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

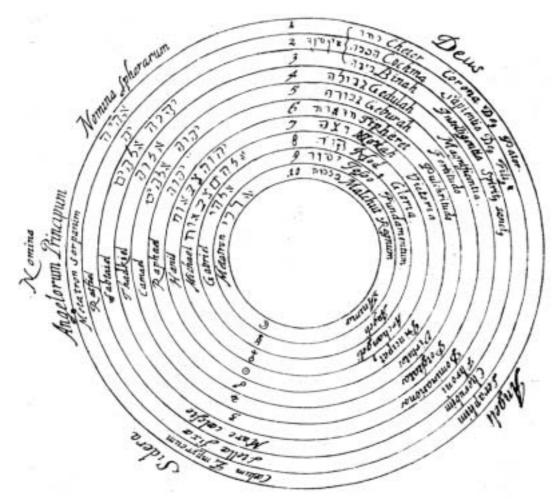


Fig. 4.3. A mediaeval picture of the ten celestial spheres as concentric wheels. Taken from the Latin book by J. Ch. Steeb titled *Coelum Sephiroticum Hebraeorum (The Sephirotic Skies of the Jews)*, Maguntiae, 1679 ([1412]). Book archive of the Pulkovo Observatory (St. Petersburg). Also see [543], page 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.

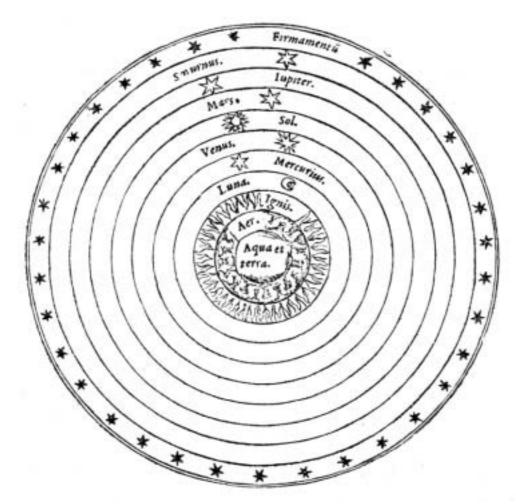


Fig. 4.4. According to the mediaeval cosmological concept, the planetary orbits had the shape of concentric wheels. Taken from the book titled Canonum Astronomicum, 1553 ([1319]). Book archive of the Pulkovo Observatory (St. Petersburg). Also see [543], page 54, ill. 22.

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 concentric 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.

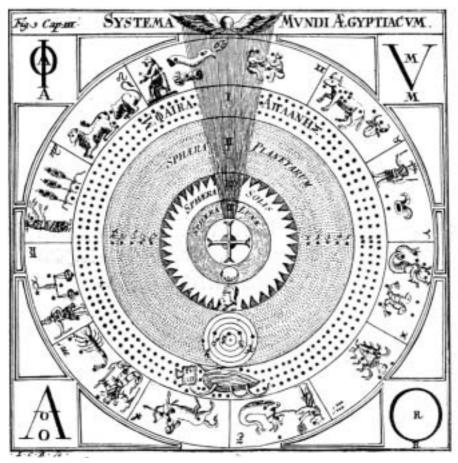


Fig. 4.7. Mediaeval Egyptian cosmology. The wheel-like orbits roll across the zodiac. Taken from *Firmamentum Firmianum* by Corbinianus dating from 1731 ([1077]). Book archive of the Pulkovo Observatory (St. Petersburg). Also see [543], page 254, ill. 136.

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

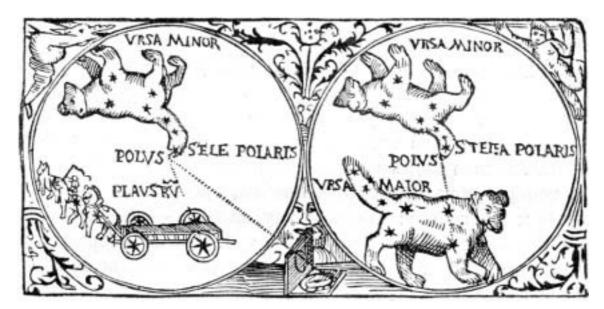


Fig. 4.8. This picture shows us that the Chariot constellation (on the left) was replaced by Ursa Major (on the right). Taken from Cosmographicus Liber Petri Apiani mathematici studiose collectus, Landshutae, impensis P. Apiani, 1524 ([1013]). Book archive of the Pulkovo Observatory (St. Petersburg). Also see [543], page 91, ill. 53.

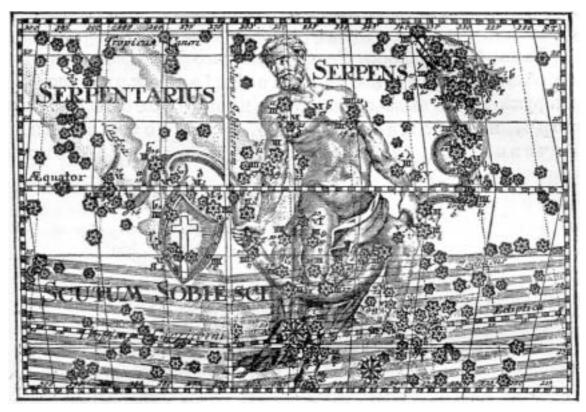


Fig. 4.9. A mediaeval picture of the Ophiuchus holding the equinoctial in his hands. There are grading points on the equinoctial, making it look like a measuring-rope. Taken from the Firmamentum Firmianum by Corbinianus, 1731 ([1077]). Book archive of the Pulkovo Observatory (St. Petersburg). Also see [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.

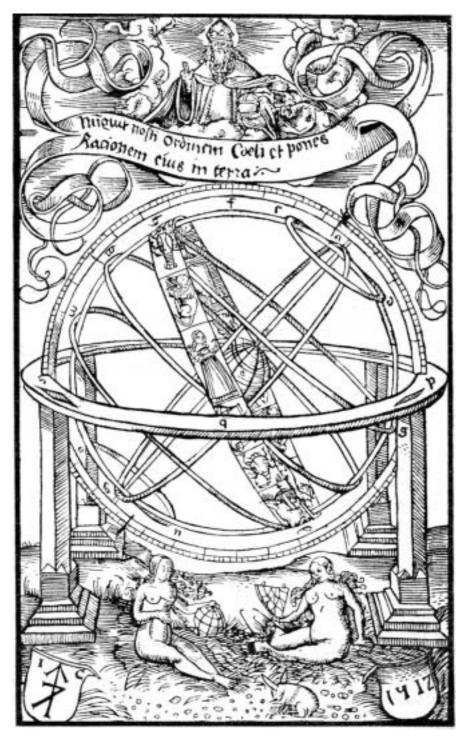


Fig. 4.11. A picture of the celestial temple from the *Opusculu de Sphaera… clarissimi philosophi Ioannis de Sacro busto*. Book archive of the Pulkovo Observatory (St. Petersburg). Also see [543], page 111, ill. 61.

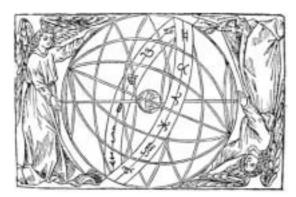


Fig. 4.12. Mediaeval concept of cosmology, or the construction of the celestial temple. The angels rotate the axes, the wheels, and the zodiacal belt. Taken from the Opusculum Johannis de Sacro busto spericum, cu figures optimus ei novis textu in se, sine ambiguitate declarantibus by J. de Sacro Bosco (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 "Godto-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.

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

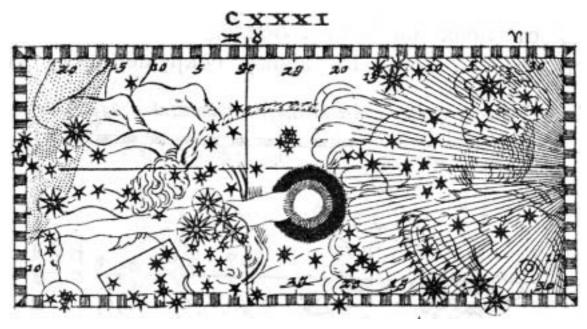


Fig. 4.15. A mace-shaped comet. Taken from the *Theatrum Cometicum*, etc. by Lubienietski, Amstelodami, 1666-1668 ([1256]). Book archive of the Pulkovo Observatory (St. Petersburg). Also see [544], page 195, ill. 101.

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.

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. Lubienetski 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.