegedly lived 930 years before the birth of Christ ([508], also see [544], Volume 4, page 673). However, what he has on his chest is simply a *Christian cross*, very much like the one worn by the present-day Orthodox eparchs. This is most probably a mediaeval king.

In fig. 7.50 we see an old image of the "extremely ancient" Phoenician goddess Astarte ([508], [544], Volume 4, p. 673). However, she has a sceptre with a *Christian cross* in her hands. It is only the Scaligerian chron-

Fig. 7.53. Mediaeval anagrams of the name of Jesus Christ from the Roman catacombs. Taken from [544], Vol. 4, p. 675, ill. 144.

Shapes of the cross

Fig. 7.54. Various shapes of the Christian cross. We shall point out the old T-shaped cross (number 3 in the table) as well as the forking cross (number 5). The "ancient" Egyptian ankh can be seen as number 20. Taken from [1427], page 5.

Cross shapes. 1) Greek cross; 2) Latin cross (High cross); 3) Tau cross, St. Anthony's cross; 4) St. Peter's cross; 5) Forked cross; 6) St. Andrew's cross (Saltire); 7) Sprag cross; 8) Repeated cross, German cross; 9) Branching cross; 10) Double cross, patriarchal cross, Lotharingian cross; 11) Orthodox cross, or the Cross of Lazarus; 12) Papal cross; 13) Pawed cross; 14) Club cross or Apple cross; 15) Clover cross; 16) Lily cross; 17) Diamond cross; 18) Circular cross; 19) Nimbus cross; 20) Handle cross; 21) Coptic cross; 22) Wheel cross, Solar Wheel; 23) Celtic cross; 24) The Orb; 25) Anchor cross; 26) Graded cross; 27) Jerusalem cross; 28) Monogram of Christ; 29) Angled cross, or Gamma cross; 30) Angled cross; 31) Red Cross; 32) Iron cross; 33) Equilateral cross; 34) Maltese cross; 35) Swastika; 36) Crooked cross.

Fig. 7.55. A copy of a Syrian sigil allegedly dating from the middle of the second millennium B.C., Berlin, the Middle East Museum. Taken from [533], Volume 1, page 457. In the centre of the sigil we see an ankh with a loop on top that facilitates its use as a pendant.

Fig. 7.56. Apparently a mediaeval picture of the Virgin Mary as Christ's mother-to-be which is considered to be an effigy of the "ancient" goddess Maia nowadays. Taken from [544], Volume 4, p. 675, ill. 145.

Fig. 7.57. A copper statuette of the "ancient" Buddha with a Christian gammadion cross on his chest. Taken from [544], Volume 4, page 677, ill. 146.

Fig. 7.58 An "ancient" picture of the Classical Bellerophontes battling an "ancient" chimera. This picture is virtually identical to the numerous mediaeval representations of St. George slaying the dragon. Taken from [508] and [544], Volume 4, page 687, ill. 150.

Juno with Mars
(Malver)

The Indian Devi with the infant Krishnu,
surrounded by the Zodiac signs (Jeremias)

Demeter (Our Lady)
with Bacchus (Malver)

Diana
(M. Brocas)

The Egyptian goddess Hathor
with the infant Osiris (Jeremias)

Our Lady of Salisbury
(M. Brocas)

Fig. 7.59. "Ancient" effigies of goddesses with infants; what we see are most probably various mediaeval representations of Virgin Mary with the infant Christ. Taken from [544], Volume 3, page 631, ill. 101.

ology that keeps the experts in the history of religions from identifying this as a mediaeval Christian effigy.

In fig. 7.51 we see the allegedly "ancient" Gaulish figurine of the "ancient" Frankish god Jupiter. However, his clothing is all covered by regular Christian crosses ([508], [544], Volume 4, page 674).

In fig. 7.52 we see an "ancient" Egyptian effigy of the goddess Isis breast-feeding her son who has a *Christian ankh* in his hand ([544], Volume 4, page 675). It is hard to get rid of the impression that this really is a mediaeval representation of Virgin Mary with her son Jesus Christ – however, misdated by the Scaligerian history and transferred into the "distant past."

In fig. 7.53 we cite the most popular *mediaeval* anagrams of the name Jesus Christ from the Roman catacombs ([544], Volume 4, page 675, ill. 144). Anagram 8 is *clearly an ankh.* We see those in great abundance on the *"ancient" Egyptian* drawings and sculptures, dated as preceding the new era by centuries and even millennia nowadays. Ankhs were worn as pendants, the way they are today, or held in a hand. The mediaeval Christian ankh was also occasionally interpreted as symbolizing *a key.*

In fig. 7.54 we cite an extremely interesting table showing different shapes of mediaeval Christian crosses ([1427], page 5). The "ancient" Egyptian ankh can be seen as number 20. Note also the T-cross (number 3), and the fork cross (number 5). We shall repeatedly encounter these apparently rather old versions of the Christian cross in the future. Let us also point out number 25, which is practically the Ottoman crescent with a cruciform star.

In fig. 7.55 we see a print of an "ancient" Syrian sigil allegedly dated as *the second millennium before Christ* ([533], Volume 1, page 457). In its centre we can clearly observe the *Christian ankh*, whose loop may have been used for wearing it as a pendant.

In fig 7.56 is an "ancient" statuette found in Hissarlyk, Asia Minor, portraying the goddess Maia ([544], Vol. 4, p. 676, ill. 145). This is most probably Virgin Mary that is represented as Jesus Christ's mother-to-be. The *Christian cross* is drawn as a swastika here.

In fig. 7.57 we see a fragment of a brass statuette of the "ancient" Buddha. However, what we see on his chest is a Christian gammadion. Russian Museum of Ethnography and the museum of Gimet in France ([544], Volume 4, page 677, ill. 146).

In fig. 7.58 is an amazing "ancient" picture of the allegedly "ancient" Bellerophontes battling a chimera ([508], [544], Volume 4, p. 687, ill. 150). This is merely the mediaeval *St. George fighting the dragon*! Only the hypnotic effect of the Scaligerian chronology has kept the admirers of "great antiquity" from seeing this.

Many of the mediaeval Christian symbols are related to the so-called *keys* of St. Peter which he is supposed to use for opening the Pearly Gates ([259]). Let us remind the reader that the key is but another form of the mediaeval Christian ankh (see fig. 7.53, anagram 8). However, it turns out that "classical ancient mythology" is also full of deities whose primary attribute is either a key, or a key-shaped cross – the mediaeval ankh, that is. Such are the "ancient" Greek Helios, the "ancient" Roman Pluto, the "ancient" Egyptian Serapis and the "ancient" infernal queen Hecate ([259], p. 58). Dupuis and Volnay point out the de facto identity of apostle Peter and the "ancient" Roman god Janus.

In fig. 7.59 we see the allegedly "ancient" effigies of various "ancient" goddesses with infants. They are the "ancient" Roman Juno with Mars (according to Malver), the Indian Devas with the infant Krishnu (according to Jeremias), Demetre with Bacchus, or simply "D-Mother," or "Deo-Mater," or Mother of God (Malver). Further on we see the "ancient" Diana with a cross on her head, and the Ottoman crescent with a cruciform star nearby. After that comes the "ancient" Egyptian goddess Athyr, or Hathor, with the infant Osiris (Jeremias). Finally, we see the so-called "Our Lady of Salisbury" (according to M. Brocas). See [544], Volume 3, page 631, ill. 101.

6.2. Mediaeval Christianity and "ancient" Mithraism

A. Drews provides an illustration for [259] that portrays the "ancient" god Mithras on a so-called "Mithraist icon," q.v. in fig. 7.60. Mithras' head has a *halo* with sunrays – exactly like the halos on the icons of Christ. The halo is obviously Christian in its origin. Failing to realise the profound inveracity of the Scaligerian chronology, Drews makes the following cautious comment: "It is hardly a coincidence that many Christian icons resemble this effigy. There is a *circle, or a halo*, around the head of the deity."

To this comment we reply that it isn't a case of

Fig. 7.60. "Ancient" effigy of the god Mithras. We see a halo and sunrays around his head, just like the ones observable on the mediaeval icons of Jesus Christ. Taken from [533], Volume 2, page 154.

Christ resembling the "ancient" Mithras, but rather that Mithraism was a form of the Christian cult after the XI century A.D. As we know, the Scaligerian history considers Mithra to be an Oriental "ancient" Aryan god, and subsequently an "ancient" Persian one, whose cult spread across all of Asia Minor ([966], Volume 2, page 416). One of the effigies of the "extremely ancient" Mithras can be seen in fig. 7.61. Mithras is shown here slaying an ox. It is possible that bullfighting, which is still popular in Spain and parts of France, is a reflection of this archetypal subject – possibly also Mithraist, but clearly *Christian in origin*, and reflected on many Orthodox icons. One can observe an Orthodox Trinity icon in fig. 7.63. The foreground of this icon is identical to the "ancient" bas-reliefs representing Mithras slaying an ox.

A. Drews says this about strong and extensive parallels between "ancient" Mithraism and mediaeval Christianity:

"The main Roman sanctuary of Mithras was *in the Vatican*, on the site of *St. Peter's Cathedral*. That is

Fig. 7.61. An effigy of the "ancient" Aryan and "ancient" Persian god Mithras slaying a bull. Taken from [966], Volume 2, page 416.

Fig. 7.62. "The Holy Trinity", a Russian icon dating from the first half of the XVII century. In front we see the "ancient" Mithras killing a bull, which makes this subject Christian and Orthodox. Taken from [647], page 36.

Fig. 7.63. A close-in of the fragment of the Orthodox Holy Trinity icon with Mithras killing a bull. Taken from [647], p. 36.

where he was worshipped, together with Attis, who had been recognized officially even earlier…. Mithras, or Attis, was called *Pater, or Father*. The High Priest of this deity was also called *"Pater"* (or the Father of Fathers); the Roman Pope is still called the *Holy Father*. The latter wears a tiara, or a mitre, on his head, which is a head-dress of Mithras, or Attis… and red soldier shoes of the priests of Mithras, as well as keeping the keys of the "Rock God" [or St. Peter – A. F.], and has "the power to bind, and the power to permit"…. The Catholic Pope's equal in rank was the Pater, the Pope of the Mithraist cult. This *pagan Pope* resided in the Vatican, worshipped the sun as the *saviour,* and Cybele as the virginal Mother of God, who was usually depicted sitting *with a child on her lap* – her Christian double is the *Virgin Mary*." ([259], page 69)

Like mediaeval Christianity, "ancient" Mithraism had a concept of purgatory; the two also shared the use of the aspersorium, and the tradition of crossing oneself ([259], page 70). Ecclesial ceremonialism and public forms of church office are similar – the liturgy was read in a dead language that the masses did not understand, both services used hosts (wafers, or altar bread), albs, wide cingula, episcopal hats, etc. This parallelism was discovered by the eminent scientist J. Robertson ([1371] and [259], pp. 70-71). He wrote that "the oriental saviour deities are all brothers of Jesus Christ" ([1371] and [544], Vol. 4, p. 695).

N. A. Koun also tells us that "the Mithraist oblation is virtually similar to the Christian Eucharist… Christians, as well as Mithraists, considered Sunday a Holy Day, and celebrated… Christmas in the Christian tradition, on the 25 December, as the day their 'Invincible' deity was born" ([454] and [544], Volume 4, pages 701-703). Some monuments depicting a clandestine Mithraist Lord's Supper have reached our age. We can see altar bread with Christian crosses on these "ancient" pictures ([259], page 3). The famous Cathedra Petri, or the Chair of Peter in Vatican, also appears to belong to the Mithraist cult.

We conclude that the "ancient" cult of Mithras was *virtually identical* to the mediaeval cult of Jesus Christ, and the gap of several centuries that separates them is merely a Scaligerian chronological simulacrum.

"The concept of Mithras coming to Europe from Asia and not vice versa is based on the fact that we find a particularly large number of the cult's traces in

the *Veda,* where Mithras is one of the key figures" ([544], Vol. 4, p. 704). This implies that the famous Veda, which was actually discovered relatively recently, dates to the end of the Middle Ages and not some hypothetical antediluvian age. Mithraism is also present in Zoroastrianism, or the religion of Zoroaster, which is supposed to have been prevalent in "ancient" Persia before its conquest by Alexander the Great. It is also supposed to have made a sudden disappearance for the period of six centuries (!) in order to be "resumed" under the Sassanides in the alleged IV century A.D. ([544], Vol. 4, p. 715-716). This all leads one to the conclusion that Zoroastrianism is also mediaeval in its origin, dating to the XI century A.D. at the earliest.

J. Frazer says, on the subject of the "ancient" Attis: "Attis… had been the same for Phrygia as Adonis was for Syria… the tradition and the cults of both deities were so similar that *the ancients often used to identify them with each other*" ([917], page 19).

The "ancient" Greek religion also echoes the various attributes of Jesus Christ. In particular, experts in the history of religions point out that "the figure of the dying and resurrecting saviour was embodied in Dionysus and Bacchus" ([743], page 41).

6.3. References to Jesus Christ contained in "ancient" Egyptian artefacts

Ancient Egypt is considered to have been a "classical cross country." Mesopotamia, Persia and India all have similar Christian crosses. As we have already pointed out, many "ancient" Egyptian gods are portrayed in drawings and bas-reliefs holding the mediaeval Christ glyph – an ankh ([259]). Such are the deities Re-Horakhty (fig. 7.64), Tefnut, the goddess of moisture and dew (fig. 7.65), and the divine lions Shu and Tefnut (fig. 7.66). In fig. 7.67 we can see an incumbent effigy of the "ancient" Egyptian god Osiris surrounded by Christian ankhs. The "ancient" Egyptian pharaoh statue (fig. 7.68, on the right) is particularly impressive. There is a large *Orthodox Christian cross* on the backrest of his throne, see fig. 7.69. The "ancient" statue is exhibited in the Metropolitan museum of New York.

N. V. Rumyantsev compiled a table that includes 32 different versions of the Christian cross. These crosses were abundant in the entire "ancient" Mediterranean region in particular, and are often dated to hypothetical distant B.C. epochs. The apparent unity of this symbol is so amazing that this alone, proved as it is by a great body of facts, suffices to question the veracity of the Scaligerian datings of all these "ancient" cults.

It turns out that the cult of Isis was also exceptionally similar to the mediaeval Christian cult, since "her idolaters had… morning, afternoon, and evening masses which were extremely similar to Catholic and occasionally even Orthodox liturgy" ([259], page 71). The expert in the history of religions N. V. Rumyantsev doesn't question the Scaligerian chronology which arbitrarily moves the cult of Isis, Osiris and Serapis into a distant age, but is nonetheless forced to make the observation that "this semblance between the Egyptian liturgy and the Christian is *too great and too stunning to be a coincidence*" ([259], page 72).

Let us also point out that the name of the famous "ancient" Egyptian god Osiris most probably originates from "*Esu-Rex*," or *Jesus the King*.

This is how N. V. Rumyantsev comments on one of the "ancient" Egyptian pictures that clearly refer to *evangelical* events: "This is Osiris rising from the dead after having been buried for three days. He is portrayed at the moment of his resurrection, stepping out of the coffin… Next to him we see his wife and sister… Isis" ([743], p. 10). Another Egyptian deity is handing *a* cross to the rising Osiris. "The resurrection of Osiris… occurs on the third day after his death. This feast would end with the "mounting of the stake of Osiris." The stake would be elevated with the aid of special contraptions… and *mounted vertically*" ([743], pp. 10-11). This "death of Osiris at a stake" is probably a reflection of the crucifixion of Christ. We shall cover this in more detail later.

There's a *woman* standing next to the rising Osiris – just like the Christian Virgin Mary and Mary Magdalene who are often depicted bearing holy oil at the coffin of Christ.

In figs. 7.70, 7.71 and 7.72 we see five "ancient" Egyptian bas-reliefs portraying five different moments in the birth of the Pharaoh Amenope ([576] and [544], Volume 6). This is supposed to have happened in 1500 B.C., a millennium and a half before Christ was born. N. V. Rumyantsev writes: "In the first picture we see a divine messenger who is standing before the *virgin* queen Met-em-ve [Mary? – A. F.] and gives the Annunciation of the birth of her son [see fig. 7.70 – A. F.].

Fig. 7.64. "Ancient" Egyptian deities Re-Horakhty and Hathor with Christian crosses in their hands. Taken from [486], page 119.

Fig. 7.65. The "ancient" Egyptian goddess Tefnut with a Christian cross in her hand. Taken from [486], page 119.

Fig. 7.66. "Ancient" Egyptian lion deities Shu and Tefnut with a Christian cross between them. Taken from [486], page 19.

Fig. 7.67. "Ancient" Egyptian effigy of the god Osiris incumbent surrounded by Christian ankhs. Taken from [533], Volume 1, page 425.

In the second illustration we see the explanation of the parentage of the pharaoh: his virgin mother and the chief solar god Amon hold each other in a lovers' embrace.

The third illustration elaborates on the meaning of the previous one and provides details of the immaculate conception from the divine seed. This idea is conveyed through the cross that is held near the nose of Met-em-ve [the author makes a reference to the poly-semy of the Russian word *dukh*, which means both "breath" and "spirit" or "ghost," and expresses the opinion that the cross symbolizes the immaculate conception from the olfactory perception of the Holy Ghost], and the roundness of her stomach [see fig. 7.71 – A. F.]… the Egyptian priests would thus write the first pages of the divine ruler's biography on the wall of their temple." ([743], page 130)

Commenting on this amazing, but far from unique, series of the *Christian and Evangelical* bas-reliefs of "ancient" Egypt, J. Robertson, the prominent expert in the history of religions, wrote that "the most exact analogy of the Egyptian myth of the divine royalty birth is that with the Christian Annunciation" (quoted in [743], page 130).

We have just covered three bas-reliefs of the five. What about the remaining two?

"Three out of these five subjects depicting various moments of his [Amenope's] birth show us the Annunciation, the coition of the lovers… and its result – *immaculate conception*… .

In the fourth illustration we see the actual birth of the divine royalty, and the fifth shows us the *adoration* of the child by the Magi [exactly the way the Gospel has it, q.v. in fig. 7.72 – A. F.]. The three genuflected human figures [or the evangelical magi accompanied by a king who is also on his knees, see CHRON6 – A. F.]

Fig. 7.68. "Ancient" Egyptian pharaoh sculpture exhibited in the Metropolitan Museum of New York. One can clearly see a broad Orthodox Christian cross on the back of the Pharaoh's throne. Picture taken by A. T. Fomenko in 1995.

Fig. 7.69. A close-in of the back of the Pharaoh's throne. New York, the Metropolitan Museum.

Fig. 7.70. An "ancient" Egyptian picture using the evangelical subject of Christ's birth. The Annunciation. Taken from [576], page 81.

Fig. 7.71. An "ancient" Egyptian picture using the evangelical subject of Christ's birth. Immaculate Conception. Taken from [576], page 81.

say benedictions and present him [the infant Christ? – A. F.] with gifts, and there are gods near them doing likewise… We consider further commentary to these five effigies unnecessary." ([743], page 149)

Historians point out that "they [the evangelical subjects of the Annunciation and the immaculate conception – A. F.] bear the greatest resemblance to similar subjects pertinent to the biographies of other famous mythical saviours of the past – the Jewish… Samson, the Babylonian and Phoenician Tammuz, or Adonis, and the Indian… Buddha" ([743], page 132).

Also "the Egyptian chrismation, or the baptism of the pharaoh by kings Horus and Thoth… they pour holy water on the king, which is represented as a stream of crosses here… with the king himself holding another cross in his hand" ([743], page 198). A similar "ancient" Egyptian picture can be seen in fig. 7.73.

In fig. 7.74 we see mediaeval Coptic representations of the Christian crosses ([544], Volume 6). Let us remind the reader that the Copts were the mediaeval Egyptian Christians. It is clearly visible that the mediaeval Coptic ankhs are virtually identical to the "ancient" Egyptian ones.

In fig. 7.75 one sees an "ancient" Egyptian obelisk that stands in Italian Rome nowadays, in Minerva Square ([1242], page 43). We see a *Christian cross* on its top. Nowadays historians assure us that this cross is a later addition. We are extremely sceptical about that. Most probably the obelisks, including the "ancient" Egyptian ones, were created as tall pedestals for the specific purpose of bearing crosses or other Christian symbols. Ergo, they were manufactured in the XVI-XVI century.

A similar Egyptian obelisk with a *Christian cross* on top was erected on St. Peter's square in Rome ([1242], page 43. See fig. 7.76). In fig. 7.77 we see an ancient engraving depicting the same obelisk in the Vatican. Here we also see a Christian cross on the spire, see fig. 7.78.

Fig. 7.72. An "ancient" Egyptian picture using the evangelical subject of Christ's birth. The birth of Christ and the Wise Men of the East bearing gifts.

Fig. 7.73. A magical resurrection of a dead man by the "ancient" Egyptian gods. The dead man is portrayed between Anubis and a god with an undefined name. Taken from [486], page 66.

However, another ancient engraving dated as 1585 (fig. 7.79) allegedly shows the very same Vatican obelisk, but looking completely different, as is its setting, although it is supposed to be depicted as standing close to St. Peter's cathedral in this picture as well ([1374], page 121). The spire of this Egyptian obelisk in the Vatican is crowned by a large sphere, possibly solar imagery (see fig. 7.79). This symbolism is Christian, since Jesus Christ was referred to as "the Sun."

It is possible that the Christian crosses or solar spheres were taken off the "ancient" Egyptian obelisks in the XVII-XVIII century, in the tumultuous epoch of the Reformation, so as to facilitate dating them to some hypothetical "ancient" period long before Jesus Christ.

Furthermore, there's a XVIII century obelisk in front of the façade of the "ancient" Roman Pantheon which dates from the alleged II century A.D. (fig. 7.80). However, its style isn't any different from that of the other "ancient" Egyptian obelisks that one sees in other Roman squares and in Egypt. All of them most probably belong to the same epoch and tradition of the XV-XVIII century.

In fig. 7.81 we see a picture allegedly dating from

Fig. 7.74. Mediaeval Coptic crosses. The drawing is ours. Taken from [544], Volume 6, pages 1048-1049.

Fig. 7.75. "Ancient" Egyptian obelisk on the Minerva Square in Rome. There's a Christian cross on its spire. Taken from [1242], page 43.

Fig. 7.76. "Ancient" Egyptian obelisk on St. Peter's square in Rome. Taken from [1242], page 42.

Fig. 7.77. Ancient engraving depicting the "Egyptian" obelisk in Vatican with a Christian cross on its spire. It is presumed that this engraving pictures a "new consecration" of the obelisk. Taken from [1374], page 21.

Fig. 7.78. A close-in of a fragment of the engraving depicting the "Egyptian" obelisk topped by a Christian cross. Taken from [1374], page 21.

LVDOVICI DEMONTIOSII

Fig. 7.79. A mediaeval picture showing the Vatican obelisk on St. Peter's square in Rome allegedly dating from 1585. It differs from the ones given above, since its spire is crowned by a globe. The globe must have symbolized the sun, which was one of Christ's symbols. Taken from [1374], page 121.

1650 which shows an "ancient" Egyptian obelisk covered in hieroglyphs from top to bottom. The obelisk of Pamphilius can be seen in the centre with either an alectryon or a dove on its top (fig. 7.82). Both are well-known Christian symbols. The same "ancient" Egyptian alectryon symbolism can be seen topping many Western European Christian temples. In Chron6 we demonstrate that the alectryon used to symbolize the Ottoman=Ataman crescent. Also, modern commentators assure us that Kircher, the author of the XVII century book this picture is taken from, interpreted the hieroglyphs in a "fanciful manner" ([1374], page 123). It would be interesting to find out what exactly it is that the present day historians dislike in Kircher's translation. We haven't had the opportunity of studying this issue yet.

In fig. 7.83 we see an engraving allegedly dating from 1499 that shows an "ancient" Egyptian obelisk mounted upon an elephant ([1374], page 119). Once again, we observe a *spherical solar symbol on the top of the obelisk* that symbolizes Jesus Christ. This engraving is taken from a book by Francesco Colonna which never fails to irritate the present day commentators. For instance, they have the following to say about this "ancient" Egyptian obelisk: "This romantic *pseudo-*

Fig. 7.80. A XVIII century obelisk in front of the façade of the "ancient" Pantheon allegedly built in the II century A.D. One can clearly see that the XVIII century obelisk resembles other "ancient" Egyptian obelisks in style. Apparently, the recent XV-XVII century tradition of building similar Christian obelisks still existed in the XVIII century. Taken from [726], page 61.

Fig. 7.81. An "ancient" engraving dating from 1650 depicting "ancient" Egyptian obelisks covered in hieroglyphs. The obelisk of Pamphilius is in the centre; we can clearly see an alectryon or a dove on its spire – a Christian symbol, in other words. One can still see such ornithic images on tops of many mediaeval cathedrals. As we shall demonstrate in CHRON6, it used to symbolize the Ottoman crescent. Taken from [1374], page 123.

Egyptian image *was very popular in the XVI century.* The book that [the drawing] was taken from originally is called the **Hypnerotomachia,** and really is a romantic *fantasy* text written in a strange mixture of languages – Italian, Latin, babelized Hebrew, and imaginary hieroglyphs. However, the illustrations are very artful; the ascetic style was considered authentically Classical by many readers" ([1374], page 119).

In other words, we are told that despite the fact that this old book is written in a rather austere manner, modern historians know the exact nature of "real Egyptian antiquities" better than the mediaeval author. Their consensual decision treats Francesco Colonna in a patronizing manner, deftly withdrawing his book from scientific circulation.

6.4. Researchers of the ancient religions commenting on the strange similarities between the cults of "antiquity" and those of the Middle Ages

The "ancient" Greek legends would have it that the "ancient" god Dionysius (fig. 7.84) performed the miracle of transforming water into wine ([743], page 198). Experts in the history of religions have noted that this is a perfect analogue of the famous evangelical miracle of Christ's transformation of water into wine in Cana in Galilee. Could Galilee refer to "Gaul," or France, and the well-known city of Cannes? Saintyves wrote that "after this, no one could possibly fail to see the origins of the matrimonial miracle in Galilean Cana… ever since the Dionysian cult and during the age of the Christian cult, water never ceased to turn to wine on the 9th of January" (quoted in [743], page 259).

A great body of scientific literature is dedicated to finding parallels between the legends of the "ancient" Indian Buddha and Jesus Christ. Buddha's "biography" doesn't only include the principal *evangelical* myths, such as the immaculate conception, the birth miracles, Candlemas etc, but finer details as well – the baptism, the temptation in the desert, etc. Lists of such parallels can be seen in the works of Drews, Frazer, Saintyves, Rumyantsev, etc.

N. V. Rumyantsev wrote the following as a summary of his research:

"An entire caravan of suffering, dying and resurrecting ancient gods had passed in front of our eyes,

Fig. 7.82. A close-in of the image of an alectryon or a dove on top of the "ancient" Egyptian obelisk of Pamphilius. The ornithic image is a Christian symbol. Taken from [1374], page 123.

Fig. 7.83. An "ancient" Egyptian obelisk topped by a sphere, which probably symbolized the sun – one of the most common symbols of Jesus Christ. The engraving allegedly dates from 1499. Taken from [1374], page 119.

we have seen their mythology, studied their feasts, rites etc. However, despite the fact that they have different names, individual mythological characteristics, countries of origin, or specialization, one feels a clear presence of something that unites them all. The ancients themselves have marked this fact… .

Indeed, if we regard the last centuries before Christ and the first centuries Anno Domini, we shall see a most peculiar tableau. All of the deities that we have listed with all their attributes appear to have blended into each other, often to the extent of becoming *indistinguishable.* Osiris, Tammuz, Attis, Dionysius, etc., appear to have formed some *common gestalt,* transforming into some syncretic deity that reigned supreme over the entire territory of the Roman state… the deities have transformed into a single eclectic, but de facto *unified saviour figure.* This intense merging occured during the age of the Roman Empire, and affected Rome itself in particular." ([743], pages 44-45)

Let us conclude with a discussion of another issue

Fig. 7.85. An ancient miniature from a book allegedly dating from the mid-XV century and titled *Les Grandes Chroniques de France.* It depicts the execution of Prince Velisarius [the name bears some semblance to *Velikiy Czar,* which stands for "the Great Czar" in Russian]. He was tied to a stake and stoned to death. Taken from [1485], ill. 186.

Fig. 7.86. A close-in of the miniature depicting the stoning of Prince Velisarius (the Great Czar?). Taken from [1485], ill. 186.

Fig. 7.87. Jesus Christ bearing his cross to Golgotha. A painting by Tintoretto (XVI century). Taken from [1472], No. 27.

Fig. 7.88. Jesus Christ bearing a cross. A painting by the XVI century artist Marco Palmezano. Taken from [713], ill. 129.

see a painting by Michael Wohlgemut allegedly created in 1485-1490. Modern commentary is as follows: "*The king Heraclius* in Jerusalem… we have a simultaneous representation of the king approaching the city gate on a horse… and then *carrying a cross barefoot*" ([1425], page 8). See a close-up detail in fig. 7.90. King Heraclius is also shown barefoot and bearing a cross in an ancient picture that can be seen in fig. 7.91.

The crucifix that one sees in the Cologne Cathedral is called "The Gero Crucifix," see CHRON6, chapter 3. Let us also point out that the "Grave of Jesus" located on Mount Beykos near Istanbul is also called the "Grave" or "Resting Place of Heracles" ([240], pages 76-77). More about this in CHRON6.

Most probably, the "ancient" Heracles, as well as the mediaeval king Heraclius, are phantom duplicates of the XI century Christ = Horus. Both ancient pictures of king Heraclius show him bearing a T-shaped cross, which must be the original shape of the Christian cross.

In fig. 7.93 we see an ancient sculpture from Palmyra, the so-called "Palmyra God Triad" allegedly dating from 150 B.C. ([1237]). The characters that we observe, however, are clearly Christian saints. Two of

Fig. 7.89 A fragment of a painting by Michael Wolgemut on the right wing of Catherine's Altar (1485-1490). According to historians, we see the king Heraclius (or Heracles) here ([1425], page 8). He approaches Jerusalem on a horse, and is then portrayed at the gates of Jerusalem, barefoot and in a plain shirt, bearing a large cross. Taken from [1425], page 8.

Fig. 7.90. A close-in of a fragment portraying king Heraclius = Heracles bearing a large cross near the city of Jerusalem. Taken from [1425], page 8.

Fig. 7.91. An ancient picture of king Heraclius = Heracles bearing a cross near Jerusalem. "King Heraclius barefoot at the city gates". Taken from [1427], page 103. See also [1425], page 9.

Fig. 7.92. An "ancient" sculpture from Palmyra, the so-called "Palmyra Deity Triad" allegedly dating from 150 B.C. It is very likely that it really depicts Christian saints with halos around their heads. One of them has an Ottoman crescent over his head. Taken from [1237].

them have Christian halos over their heads. Furthermore, the saint on the left has got an Ottoman crescent behind his head. One should mark the fact that the right arm of every statue is broken off, but the rest of the sculpture is in a good condition. Could their right hands have been raised in Christian benediction? It is possible that some devout Scaligerite broke their fingers that were raised in the familiar Christian gesture in order to eliminate such blatantly mediaeval relics from "antiquity."

This array of facts proves that Christianity and "ancient" symbolism share the same mediaeval origins that can be traced back to the XI-XIII century A.D.

In fig. 7.93 we see an archaeological finding from Iran allegedly dating from the XIII-XII century B.C. ([1237]). It is kept in the Louvre nowadays and considered to be an "ancient" figure of some "fantasy monster." However, the unprejudiced observer will instantly recognize a bicephalous eagle here, which was a well-known imperial symbol in the Middle Ages.

6.5. Moses, Aaron and their sister Virgin Mary on the pages of the Koran

As one sees from folding the "Scaligerian History Textbook" into a sum of four shorter chronicles, we get several options for dating the beginning of the Muslim Hijra era, that is dated at 622 A.D. nowadays. All of them supersede the Scaligerian version. N. A. Morozov cites a great number of data showing considerable oddities pertinent to Muslim as well as Christian history. Let us give an example.

The chronology of the Koran is often radically different from the Scaligerian chronology of the Bible. The Koran insists on Aaron (Arius?) being the *uncle* of the evangelical Jesus, no less. Mary, the mother of Jesus, is declared to be the *sister* of Moses and Aaron. Thus, according to the Koran, these Old Testament characters belong to the generation that *immediately* preceded Jesus Christ. Naturally, this is in drastic contradiction of the Scaligerian chronology, the discrepancy comprising *several centuries.* However, it concurs well with our abbreviated chronology. Let us turn to the 19th Sura from the Koran ([427], page 239). The Koran commentator I. B. Krachkovsky writes that it is "the oldest Sura that mentions such evangelical characters as... Mary and Jesus" ([427], page 560).

The 19th Sura refers to the birth of Jesus, the son of Mary, in the following manner: "O Mariam, thou hast performed a feat unheard of! O sister of Harun [Aaron – A. F.]…" ([427], the 19th Sura, 28(7); 29(28), pages 240-241). The commentary to this fragment is as follows: "*the sister of Moses and Aaron is the mother of Jesus*" ([427], page 561, No. 17).

6.6. The XI century as the apparent epoch of St. Mark's lifetime. The history of St. Mark's Cathedral in Venice

The gigantic Venetian cathedral of St. Mark is a true architectural gem adorning the city. It is also one of the most popular mediaeval buildings in Italy. Its history proves to be most interesting indeed in light of the new abbreviated chronology. Let us begin with reminding the reader of the official history of St. Mark's cathedral as it is related in the books titled **Basilica of San Marco** ([1265]) and **Venice** ([1467]). This is what we learn from [1265]:

"The Basilica of San Marco is an object of adoration of the Venetians that also symbolizes their historical unity. This is doubtlessly the *main symbol of Venice* that attracts visitors from afar by the uniqueness of its beauty and its oriental splendour.

The Basilica of San Marco used to be a ducal chapel until the end of the XVIII century and has thus absorbed the secular and the ecclesial history of the Venetian republic. Ever since 1807, when the church transformed into the city cathedral having substituted the church of San Pietro de Castello in this role, it became a Mecca not only for the Venetians, but also visitors from across the world. Its bishop bears the *ancient title of the Patriarch*.

The initial construction of the Church of St. Mark occurred… after 828 A.D., when the body of St. Mark was saved from desecration and delivered from Alexandria on a ship by some Venetians". ([1265], page 7).

The story unfolds as follows: nowadays St. Mark is supposed to have been the first of the four canonical evangelists ([765]). His Gospel – The Gospel According to Mark – is presumed to be the o*ldest*, written around 50 A.D. at the insistence of either St. Peter or the Christian community. Sometime later Mark returned to Alexandria in Egypt where he had died on the 25th April of the alleged year 68 A.D. ([1265], p. 26).

Fig. 7.93. An "ancient" effigy found in Iran and allegedly dating from XIII-XII century B.C. We are being told that this is an effigy of some "prehistoric fantasy monster". It is however hard to fail seeing the well-known mediaeval Imperial symbol here, namely, the dicephalous eagle. Taken from [1237].

Scaligerian chronology contains an informational gap of *many centuries* in what concerns St. Mark, whose name allegedly resurfaces from oblivion in the IX century A.D. – a millennium later, in other words. His body is supposed to have been *secretly* delivered to the Italian Venice from the Egyptian Alexandria. The canonical legend runs as follows ([1265]): two Venetian traders paid a chance visit to a Christian church in Alexandria that was consecrated to St. Mark and housed his ossuary. Some monk, as well as the prior, complained to them about the constant desecrations inflicted upon the church by the Muslims seeking to convert all Christian churches to mosques. The Venetian traders then uncoffined the body of St. Mark and have *smuggled* it out of Alexandria in a basket full of vegetables and pork. After a sea journey full of deadly perils, the salvaged holy relic was delivered to Venice, where the construction of a new temple instantly began, one that was designed as a shrine for St. Mark. All the episodes of this abduction are illustrated by inlays covering the walls of the Venetian cathedral.

The *first* church of St. Mark was thus constructed after the alleged year 828 A.D. as a shrine for his body
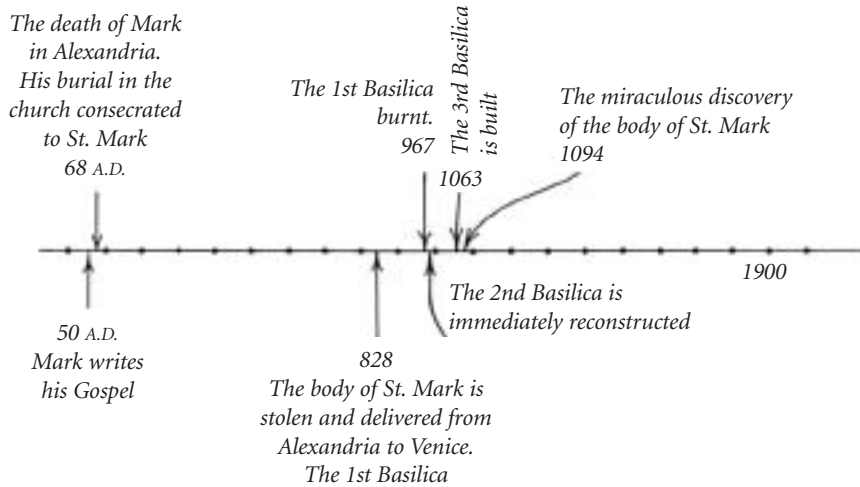
Fig. 7.94. The Scaligerian chronology of the events related to the burial of the evangelist Mark in Venice.

that was "miraculously salvaged" from Alexandria. However, alack and alas, *there are no traces* of the first Venetian church of St. Mark anywhere. The historians say: "There is a large number of different *hypotheses* concerning the shape of this original church, all of them based on a very small number of archaeological findings" ([1265], page 7).

The *first* Basilica of San Marco is supposed to have burnt down in the alleged year 976. According to [1265], page 7, "it had immediately been reconstructed." As a result, the second San Marco Basilica was built in Venice, allegedly towards the end of the X century. *It was destroyed as well* ([1265]).

Then, allegedly around 1063, the doge Domenico Contarini began the construction of *a new and much larger church* of St. Mark on the site of the second basilica. It is assumed that this *third* basilica was built after the fashion of the Basilica of the Twelve Apostles in Constantinople.

This is where oddities begin, well shrouded in mystery. See for yourselves, we are quoting verbatim:

"The *rediscovery* [sic! – A. F.] of St. Mark's body is the last episode of the Venetian legend. During the construction of the third basilica, the ossuary was *hidden so well* [?! – A. F.] that several years later, after the death of the doge, *no one had a clue about their possible location*. It was only in 1094, after several days

of ardent prayers of the doge Vitali Falier, the Patriarch, *and the entire populace*, that the holy relic [the body of St. Mark – A. F.] had *manifested itself miraculously from inside a column* [sic! – A. F.]". ([1265], page 67).

This miraculous event is also represented on one of the inlays inside the Cathedral of St. Mark. Below one can see the famous painting on this subject by the XVI century artist Tintoretto.

Now then, we are being assured in a poised, nononsense manner that the XI century Venetians erected the gigantic cathedral of St. Mark *without having the slightest notion* of the location of the holy relic that served as the *very reason* for the cathedral's construction. And all the while, *the body of St. Mark the evangelist was right there, on the building site!*

Apparently, the cathedral was erected first; after that, the loss of the holy relic was suddenly noticed, and the search for it was long and fruitless. It took the fervent prayers of the doge, the Patriarch, and all of the population of Venice to make the body of the evangelist manifest itself *inside a stone column* (?). It was taken out with the utmost care (does that mean the stone pillar had to be shattered?) and solemnly buried by the altar.

This is where the body of St. Mark lies *until the present day*, being the central object of adoration in the

Fig. 7.95. A XVI century painting by Tintoretto titled "The Discovery of the Body of St. Mark". It may have had a different title at some point, something along the lines of "The Burial of St. Mark". Taken from [1472], ill. 17.

cathedral. The Scaligerian chronology of the events that we have related is shown in fig. 7.94. It is noteworthy that the eminent XVI century artist Tintoretto had *an altogether different concept* of the history of St. Mark's burial in this cathedral. His famous painting with this exact subject can be seen in fig. 7.95 ([1472]). Mark the fact that St. Mark does not resemble a desiccated mummy the least bit, looking like a man who

has *just died* and is going to be buried, q.v. in the left corner of the painting. The prevalent opinion in the XVI century was that St. Mark the evangelist was buried in the cathedral built specifically for this purpose in the alleged XI century *as befitting a person who had just died and earned great honours.* As we can see, there *wasn't any* "millenarian vagrancy of St. Mark's body" in Tintoretto's perception.

Apparently, the bizarre legend of the "pilgrimage of Mark's body" was a product of efforts by later historians to delve deeper into the real events of the XI century and make them concur with the erroneous Scaligerian chronology. This is what we think really happened:

St. Mark, the first evangelist, lived in the XI century A.D. and died in the second half of that century. He was buried for the first and the last time in the Cathedral of St. Mark, erected in his honour. This opulent inhumation, which took place in 1094 with the doge, the patriarch, and the entire city present, was later misinterpreted as the rediscovery of his body, since the Scaligerian chronology had already shifted the lifetime of St. Mark into the I century A.D.

There were no mysterious disappearances and miraculous rediscoveries. These legends come from a much later age, when the historians attempted to make the Scaligerian chronology concur with the documents that explicitly pointed to the XI century as the age of St. Mark's life and activity.

The cathedral of St. Mark obviously assumed its current shape a great deal later than the XI century. When we look at this cathedral nowadays we see a building whose construction was finished by the XVI century. On its walls we see inlays illustrating the rather airy legend of the fate of St. Mark's body. Even within the Scaligerian chronological paradigm, the cathedral's construction continued well into the XIII century, when it was adorned with an equine sculptural group that was allegedly smuggled from the hippodrome of Constantinople in Byzantium ([1467], page 39).

It is difficult to pinpoint the exact place of St. Mark's residence. It may have been Asia Minor or Constantinople, as the Scaligerian history insists, and not Italy. But at any rate his lifetime falls within the XI century A.D. and not the first.

The idea that St. Mark could have lived in Venice for some time is indirectly substantiated by the fact that "for many centuries the town was associated with the symbol of the winged lion that the Christian tradition ascribes to St. Mark the evangelist. Venetian banners, churches, palaces and ships, as well as the lands that the Venetians conquered all bore the sigil of the winged lion" ([1265], page 27).

It is however possible that Italy obtained the "possession rights" to St. Mark merely as a result of a chronological and geographical transfer of the Byzantine events from Constantinople (on paper, naturally).

This conclusion fits with our hypothesis that Jesus Christ lived in the XI century A.D. Mark, the first evangelist, lived in the same century and died near its end.

This implies that the other three evangelists – Luke, Matthew, and John – also couldn't have lived earlier than the XI century, since they wrote their Gospels after Mark, according to the Scaligerian history. It would be very interesting indeed to find the *real* burial spots of these three evangelists as well.

7.
THE "ANCIENT" EGYPT AND THE MIDDLE AGES

7.1. The odd graph of demotic text datings

We give a detailed account of Egyptian history in CHRON5. Here we will limit ourselves to several brief introductory notes.

As we have already mentioned in CHRON1, chapter 1, the Scaligerian chronology of Egypt contains gigantic gaps and actually consists of a number of assorted fragments, either linked in an arbitrary manner or altogether independent. [1069] contains a complete list of all the dated demotic texts for 1966. It goes without saying that certain Egyptian texts can be given no exact dating; we shall not be considering them here, turning to the ones described in [1069] instead. It is most edifying to observe their distribu-
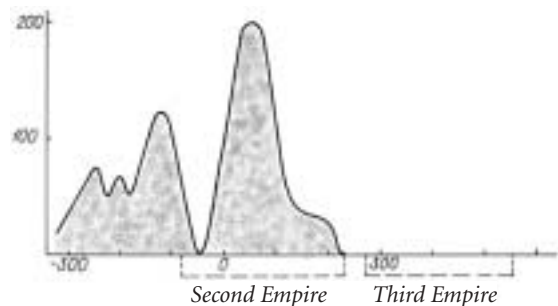

Fig. 7.96. Quantity distribution graph for the dated demotic Egyptian documents compiled from the data collected in [1069]. One's attention is instantly drawn to the strange gaps in the beginning and at the end of the Second Roman Empire, as well as a suspicious lack of such documents pertinent to the Third Roman Empire epoch.

tion on the time axis of the Scaligerian history. The result can be seen in fig. 7.96. The resulting graph is extremely noteworthy.

Primo, one sees that the majority of dated demotic Egyptian texts falls on the epoch of the Second Roman Empire allegedly covering the period of the I-III century A.D. It is significant that the gaps in the graph correspond fully to the chronological framework of the Second Roman Empire. Some of them are dated as belonging to earlier epochs, but those are separated from the Second Roman Empire by a strange gap in the middle of the alleged I century A.D.

Secundo, the graph in fig. 7.96 shows a complete absence of dated demotic documents in the epoch of the Third Roman Empire.

The Scaligerian chronology of demotic texts ipso facto reveals itself as several groups of documents whose relation to each other is rather far-fetched and fanciful. These groups are separated by gaps whose boundaries most peculiarly coincide with the break points between dynastic duplicates that we have determined by completely different methods – those of statistical analysis, q.v. in CHRON1, chapter 5. Ergo, the folding of the European chronological scheme results in a corresponding abbreviation of the "ancient" Egyptian chronology.

7.2. The enigmatic "revival periods" in the history of "ancient" Egypt

In CHRON1, chapter 1, we have already discussed the fact that the chronology of Egypt counts amongst the youngest of historical disciplines. Its formation was based on the existing Scaligerian chronology of Rome and Greece, and has therefore been dependent on it from the very start. The Egyptologists who initiated the compilation of the Egyptian chronology did not possess the objective criteria necessary for the verification of their hypotheses. This led to major discrepancies between the "different chronologies" of Egypt, amounting to *2-3 millennia*, q.v. in CHRON1, chapter 1.

The few dynastic lists that have survived until our day occasionally give reign durations for certain pharaohs, but the pharaohs are often referred to by different names; moreover, these numbers change *drastically* from list to list.

For instance, Eusebius gives 26 years as the reign

duration for Amenmesse (second version), as it is pointed out in [544], whereas Africanus gives 5 years. The durations differ from each other by a *factor of five*.

Eusebius gives 40 years for Amenope (both versions), Africanus gives 20, and Ophis only 8. And so on, and so forth.

Nevertheless, all of this data can still provide the basis for some speculation at least, obvious and numerous distortions notwithstanding, and there is little wonder that the XIX century Egyptologists attempted to use these numbers to establish chronologies. However, they would get deviations of several millennia, as we have seen above, not to mention the inveracity of the very concept of the Scaligerian "elongated history."

However, for most Egyptian dynasties, reign durations of the pharaohs remain a complete mystery ([99], pages 725-730). The entire sixth dynasty, for instance, can be cited as an example (according to Brugsch). There is no chronological data for most of its pharaohs, which makes it all the more peculiar to observe Brugsch ascribing reign durations of 33.3 years to every pharaoh of this dynasty with some determined and glum exhilaration, counting 3 pharaohs per century. His datings of the sixth dynasty are as follows:

Userkaf – reigned from 3300 B.C. onwards,

Teti – from 3266 B.C.,

Pepy I (Meryre) – from 3233 B.C.,

Merenre – from 3200 B.C.,

Neferkaf – from 3166 B.C.,

Merenre Zafemzaf – from 3133 B.C. (see [99], p. 725).

Furthermore, Brugsh used the very same principle – numbers ending in 00, 33, and 66 – for "dating" *all of the dynasties* starting with the first and ending with the twenty-fourth inclusive. It was only the pharaohs of the last seven dynasties (of thirty!) that enjoyed some sort of heterogeneity in the way their reigns were dated ([99], pages 725-730).

This "dating method" is so ludicrous one feels embarrassed even to discuss it nowadays. Nevertheless, it is this very method, with a number of minor later modifications, *that provided for the foundation of the consensual version of the Egyptian chronology*. Brugsch's datings haven't ever been revised in any cardinal way. See [1447], page 254, for instance.

The dynastic history of Egypt is anything but con-

tinuous. Some of the gaps that it contains swallow entire dynasties ([99], [544], Volume 6). At the same time, the researchers of "ancient" Egyptian history have noted that it has an uncannily cyclic nature. The Scaligerian history of Egypt demonstrates a strange "renaissance effect," much like that of its European cousin. This effect is well known to us already – what we encounter are phantom duplicates of one and the same mediaeval reality that were cast far back into the past.

Chantepie de la Saussaye, for one, wrote:

"If we are to turn to later ages in Egyptian history, we shall be surprised to discover that the culture of the Sais epoch is a spitting image of the culture of the pyramid epoch. The texts that were used *almost 3000 years ago* [sic! – A. F.] enter circulation once again, and the ancient fashion of decorating graves makes a comeback". ([966], page 99)

H. Brugsch pointed out that:

"As Mariett-Bey justly noted, the names typical for the twelfth and especially the eleventh dynasty come back on the monuments of the eighteenth dynasty in the same shape and form as they had once possessed, and *similar sepulchres* with identical ornamentation were used in both these periods. What we have in front of us is *a historical enigma* that we sadly lack the means to solve so far". ([99], page 99)

Egyptologists find inscriptions referring to pharaohs and kings set apart by millennia in the Scaligerian chronology, coexisting side by side on the walls of Egyptian temples. In order to provide some kind of explanation, the Egyptologists have thought up the following hypothesis:

"The temples, newly-built by the Ptolemeian rulers and adorned by the Romans, had all been built on the sites of ancient shrines; all of the ancient inscriptions found on temple walls were meticulously and devoutly *copied onto the walls of the new temple*," suggests Brugsch in [99], page 145.

The practice of copying old and unintelligible inscriptions from the walls of ancient temples hasn't been noted in any veracious historical period. One has to think no such nonsense occurred in "ancient" Egypt, either.

All of these recurrences and renaissances have received the legitimate and earnest title of "restorations." We are told, for instance, that the nineteenth dynasty was followed by a restoration when "Egypt… had re-

turned to the ancient epoch of pyramid construction, which becomes regarded as an age worthy of imitating. The ancient religious texts are *resurrected*, although *their understanding is supposed to be partial*. The funereal rites of the fourth dynasty are adhered to *once more*. Their pyramids are *restored*; the ancient titles of the kings that have remained in complete obscurity for *over two millennia* are celebrated in quotidian use *yet again*. Art comes back into the solid realistic manner of the Old Kingdom" ([966], page 166).

It is obvious that the Scaligerite historians should want to find some sort of explanation for these bizarre "mass recurrences" of ancient rites, failing to recognize them for the products of an erroneous chronological system that they are. The "explanation" offered by historians is the alleged *extreme conservatism* of the Egyptians. It is written that "the Sais *restoration* can be counted amongst the most significant periods in the history of the Egyptian culture, and provides for the best possible illustration of just how *conservative* the Egyptian national spirit was" ([966], page 166).

This is what B. A. Turayev has to say about the "restorations":

"Attempts were made to edit all of the official texts using an *archaic language* that is hardly understood by many… the forgotten ranks and offices are *revived*, the inscriptions made during the epoch, even the *private* ones, can be taken for those made during the epoch of the Old Kingdom [sic! – A. F.]… . The most typical phenomenon here is the appearance of the pictures of agricultural works, pastoral scenes, etc., on the sepulchral wall that are familiar to us from the Old Kingdom epoch." ([853], Volume 2, pages 102-103)

All of this after *two thousand years*?

Try imagining having to write a message to your friends using *the language of I B.C.* This seems hardly possible, even if one were to express such a volition.

The new chronology eliminates the necessity of inventing such absurd explanations. Apparently, there have been *no "global renaissances"* on such a scale.

N. A. Morozov gives a consecutive analysis of all thirty dynasties of the Egyptian pharaohs. He comes to the conclusion that nearly all of the dynasties preceding the IV century A.D. are phantom duplicates of several mediaeval dynasties.

We shall refrain from quoting his speculations here. It isn't Morozov's conclusions that our research

is ultimately based upon, but, rather, our mathematical and statistical research, q.v. in the bibliography of our publications. Our research has shown, among other things, that N. A. Morozov was really very far from concluding his research. He stopped at too early an epoch – the beginning of the IV century A.D. – being of the erroneous opinion that subsequent Egyptian history doesn't need to be revised.

He turns out to have been wrong. Apparently, the entire "Scaligerian Textbook of Egyptian History" preceding the X-XII century A.D. is compiled from phantom duplicates of the mediaeval history of Egypt of the XIII-XVII century A.D., as well as the XIV-XVII century history of the Great=Mongolian empire, q.v. in CHRON5. Furthermore, the Biblical "Land of Egypt" apparently has got nothing to do with the territory of modern Egypt, since the Biblical Egyptian events apparently took place in an altogether different location. See CHRON6 for more details.

7.3 The ancient Hittites and the mediaeval Goths

It is commonly known that the "ancient Hittites" were "discovered" as late as 1880, when Professor Archibald Sayce read his lecture proclaiming the existence of "the ancient nation of the Hittites," basing his research on analysis of the Bible, q.v. in [291], page 21. Sayce was granted the title of the Inventor of the Hittites ([291]). The Biblical studies of Archibald Sayce and William Wright led them to the conclusion that the "Hittites" used to live to the north of the Biblical Promised Land. Being raised on the Scaligerian history and adhering to the erroneous opinion that the Promised Land is located on the territory of modern Palestine, Sayce and Wright confined the "ancient Hittites" to Asia Minor, which lies to the north of Palestine. However, nowadays we are beginning to understand that the Biblical Promised Land covers large territories in Southern Europe and the Mediterranean lands, q.v. above and in CHRON6. However, in this case the "Hittites" would have lived to the north from Southern Europe – in the lands populated by *the Goths*. What we witness here is a superposition of the "ancient Hittites" and the mediaeval Goths.

We can now see the roots of the mistake made by Sayce and Wright. They suggested searching for Hit-

tite relics in Asia Minor, which was the place of the erroneous XVII century Scaligerian localization of Biblical events, and not in Europe, where one wouldn't have to search for them since these "Hittites" were already perfectly well known under the name of Goths. The "Hittite studies" were conducted in the same manner as previous Biblical research, with archaeologists going to Asia Minor in search of ruins and finding plenty to ascribe to "Hittites." This is how another error of the Scaligerian chronology received "archaeological proof."

8.
PROBLEMS INHERENT IN THE SCALIGERIAN CHRONOLOGY OF INDIA

The Scaligerian history of the East is closely related to the history of Europe and Egypt as presented by Scaliger and Petavius. Thus, all possible alterations of the European chronology automatically affect the chronology of "ancient" India. Let us give a brief summary of the Scaligerian chronology of India. The historian N. Gousseva writes that "historical science runs into such problems in India as the researchers of the ancient history of other countries and peoples cannot even conceive of [this confession was made in 1968 – A. F.]. The primary difficulty here is the absolute lack of dated monuments" ([433], page 5). Apparently, all of the main "chronological landmarks" in Indian history are a product of a rather recent age, and they are directly dependent on the previously compiled Scaligerian chronology of Rome, Greece, and Egypt. Hence the obvious necessity for the revision of the Scaligerian history of India.

The historian D. Kosambi reports:

"There is virtually *nothing* of what we know as historical literature in India… all we have is a vague oral tradition and an extremely limited number of documented data, which is of a much greater value to us than that obtained from legends and myths. This tradition gives us *no opportunity* of reconstructing the names of all the rulers. The meagre remnants that we do possess are *so nebulous* that no date preceding the Muslim period [before the VIII century A.D. – A. F.] can be regarded as precise… the works of the court chroniclers didn't reach our time; only Cashmere and Camba can be regarded as an excep-

tion of sorts… all of this leads some rather earnest and eminent scientists claim that India has *no history of its own*". ([433], pages 19-20).

For instance, this is what the historians tell us about the "ancient" culture of the Indus valley:

"Written memorials of the Indus culture *defy deciphement to this day… not a single finding can be associated with an actual person or historical episode*. We don't even know the language that was spoken by the inhabitants of the Indus valley". ([433], pages 65-66).

We are told that the Scaligerian chronology of "ancient" India contains *gaps larger than 600 years* ([433], pages 65-66). As does the Scaligerian "ancient" Europe, India "suddenly" rolls back to barbarism around the beginning of the new era, and then "resumes" its ascension to the mediaeval "position of eminence"; which is suspiciously similar to the fate of the culture of "ancient" Europe, allegedly forgotten by everyone and only achieved once again in the Middle Ages.

The VII century A.D. is the time when the alleged "renaissance" of the Indian culture allegedly began – rather gradually, based on the Aryan culture (possibly the Christian-Arian ideology). The famous "ancient" Indian "Aryans" can apparently be identified as the Arian Christians of the XI-XIII century, according to our reconstruction. The mysterious Aryans began to haunt an antediluvian age courtesy of Scaligerian chronology.

Furthermore, it turns out ([433]) that the texts concerning the cult of Krishna in India are of a relatively recent origin. Specialists in the history of religions have long since confirmed the existence of a vast number of parallels between Krishna and Christ ([544], Volume 4). This is why certain statements made by latter day historians reek of ambiguity, such as "the complete biography of Krishna was completed as late as the *XII century A.D.*" ([433], page 122). It is possible that the Indian Krishna cult is nothing but the cult of Jesus, brought to India by the Christian missionaries of the XI-XII century.

It is assumed that the god Krishna is mentioned in the Bible ([519], Volume 4, page 17). According to some Indian sources, the god "Krishna" can virtually be identified with Christ ([519], Volume 4).

Mediaeval authors occasionally placed India in Africa or Italy (!). See more details in CHRON5. We should point out another very odd fact of Scaligerian

history in this respect. It is presumed that the "ancient" Alexander the Great reached India and defeated the Indian king Porus, having conquered many lands in India ([433]). One would think an event of this calibre would leave some trace in Indian history at the very least. However, this doesn't seem to be the case. "This invasion… appears to have *remained unnoticed* by the Indian tradition, although some foreign historians consider it to be the *only* large-scale event in the ancient history of India" ([433], page 143).

One feels like asking the obvious question of whether the "India" of the mediaeval manuscripts really is the same country as the modern India? Could it have been an altogether different country that Alexander had conquered?

We are told further on that many vital issues concerning the "ancient" history of India are based on the manuscripts found as late as the *XX century*. It turns out, for instance, that "the *main* source of knowledge in what concerns the governmental system of India and the policy of the state in the epoch of Maghadhi's ascension is the *Arthashastra* – the book… that had only been found in 1905, after many a century of *utter oblivion*" ([433], page 146). It turns out that this book is basically an Indian version of the famous mediaeval oeuvre of Machiavelli. However, in this case the "ancient Indian Arthashastra" couldn't have been written before the Renaissance. This could have happened in the XVII-XVIII century, or even the XIX.

The Scaligerian history of India resembles its European cousin in that it rolled back to barbarism in the beginning of the new era, and had to "resume" its "long ascension to the heights of civilization" ([433]). We are also told that the "first significant Sanskrit inscription was found in Ghirnar and dates from roughly 150 A.D." ([433], page 172). However, we instantly discover that the heyday of *Sanskrit* literature in India began around the XI century A.D. This is most probably a result of the chronological shift of a thousand years that we so familiar with by now. A propos, could "Sanskrit" stand for "Saint Script," or the Holy Writ?

The Scaligerian history of mediaeval India also contains a great number of centenarian chronological gaps, and is confusing and chaotic.

"The apathy of the Brahmans to everything real in the past and the present… had *erased the history of*

India from human memory… . The reconstruction of the history and the realities… of the ancient India… we have to rely on the reports of the Greek geographers and Arab travellers… there isn't *a single Indian source* that would equal the reports of the foreigners in value". ([433], page 180).

Thus, the Scaligerian history of India is wholly dependent on the consensual chronology of Rome and Greece and will have to be reconstructed in turn.

Historians characterize the dynastic history of India thusly: "The names of individual kings are obscured by the *quaint haze of legends*. We possess *nothing* that would remotely resemble palace chronicles" ([433], page 192). We fail to see the quaintness of historical haze. Could it reside in the freedom it gives to one's fantasy?

The famous *Mahabharata,* a collection of the "ancient" Indian epos, is relegated to a distant B.C. epoch by the Scaligerian historians. On the other hand, the work is supposed to have been based on the "ancient" Greek epos. A large number of parallels between the *Mahabharata* and the poems of Homer were discovered quite a while ago ([519]). Historians claim that the Indians were "rephrasing Homer" ([520], page 13). If this be the case, the dating of the *Mahabharata* becomes completely dependent on the datings of the poems written by the "ancient" Homer. We have already demonstrated that events that occurred in "ancient" Greece were most probably really mediaeval, that is, dating to the XIII-XVI century A.D.

An in-depth analysis of the *Mahabharata*, the great body of epic text, as seen from the stance of the new chronology, is performed in our new book titled *The Chronology of India. Ptolemy's 'Geography'. The 'Atlas' of Ortelius*, 2003.

9.
WAS THE ARTIFICIAL ELONGATION OF ANCIENT HISTORY DELIBERATE?

According to the results obtained by the new methods of dating, virtually all of the old documents that have reached our age are copies from ancient originals, presumed lost. These originals were written in order to reflect the current events of the XI-XVI century A.D., and not for the purpose of confusing future historians. It seems that earlier documents simply failed to have survived until the present day. However, the overwhelming majority of XI-XVI century originals either got destroyed, or were subjected to tendentious editing in the XVI-XVII century, during the creation of the Scaligerian chronology. Whatever meagre genuine evidence of antiquity escaped such editing (or re-writing in the light of the veracious Scaligerian Chronology) are declared to be forgeries or creations of ignorant authors.

In CHRON5 and CHRON6 we give examples of how our revised chronology acquits several old documents from accusations of forgery, such as the famous Gift of Constantine, the Gift of Alexander the Great, and so on. In other words, many of the documents declared fake nowadays turn out to be original, concurring perfectly well with the new chronology. Such is the case with the "Privileges" given to the mediaeval Ducal House of Austria by Caesar and Nero (see CHRON1, chapter 1). In our opinion, nearly all of the events described in the ancient chronicles really *did take place*. The question is one of their exact *location and timing*. This is precisely where chronological and geographical confusion began, aided by the deliberate distortions of the Scaligerite chronologers, which led to the "elongation of history." However, the key role was most probably played by the tendentious "editing of history" in the XVI-XVII century.

Summary.

1) Most of the documents that have reached our age – the ones referring to pre-XVI century events – are based on old originals. However, nearly all of the latter went through the hands of the tendentious editors of the XVI-XVII centuries. Their reading and interpretation are ambiguous, and an altered chronology leads to a new understanding.

2) Some chronological errors were accidental. A millenarian shift of the years of Christ's life from the XI century A.D. to the I might be an example of such an error.

3) Some of the distortions of mediaeval history preceding the XVI century A.D. were deliberate and verged on blatant falsification. We shall provide more details in CHRON5, CHRON6 and CHRON7.