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 in a later age, when the pyramid stones were pillaged for building purposes."

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

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 was 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 chronologist 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.

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

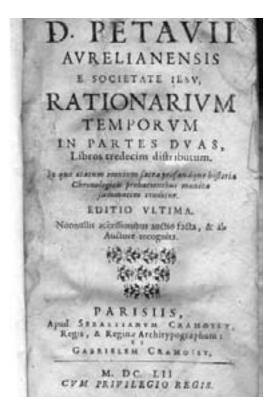


Fig. 1.2. The title page of *Rationarium Temporum* by D. Petavius, published in 1652. Taken from [1338]. Mark that the Latin letters U and V were identical in XVI-XVIII century texts.

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].

Middle Ages the Scaliger-Petavius version. We shall simply refer to it as "Scaligerian Chronology". As it 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 be 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).

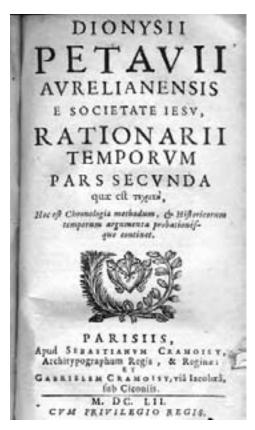


Fig. 1.4. The title of the second volume of Rationarium Temporum by D. Petavius, published in 1652. Taken from [1338].

It is worth noting that Eusebius of Caesarea is painted wearing 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).

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,



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.

in hard covers with wide fastening straps. The artists of the XVI-XVII century have most probably painted recent mediaeval events and characters cast into the "dark ages" by later 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 в.с. – 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 scholastic, and received 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



Fig. 1.7. Painting by Cesare Nebbia and Giovanni Guerra allegedly dating from 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.