to consider planets mobile stars. Old Russian and Byzantine chronicles (the chronicle of John Malalas, for instance) would explicitly use the term "wandering star" ([503], page 195). This is why planetary figures from the Egyptian zodiacs carry rods.

Let us point out that the Sun and the Moon also ranked as stars in ancient astronomy, since they move across the celestial sphere following the same trajectory as the planets from the point of view of an earth observer. This is why we shall occasionally refer to them as planets, which is incorrect insofar as modern astronomy is concerned, but facilitates the narration to some extent.

We haven't told the reader anything new so far. N. A. Morozov already knew about the planetary rods in the Egyptian astronomical symbolism, likewise his predecessors who studied Egyptian zodiacs. The planetary rod is the primary attribute for telling planets apart from other signs and figures, and is used by modern Egyptologists whenever they attempt a cautious discussion of the issue of dating the Egyptian zodiacs astronomically (see [1062] and [1062:1], for instance). All the planetary figures found in the Round Zodiac of Dendera by the modern researcher S. Cauville, for example, have planetary rods in their hands, looking just as described above ([1062]).

One is confronted by a certain problem here. The matter is that one usually finds more figures with rods in Egyptian zodiacs than it is required for all the planets one can see with the naked eye, of which there are five (apart from the Sun and the Moon) – Saturn, Jupiter, Mars, Mercury and Venus. Nevertheless, in the Long Zodiac of Dendera we find ten such figures, for instance, the number equalling nine for the Round Zodiac, etc. Of course, it is possible that certain planets could be depicted by several figures with rods - a "procession", as it were. Yet we usually find too many such "processions" for a single horoscope.

We have discovered the reason for this above, in our study of the Egyptian zodiacs. The matter was addressed above - it turns out that there isn't just one horoscope that we find in a given Egyptian zodiac, but several of those at once. The only complete horoscope is usually the main one, which stands for the actual date that the horoscope in question was compiled and drawn for. Other horoscopes are secondary and incomplete. They are related to the astronomi-



Fig. 15.29. The drawing of a sitting person with a rod. Such rods are a distinctive feature of planets in Egyptian zodiacs. A fragment of mural artwork from an Egyptian tomb near Luxor (the so-called Inkherki tomb in the Valley of the Craftsmen). Taken from [499], page 94.

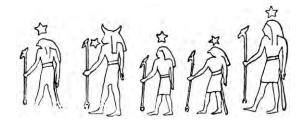


Fig. 15.30. "Typical drawings of planets from the Egyptian horoscope artwork". Fig. 182 from the book by N. A. Morozov ([544], Volume 6, page 956). All the figures are holding similar rods.

cal description of a calendar year that contains the zodiac's primary date. Therefore one finds more planetary figures than one expects in the Egyptian zodiacs - some of the figures pertain to secondary horoscopes and not the primary one. As a result, some of the planets are represented several times in one and the same zodiac (once in the main horoscope, and, possibly, a few more times in the secondary ones).

N. A. Morozov failed to realise this, and so he proposed that some of the figures should stand for something else but planets, despite being equipped with planetary rods. As we can understand now, this idea had been erroneous. N. A. Morozov followed it nevertheless, and tried to ascribe a non-astronomical meaning to the "extraneous" planetary symbols. This would lead to imperfections and contradictions in his interpretation of the zodiacs. We have cited some of them above, and shall refrain from carrying on with their list presently.

Let us formulate the principle behind our interpretation of the planetary symbols present in the Egyptian zodiacs. It is as follows.

Each and every figure that carries a planetary rod in an Egyptian zodiac stands for a planet, regardless of whether the figure in question is standing, sitting or walking. Alternatively, they can be participants of "planetary processions", which once again means that they accompany one planet or the other. Below we shall discuss the issue of telling the main horoscope's planets apart from those from the secondary horoscopes.

However, if the rod carried by a figure in the Egyptian zodiac is a mere stick with no special topping, the figure in question may well be a non-planetary one. We usually see these "unorthodox" rods carried by secondary horoscope figures, likewise the symbols that accompany a planet as its "procession" or "entourage". Their symbolism varies to a greater extent and isn't quire as strict as the one used for the planets of the primary horoscope. In the rare cases when the quality of the picture doesn't allow us to estimate what rod it is that the figure in question is carrying, we shall consider both possibilities at once.

There are Egyptian zodiacs where planets are represented differently – not as wayfarers. This isn't a frequent occurrence, but it takes place at times. In the Athribis zodiacs of Flinders Petrie, for instance (zodiacs AV and AN), all the planets except for the Sun, the Moon and Mercury are drawn as birds. In the zodiacs from the tomb of Petosiris (zodiacs P1 and P2) the planets look like waist-long portraits whose hands are out of sight altogether. In such cases there can obviously be no rods anywhere.

One has to emphasize that the identification of planets on the zodiac is one of the key moments of astronomical dating. The date that one gets as a result of astronomical calculations shall simply be incorrect if the figures are misidentified. On the other hand, one is occasionally faced with several identification options for one or the other zodiacal figure. The correct one is discovered as a result of astronomical calculations.

Let us explain the procedure of such calculations. Let's assume that a given zodiac allows for several options of identifying one planet or another. In other words, some of the planets can be found in a variety of methods, the correct one remaining unknown a priori. This is often the case with research in Egyptian zodiacs, and we shall keep running into such occurrences below. Is it possible to identify planets correctly in circumstances this ambiguous, likewise the veracious astronomical dating of the zodiac? The answer turns out to be in the positive. One can indeed do this for the overwhelming majority of Egyptian zodiacs owing to the secondary horoscopes that we have discovered therein.

We shall proceed as follows. In the first stage we shall consider all the astronomical solutions resulting from various planet identifications to be of equal validity, and then verify each one's correspondence to the secondary horoscopes of the zodiac in question. It turns out that "random" solutions don't withhold such tests, excepting the very brief and minimally informative zodiacs, and there are few of these. We shall witness the fact that the Egyptian astronomers and artists applied enough effort to exclude random or extraneous solutions from the zodiacs they created. In other words, they introduced enough additional astronomical information into these zodiacs for all of the random solutions to become redundant. As a rule, there is only one solution that satisfies to the entire symbolic content of an Egyptian zodiac.

After we do away with the extraneous solutions, we can return to the issue of veracious planetary identification. Bear in mind that each of the solutions that we arrived at during the first stage would be based on a decipherment of its own, or an a priori determined method of identifying planets. All such methods were of equal importance to us initially. However, once the correct solution emerges, we shall have the opportunity of specifying the correct planetary identification method with absolute precision. This will be the iden-

tification method that brings us to the correct astronomical solution, which we shall use as our finite method, rejecting all the other identification options that spawned solutions contradicting secondary horoscopes.

Thus, let is sum up.

The finite solution of the issue concerning the respective identity of the figures in the zodiac under study and the planets that they represent can only be reached after all of the zodiac's decipherment options undergo exhaustive calculations and are tested to comply with the secondary horoscopes. The final option is the one that yields an astronomical solution satisfying to all the parameters. There is usually just one such solution, which removes the ambiguity from the issue of planetary identification.

Below we provide an in-depth account of how each planet of seven (the Sun and the Moon included) were represented in the main horoscope of an Egyptian zodiac. In accordance with the above, the planetary figures in the zodiacs can be divided in two parts.

The first part is the Egyptian planetary images, which can be deciphered instantly, even before we begin with astronomical calculations. This shall be the case, for instance, if the identification of a certain planet from the zodiac directly stems from "ancient" mythology or old astral symbolism. Obviously, astronomical considerations also play a part in this.

Most of such cases were already discovered and studied in detail by our predecessors. It has to be said that the Egyptologists and the astronomers of the XIX and the early XX century were rather active in their search and interpretation of planetary symbols inherent in the Egyptian zodiacs. H. Brugsch, the famous XIX-century Egyptologists, had worked on it, as well as the astronomers Dupuis, Laplace, Fourier, Letron, Holm, Biot, Knobel, Viliev and a plethora of others ([544], Volume 6, pages 651, 632 and 633). Their efforts of many years were summed up in the fundamental work by N. A. Morozov on the astronomical dating of the Egyptian zodiacs ([544], Volume 6). Apart from that, N. A. Morozov voiced a number of new valuable ideas concerning this issue and corrected some of the errors in the interpretation of the zodiacs made by his predecessors. Some of the examples are cited above.

All of this concerns the first group of planetary fig-

ures – the ones which can be identified as respective planets with enough reliability based on a priori considerations.

The second group is constituted of the planetary figures that cannot be given a final identification during preliminary analysis. There are usually few such figures - just one or two per zodiac. However, even a single planet can significantly alter the result of the astronomical dating. Therefore, if we have doubts about so much as a single planetary figure, it is an absolute necessity to consider several interpretation options at once.

The situation when a single planet could be represented by several figures simultaneously isn't an uncommon occurrence in the analysis of Egyptian zodiacs. As we already mentioned, in such cases we go through all possible versions and perform astronomical calculations for each and every one of them. Finite identifications of planets only emerge at the very end of the research. More details can be found in the ensuing sections dedicated to the astronomical datings of actual zodiacs. In particular, we shall provide a description of our verification calculations that led to one or another identification of planets from a given zodiac.

In the present section we shall only cite the end result, or the main horoscope's planetary figures as interpreted for each of the zodiacs under study. Bear in mind that under the main horoscope of an Egyptian zodiac we understand the planetary disposition for the primary date encoded therein, which is the very date that the horoscope in question would be compiled for. Below we shall simply study the planetary figures of the primary horoscope, with the figures of the secondary horoscopes considered in the ensuing sections.

A list of the planetary symbols from the primary horoscope in the Egyptian zodiacs shall be presented as a sequence of seven drawings that corresponds to the number of planets, the Sun and Moon included. In each of them one sees collected representations of the same planet from various Egyptian zodiacs, which gives us the opportunity to compare them with ease.

In order to distinguish between the cases of the first type, when the planet has been identified a priori, and those of the second type, for which the final identification was chosen out of several options, we shall use the following approach. In the first case, the circle that contains the zodiac where the figure in question comes from shall look normal, and in the second case it shall be shaded grey. Thus, the grey shading of a circle refers to the fact that this figure's finite identification resulted from a calculation that involved all of the identification options.

We shall begin with Saturn.

4.2. Saturn in the primary horoscope

The "ancient" Egyptian symbols of Saturn from various Egyptian zodiacs are presented in fig. 15.31. Let us remind the reader that we shall only cover the symbols of the primary horoscope so far. Fig. 15.31 is divided into cells; each one of those corresponds to one Egyptian zodiac or another. The actual zodiac is represented by the circle one sees in the cell. If the



Fig. 15.31. Saturn in the primary horoscope as drawn in various Egyptian zodiacs. Cells where the circles with the horoscope codes are shaded grey refer to cases where Saturn could not be identified reliably in the preliminary analysis stage, and its identification would only become clear after astronomical calculations accounting for all possible variants. The zodiacs of Petosiris aren't represented. Fragments taken from [1100], [1062] and [544], Volume 6.

circle has a grey shading, the figure of Saturn for this zodiac was identified after calculations involving different interpretation options. In other cases, the planetary symbol was identified as such during the preliminary analysis of the zodiac.

We see no drawings from the zodiacs of Petosiris in fig. 15.31. The matter is that Saturn, likewise a number of other planets, is drawn in a manner most peculiar for Egyptian astronomical symbolism - as waistlong portraits, which resemble each other to a great extent in case of Saturn and Jupiter. None of the two possess the distinctive characteristics of Jupiter and Saturn as seen in other Egyptian zodiacs. Therefore, the problem of their planetary identity had to be solved via sorting through all possible options and involved a large body of astronomical calculations. In general, these drawings are of little interest, and stand apart from all other Egyptian representations of Jupiter and Saturn. We shall deal with them further on.

One has to mention some of the idiosyncrasies inherent in Brugsch's zodiac in re fig. 15.31. Pay attention to the fact that one sees three pictures of Saturn in this zodiac (cell BR in fig. 15.31). This results from the fact that Brugsch's zodiac contains three primary horoscopes at the same time, as we mentioned above. In the horoscope that was dated by N. A. Morozov, the name of Saturn is a demotic subscript (ibid). In the other two, discovered by the authors of the present book, Saturn is presented as figures.

The history of the discovery of all three horoscopes from Brugsch's zodiac was told above. Let us relate it in brief – the demotic subscript horoscope had been discovered by Brugsch himself as early as in the XIX century. Brugsh found a coffin with a zodiac in Egypt and published its description accompanied by a drawn copy in 1862 ([1054] and [544], Volume 6, pages 694-697). In particular, Brugsch noticed a number of subscripts in Egyptian demotic writing. One sees them between the constellation figures to the left from the central figure of "the goddess Nuit", qv in figs. 12.17 and 13.14. When Brugsh had read all of the subscripts, it turned out that they contained the names of all the planets except for the Sun and the Moon, whose positions were also given explicitly nonetheless. This resulted in the compilation of a complete horoscope that we shall be referring to as the "demotic subscript horoscope" from Brugsch's zodiac.

Recently we made the discovery of two more horoscopes in Brugsch's zodiac. Unlike the demotic horoscope, as discovered by Brugsch and dated by Morozov, they aren't subscripts, but consider an integral part of the actual zodiac. The planetary figures thereupon stand in boats, hence the name "horoscope with boats". Planetary figures of yet another zodiac are drawn without rods, possibly in order distinguish them from the zodiac with boats, qv in fig. 13.17. We refer to it as to the "horoscope without rods".

Let us return to the drawing with the Egyptian drawings of Saturn (fig. 15.31).

The figure of Saturn is easy to recognize in the Egyptian zodiacs, since it possesses some distinctive traits, one of those being a crescent on the head of the figure. As a rule, a planetary figure from an Egyptian zodiac with a crescent on its head is Saturn. Another Egyptian attribute of Saturn is a hieroglyph of an ox or a bull near the head of the figure. In cases when one finds said attributes in a horoscope, it is easy enough to identify Saturn, and there is no confusion in the researcher camp (see [544], Volume 6, for instance, as well as [1062] and [1062:1]. In other cases we must choose from a variety of options. Let us linger on this for a while and explain why Saturn's representations in the Egyptian zodiacs are usually similar to what one sees in fig. 15.31.

In fig. 15.31 the circles standing for zodiacs aren't shaded grey in four cases out of seven, which means that in four cases the figure of Saturn had been identified as such prior to the astronomical calculations. Its position in the zodiac would subsequently be considered quite unambiguous. We shall begin with these simpler cases. The three other cases are presented in fig. 15.31 in the cells where the circles are shaded grey. These are more complex and required a choice from multiple possibilities. We shall deal with these cases below, in the sections related to the dating of individual zodiacs.

Let us study fig. 15.31 and see how Saturn is drawn in the zodiacs whose icons aren't shaded, starting with the large zodiacs from temples. The icons used for three of them aren't shaded in fig. 15.31. Those are the Round Zodiac of Dendera (DR), the Long Zodiac of Dendera (DL) and the zodiac from the Greater Temple of Esna (EB), qv in figs. 13.7, 12.13 and 12.14. In each of those we see virtually the same symbol with a planetary rod – a male figure with the face of an animal and a crescent on its head, qv in fig. 15.31.

We are using the word "crescent" - however, one could argue about the object in question being crescent-shaped horns rather than a crescent per se. This is possible. The shape of the figure with a crescent on its head does resemble the snout of a bull (ibid). However, we shall simply be using the term "crescent" below. It has to be said that it is completely unimportant for astronomical dating whether or not the object in question is in fact a crescent.

Next to the planetary figures with crescents on their head we see the same hieroglyphic inscription in both zodiacs from Dendera, which looks by a bull underneath a bird, with a star at the very bottom of the composition, qv in fig. 15.31 (DR and DL). A propos, in the Round Zodiac one sees another small hieroglyph that looks like a small square. According to the Egyptologists, it stands for a room or some other confined space, as well as the sound P ([370], page 19). The translation of the entire inscription as given in [1062] runs as "Horus le taureau" – Horus the bull, or Horus the Taurus. We aren't concerned with a precise translation at the moment; the important fact is that the repetition of the same description near two identical figures clearly attests to the fact that the figures in question refer to the same object, which is obviously a planet in this case and not some other astronomical figure – this is confirmed by the rods in the hands of the figures under study, qv in fig. 15.31.

What planet could this be? The answer had already been given in the works of our predecessors. The planet in question is Saturn ([544], Volume 6; also [912:3], [1062] and [1062:1]. In order to make the answer more clear, let us draw the reader's attention to the fact that near the planetary figure with a crescent on its head we see another similar figure in the Round Zodiac, also with a crescent on the top of its head; however, it is a scythe and not a rod that it's holding in its hands, qv in fig. 14.19 above. As we already mentioned, the second figure pertains to one of the secondary horoscopes, and a rod isn't an obligatory attribute in its case, although it does indeed represent a planet. All the planets of the main horoscope have rods in the Round Zodiac, which isn't always the case with secondary horoscopes. If we are to disregard the rod vs. scythe in the hands of the fig-



Fig. 15.32. Ancient drawing of the planet Saturn with a scythe from a mediaeval astronomical book allegedly dating from 1489 (Leupoldus de Austria, Compilatio de Astrorum Scientia - see [1247]). We see the legend "Saturnus" right next to the picture, quite obviously standing for "Saturn". As we can see, the scythe, which used to symbolise death in ancient mythology and astronomy, had been an attribute of Saturn. Taken from [912:3], page 657.

ures, they resemble each other to such an extent that one can have no doubts about them standing for the same planet.

One must finally note that the scythe carried by the second figure is a well-known mediaeval symbol of Saturn. The scythe, which used to be a figure of death in mediaeval symbolism, is frequently found to be an attribute of the planet Saturn, qv in the pictures of Saturn taken from mediaeval European tractates on astronomy reproduced in [912:3], page 657. We reproduce one of such drawings in fig. 15.32. We see Saturn hold a scythe; thus, the figure with the scythe on the Round Zodiac is also most likely to represent the planet Saturn, qv in fig. 14.19. Thus, the second figure that we see hold a planetary rod in the Round Zodiac is also most likely to stand for the planet Saturn, qv in fig. 15.31 (DR). Let us point out that a perfectly similar figure represents Saturn in the Long Zodiac of Dendera (DL) and the "Greater" Zodiac of Esna (EB).

Thus, a male planetary figure with a crescent on its head is a representation of Saturn.

Coming back to the scythe in the hands of Saturn, one must point out that the latter used to be considered a "sinister planet" in general ([532], page 488). Furthermore, in the "ancient" mythology Saturn was identified as Kronos, the devourer of his own offspring ([532], page 488; also [1062], page 31). In other myths Saturn was considered the Lord of the Dead ([532], page 488). We already mentioned the scythe to be a symbol of death. No other planet out of the six known in antiquity possesses such "deathly" qualities. Therefore, we consider the idea that the scythe in the hands of the figure from the Round Zodiac of Dendera as voiced by N. A. Morozov and other researchers to be perfectly sound.

In general, there was no controversy involving the identification of Saturn on the Round Zodiac of Dendera. The very same figure that one can see in fig. 15.31 (DR) is identified as Saturn by both N. A. Morozov ([544], Volume 6) and Sylvia Cauville, a modern Egyptologist ([1062] and [1062:1]). A similar identification is suggested in the recent work by T. N. Fomenko ([METH3]:3, Chapter 12). As a result of our analysis, the abovementioned identification of Saturn receives additional validation, since the astronomical solutions that we have discovered (based upon the identification in question, among other things) are in perfect concurrence with all the graphical information one finds in the Egyptian zodiacs.

Let us now consider several more zodiacs from Egypt.

In the Ahtribean zodiacs of Flinders Petrie, Saturn looks like a bird with a crescent on its head, qv in fig. 15.31 (AN and AV). This identification results from a calculation that involves all possibilities (the circles for AN and AV are shaded grey in fig. 15.31). It corresponds with the identification of Saturn suggested for these zodiacs by the Egyptologists in [544], Volume 6, page 731. We must emphasize that N. A. Morozov had used a different identification here - an erroneous one, as it turns out ([544], Volume 6, page 738). See details below, in the section related to the dating of the zodiacs from Athribis.

Another zodiac with an unshaded circle in fig. 15.31 is the zodiac of Brugsch (BR). The figure of Saturn is easy to identify before the calculations. The actual zodiac of Brugsch can be seen in fig. 12.17 above. As we already mentioned, it contains three primary horoscopes at once - the "demotic subscript horoscope", the "horoscope with boats" and the "horoscope without rods". In fig. 15.31 (BR) one sees the figures associated with Saturn in each of the three horoscopes.

In the demotic subscript horoscope the name of Saturn, as well as that of Jupiter, is found in the two lines of text directed towards the head of Leo, qv in fig. 15.31 (BR). H. Brugsch interpreted the inscription a "Hor-pe-Setah" and "Hor-pe-Kah" ([544], Volume 6, page 697). Thus, Saturn isn't drawn as a figure in the horoscope in question, but rather represented by a simple inscription in the necessary place. This is a fortunate enough case; if the name of a planet is specified in a zodiac explicitly, one has no problems with identifying it.

In another horoscope that we find in Brugsch's zodiac - the "horoscope with boats", it is also easy to find Saturn, who is represented by exactly the same figure as we see in the zodiacs from Dendera (DR and DL), likewise the "Greater Zodiac" of Esna (EB). It is the figure with the body of a man and the head of an animal who stands in a boat with a planetary rod in his hand and a crescent crowning his head, qv in fig. 15.31 (BR).

As for the last horoscope of the zodiac, or "the horoscope without rods" that one finds on the vertical strip to the left of "the goddess Nuit", qv in fig. 13.17, the situation with identifying Saturn is somewhat more complex, hence the question mark under the presumed figure of Saturn in the horoscope, qv in fig. 15.31 (BR). The matter is that one doesn't know a priori which of the four male figures of the "horoscope without rods" represents Saturn (see fig. 15.33). There are four male figures in a row, with the respective heads of a jackal, a human, an ape and a falcon.

The situation is far from easy. However, we are fortunate since all four male figures are located near each other in the horoscope, qv in fig. 13.17. Since all of them are male, we can be certain about the fact that they represent Saturn, Jupiter, Mercury and Mars. The remaining three planets don't fit since Venus is represented by a female figure, whereas the Sun and the Moon aren't drawn as human figures at all, as is the case in most other Egyptian zodiacs. We shall discuss their symbolism below. Therefore, from the point of view of astronomical dating the exact identity of each of the four adjacent figures in the horoscope under study is of minor importance - what does mat-



Fig. 15.33. A fragment of the "horoscope without rods" from Brugsch's zodiac. The four male figures refer to four planets following one another. Venus is absent, since it was always drawn as a female figure. Therefore, the four figures must be Mercury, Saturn, Jupiter and Mars. Our calculations yielded the following identifications of the four figures. From left to right: Mercury (with a human head), Jupiter (probably with a baboon's head), Saturn (with the head of a jackal) and Mars (with the head of a falcon). Fragment of a drawn copy from [544], Volume 6, page 696.

ter is the fact that we know the identity of the entire set. Furthermore, astronomical calculations shall eventually enable us to perform the "casting" of the four figures correctly and learn which planet each one of them stands for (see fig. 15.33).

We shall provide a more detail account of this problem below, in the section concerned with the dating of Brugsch's zodiac. Let us simply cite the final solution here. Saturn is represented by the figure with a jackal's head in the present zodiac, qv in fig. 15.31 (BR) and fig. 15.33.

By the way, we should also point out the fact that the abovementioned four symbols of "male" planets in the Egyptian astral symbolism, or the figures with the head of a human, an ape, a jackal and a hawk weren't restricted to the Egyptian zodiacs; they were also used in the preparation of the Egyptian mummies. Egyptologists are of the opinion that these symbols referred to "the four spirits of the netherworld" ([2], page 14). This doesn't contradict our planetary identification of said figures since, according to the ancient beliefs, the souls of the deceased kings -Egyptian as well as Assyrian, which our reconstruction identifies as the same people, the founders of the Great Empire in the Middle Ages, would transform into stars after their death ([503], page 195; also [514:1], page 40). Furthermore, the names of the first

kings had at the same time served as the names of the "wandering stars", or planets ([503], page 195, [514:1], page 40 and [477:1], page 8. However, modern Egyptologists concur with the opinion of Parker and Neugebauer ([1290:1], Volume 1, pages 24-25) that the tradition that tells about souls transforming into stars really refers to the constellation of Orion and not the planets ([114:1], page 96). However, we shall demonstrate below that this erroneous opinion held by the Egyptologists results from their misinterpretation of the Egyptian sign for summer solstice, which they have misidentified as the constellation of Orion.

Let us quote what N. A. Morozov has got to say in this respect: "The seven divine rulers of the first Archaean dynasty [which is how N. A. Morozov refers to the First Dynasty of Egypt – Auth.] correspond to the seven ancient planetary deities. However, they didn't just rule over the valley of the Nile, but other ancient lands as well" ([544], Volume 6, page 786). We agree with N. A. Morozov in general - however, his mistake is that the chronology he uses is the one that he didn't manage to correct in its fullness, and it still contains errors. According to our reconstructions, it isn't the "ancient lands" of the IV-VII century A.D. that one should refer to, but rather the relatively recent history of the XIV-XV century A.D. ([REC]:1).

We shall now return to the four symbols of the "male planets" in Brugsch's "horoscope without rods" (BR) – the human, the jackal, the hawk and the baboon, qv in fig. 15.33. We have witnessed the use of these symbols in the manufacture of mummies. It is presumed that Egyptian mummies were made in the following order: "the entrails would be treated with boiling bitumen together with the liver and the brain, and sealed in special vessels made of clay, limestone or alabaster, as well as stone and metal (depending on the social standing of the deceased). Figures of four different heads would seal the tops of these urns, which would be put in the same sarcophagus as the mummy, representing the four spirits of the Otherworld - a human's, a jackal's, a hawk's and a baboon's" ([2], page 14). However, the same symbols could stand for the four planets - Mercury (human head), Saturn (jackal's head), Mars (hawk's head) and Jupiter (baboon's head). If these planets were identified as the souls of the first kings of the Great "Mongolian" Empire, or the kings of the new epoch

of the XIV-XV century, according to the New Chronology ([REC]:1), using planetary symbols in the funereal rites of the subsequent rulers of the Empire is an obvious thing to do.

Saturday, or the sixth day of the week that began with Sunday, was associated with Saturn. Dies Saturni, the Latin name of the day, literally means "Saturn's day" ([393], page 41).

4.3. Seth, Anubis and Thoth as the symbols of Saturn and Mercury

Identifying Saturn as the figure with a jackal's head is also logical from the point of view of the Egyptian mythology. It is presumed that a jackal's head in the Egyptian drawings stood for "the god Anubis" ([370], page 15). The Dictionary of Mythology tells us that "Anubis (Greek), or Inpu (Egyptian) is the god of the dead in Egyptian mythology; was revered in the form of a lying jackal, black in colour, or Sab, the wild dog, or a human with the head of a dog or a jackal ... according to the Pyramid Texts, Anubis had been the principal deity of the Netherworld ([532], page 49). Saturn was also considered the god of the dead ([532], page 488). This was often emphasized in the Egyptian drawings of the planet Saturn, as we witnessed above. See also [METH3]:3, Chapter 12, page 657, and fig. 15.32 as cited above.

On the other hand, it is presumed that the Egyptian "god Anubis" would be associated with Hermes by the Greeks, and the latter, in turn, was a double of the Roman Mercury ([532], pages 50 and 151). Thus, Anubis could stand for Mercury as well as Saturn, which is a possibility that we accounted for in our research of the Egyptian zodiacs.

Our calculations demonstrated that the jackal's head can indeed correspond to both Saturn and Mercury in Egyptian symbolism. For instance, in the "Greater Zodiac" of Esna the figure of Mercury has the head of a jackal. It is most likely that Mercury has the head of a jackal in the "Theban coloured zodiac" (OU), where Saturn has the head of an ibis, qv in fig. 15.31 (OU). However, one needs to point out that in the latter case Saturn and Mercury prove to be very close to each other, according to our astronomical solution which is what one also sees in the zodiac. Thus, astronomical calculations cannot help with the "role

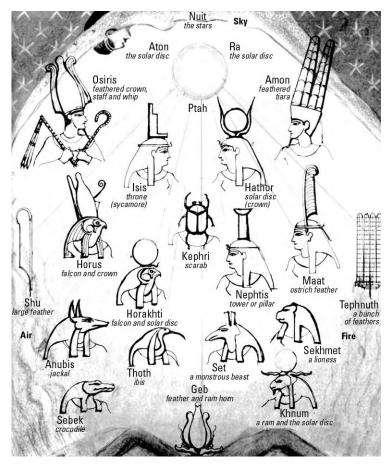


Fig. 15.34. Egyptian "deities". Many of these symbols were used for referring to planets in ancient Egyptian symbolism. Taken from [370], page 15.

distribution" between the symbols of Saturn and Mercury in the OU zodiac, qv in fig. 15.31 (OU) and fig. 15.45 (OU) below.

However, the head of a jackal used as a symbol of Mercury on an Egyptian zodiac in an exception rather than the rule. We have discovered that Mercury would most often be drawn with a human face (if his figure possesses two faces, one of them is human, at least). We shall cover Mercury in detail below.

Thus, the issue of identifying the wayfarer with a jackal's head as a planet could be solved in a variety of ways. Let us linger on this for a while.

N. A. Morozov, in his account of the drawings from the Round Zodiac of Dendera, tells us that the Egyptian Anubis with the head of a jackal used to symbolize Saturn ([544], Volume 6, pages 653, 658 and 678). Morozov's concept was correct in general. However, in the Round Zodiac that Morozov tells us of in the present case, Saturn has the head of a bull and not a jackal. It is clearly visible if one is to use higher-quality renderings of the Round Zodiac than the one that Morozov had at his disposal (see fig. 15.31 (DR), as well as the illustrations cited above - figs. 12.30 and 12.31. The jackal's snout in Egyptian drawings would usually be a great deal more oblong than that of Saturn from the Round Zodiac (see the drawing with Anubis with the head of a jackal in fig. 14.7, for instance.

The Dictionary of Mythology, on the other hand, claims that the Egyptian Anubis corresponded to Mercury and not Saturn, qv above.

This confusion might be partially explained by the following fact. It appears that there was another "god" in the "ancient" Egyptian patheon, who was all but indistinguishable from Anubis in appearance. It is Seth (or Set), the "god of destruction" ([370], page 14), the "epitome of evil and the murderer of Osiris" ([532], page 496). Seth would also be drawn with a planetary rod in his hands, qv in fig. 14.7, and therefore corresponded to some planet. His "sinister" qualities fit Saturn perfectly, and the names of the two resemble each other.

We already cited the picture of the "Egyptian god" Seth above in fig. 14.7. Another picture of Seth and also Anubis can be seen in fig. 15.34. In both illustrations one sees that the Egyptian drawings of Anubis and Seth are near-identical. Anubis has the head of a jackal, and Seth's head looks very similar, qv in figs. 14.7 and 15.34. It is possible that in order to make this similarity with Anubis less obvious, the Egyptologists evasively refer to Seth's head as to that of a "monster" ([370], page 15). The Egyptians apparently drew a monster unknown to science, and our learned scholars neither know what animal it might resemble, nor want to. However, the heads of all other Egyptian "gods" belong to actual animals and not fantasy "monsters" – see fig. 14.7, for instance.

Set is most likely to be Saturn with the head of a jackal, whereas Anubis is Mercury, also with the head of a jackal. Hence the similar heads and different names of these "Egyptian deities" – they stand for different planets. One and the same Egyptian figure with the head of a jackal is referred to as wither Anubis or Thoth, which depends of the inscription seen next to it.

However, this implies that the same symbol (a male figure with the head of a jackal) could be used in the "ancient" Egypt for referring to Saturn as well as Mercury. This indeed appears to have been the case.

Jackal's head is not the only symbol that could be used for both Saturn and Mercury. The head of ibis is another example.

The name of the "ancient" Egyptian god with the head of an ibis is Thoth. His drawings can be seen in figs. 14.7 and 15.34. It is presumed that the Egyptian Thoth, or ibis, corresponded to the Greek Hermes, or Mercury. "Living ibises were a symbol of Thoth – the Greek Hermes; they would be mummified after death

and kept in vessels of clay", according to the descriptions of the "ancient" Egyptian rites ([2], page 12). Thus, according to the Egyptologists, Thoth can be identified as Mercury.

However, it turns out that in some cases Thoth, or the ibis, would stand for Saturn and not Mercury in the Egyptian zodiacs. See the drawing of Saturn from the Lesser Zodiac of Esna, for instance (EM), fig. 15.31 (EM), that we discovered as a result of astronomical calculations. It turns out that Saturn is represented by a procession of three male wayfarer figures carrying planetary rods, qv in fig. 15.31 (EM). The two figures on the sides have ovine heads, while the one in the middle has the head of an ibis. Thus, we see Saturn drawn with the head of an ibis (and also that of a ram). We also see Saturn drawn with the head of an ibis in the "coloured zodiac" of Thebes, qv in fig. 15.31 (OU). This concurs well with the fact that, according to a number of researchers, Thoth and Seth used to be two names of the same "ancient Egyptian god" ([1335:1], quotation given according to [1099:1], II, pages 78-80).

4.4. Confusion between Saturn and Mercury in astral symbolism

Such ambiguity with the Egyptian Anubis/Seth (jackal) and Thoth (ibis), which could stand for Mercury and Saturn, would invariably result in some confusion between the two in the ancient astral symbolism. Would any traces of this confusion survive? Apparently, some of them have, which was pointed out by N. A. Morozov. He writes that "Seth is considered the oldest son of Osiris and the murderer of the latter; he is the lord of darkness. Astrologically he is represented by ... Mercury, who always hides behind the Sun, as if lying in ambush from whence he slays his father, the Moon, or Osiris, when the latter approaches the Sun ... later on, when the evil qualities became a prerogative of Saturn, he would become confused with the latter" ([544], Volume 6, page 787).

Morozov is most likely to be right here. It is likely that Saturn hadn't always been the "sinister planet" or the "god of the dead". This happened later, in which case the Egyptian zodiacs where Saturn has the full attributes of a "sinister" figure – the deathly scythe et al, aren't quite as "ancient" as we're told. It is easy to

understand why the astronomical dates of the Egyptian zodiacs that have reached our day keep turning out mediaeval.

4.5. Our hypothesis in re the genesis of the old cult of Saturn

We have to make the following statement in re the original cult of Saturn. It bears no direct relation to the problem of astronomical dating, but is useful for the understanding of the resulting datings of the Egyptian zodiacs.

According to our reconstruction, all of the "ancient" myths about the "Olympian gods and goddesses" date to the epoch of the Great = "Mongolian" conquest of the XIV century. This was the epoch when the Great Empire was created. The "ancient" myths date to a later epoch; they are embellished biographical episodes concerning the real first rulers of the Great Empire, whose zone of influence had covered the European "antiquity zones" for a long time, in particular. The rulers of the Empire had taken their court to an area that was at a great distance from Europe in the XIV century - the Vladimir and Suzdal Russia. Thus, the Western Europeans, as well as other imperial subjects from areas located at some distance from the East, would think of the rulers as "faraway and inaccessible gods". Local tales of the faraway kings would eventually attain fairy tale hues and reached our day as the very same myths that historians declare to be "extremely ancient" nowadays.

According to our reconstruction, the deceased kings of the Empire would be brought to the Nile Valley in Egypt for their burial. Thus, we are of the opinion that Egypt used to serve as a gigantic imperial royal cemetery. Thus, the monuments of the "ancient" Egypt weren't serving local ends, but rather those of the gigantic Empire that included Egypt as its tiny part. They were constructed with the collective imperial resources used for the purpose, and not just the Egyptian ones. Hence the mind-boggling scale of the "ancient" Egyptian sepulchral architecture, qv in Chron5.

According to our reconstruction, one of the founders of the Great Empire had been Great Prince Ivan Danilovich Kalita, also known as Batu-Khan (possibly a form of "Batya", or "father"), who had colonized Western Europe during his "occidental campaign". It turns out that in the "ancient" Greek myths Ivan Kalita (Kaliph) became known as the god Kronos, or the planet Saturn in astral symbolism. His heir was the Great Prince Simon the Proud who was known as Dy, Zeus and Jupiter in the "ancient" mythology. He was identified with the planet Jupiter in mediaeval astral symbolism, qv in [REC]:1.

Thus, the "ancient" myths of Kronos (Saturn) are the biographical accounts of the Great Prince Ivan Danilovich Kalita, the colonizer of the Western Europe. They remained oral tradition for a long time, and started to look like a fairy tale. Let us quote the respective passage from the Dictionary of Mythology:

"The ideas of Kronos resulted in Saturn (whatever his initial functions had been) revered as the god of the Golden Age, one of the first Latian kings [Latius or Ratius is yet another name of Russia - Auth.] where, according to a version of this myth, he had escaped to, deposed by his son Jupiter. He was accepted warmly by Janus [Ivan – Auth.] who had ruled there and shared the power with him" ([532], page 488).

"Set, Seth or Suthekh is the "god of foreign lands" in Egyptian mythology ... a figure that represents the forces of evil ... Seth was revered alongside Horus as the protector of royal power, which is reflected in the Pyramid Texts and the titles of pharaohs of the II dynasty (the combination of the names of Seth and Horus yields "Czar"). Under the Hyxos [Cossack -Auth.] rule, Seth was identified as Balu [or the White King - Auth.]. One encounters many names with "Seti" a part of them in the beginning of the New Kingdom; these names were borne by the pharaohs of the XIX dynasty - Seti, Sethnakht et al. Seth used to called "the mighty" ... in the period of the Old Kingdom Seth was credited with saving Ra from the serpent Apop, whom he had run through with his harpoon" ([532], page 496).

A propos, according to our reconstruction, it is this very "victory over the serpent" that one would see in the famous Russian icons as "the Miracle of George and the Serpent" with St. George piercing the serpent with his spear. Let us remind the reader that, according to our reconstruction, St. George is the older brother of Ivan Kalita, the Great Muscovite Prince George, also known as Genghis-Khan, the creator of the Great = "Mongolian" Empire, qv in Chron4. It

is possible that in the Egyptian astral symbolism the two great princely brothers were represented by Mercury and Saturn, and the two-faced Janus (Ivan) in the "Roman pantheon". We shall discuss it in more detail below, in our account of the Egyptian symbolism of Mercury. The only thing we shall point out here is that the confusion between the symbols of Mercury and Saturn was due to the later merging of the two brother's images.

Let us carry on quoting from the *Dictionary of* Mythology:

"The names of the holy animals associated with Seth would often include such epithets as "the tempest" or "the hurricane" ... Seth would also occasionally be called Apope [Pope? – Auth.]" ([532], page 496).

4.6. Jupiter in the main horoscope

Drawings of Jupiter from the primary horoscope as encountered in Egyptian zodiacs can be seen in fig. 15.35. Fig. 15.35 is divided into cells; each of those corresponds to a single zodiac. The zodiac's abbreviation can be seen in the circle inside the cell. If the circle is shaded grey, the discovery of Jupiter for the zodiac in question was made as a result of calculations involving different identification options. Otherwise it was discovered during the preliminary stage of zodiac analysis.

There are no drawings from the zodiacs of Petosiris in fig. 15.35. We have explained the reasons for this above. We shall deal with Jupiter as drawn in the zodiacs of Petosiris below.

As is the case with Saturn, we see three different pictures of Jupiter in fig. 15.35 (Brugsch's zodiac, cell BR in fig. 15.31). This results from the fact that there are three primary horoscopes in Brugsch's zodiac and not one - the "demotic horoscope", the "horoscope without rods" and the "horoscope with boats", qv above. In the first one we see Jupiter's name in demotic script, qv in fig. 15.35 (BR), whereas he's presented as human figures in the two others.

In both the Round and the Long Zodiacs of Dendera Jupiter has got the same hieroglyphic subscript that looks like a bird over a long pair of horns with a circle inside, qv in fig. 15.35 (DR and DL). This is the inscription that Brugsch used to identify Jupiter in the zodiacs of Dendera. He interpreted it as "HorApis-Seta", which, according to Brugsch, stands for "Planet Jupiter" ([544], Volume 6, page 652). Brugsch's opinion in re Jupiter in the zodiacs of Dendera did not lead to any objections from the part of N. A. Morozov, who had accepted it instantly (ibid). T. N. Fomenko adheres to the same identification in [912:3], pages 652 and 700. Modern Egyptologists identify Jupiter as drawn in the Dendera zodiacs in the exact same manner ([1062], page 31). Thus, all researchers of the zodiacs from Dendera were of the same opinion in re identifying Jupiter according to Brugsch.

We also followed the identification of Jupiter suggested by H. Brugsch, which is reflected in the fact that both of the circles representing the Dendera Zodiacs (DR and DL) aren't shaded grey in fig 15.35, which, as we agreed above, means that the planetary figure had been identified in the zodiac beforehand quite unambiguously.

One could naturally doubt Brugsch's interpretation of the hieroglyphic inscription in question, especially seeing how S. Cauville, a modern Egyptologist, reads these hieroglyphs from the Round Zodiac of Dendera in an altogether different manner, for some reason, suggesting two different interpretations thereof - "Horus who makes the land bright (with a lightning?)", or "Horus qui éclaire le pays", and "Horus, the god of mystery", or "Horus qui devoile le mystère" ([1062], page 31). Nevertheless, S. Cauville also identifies the figure in question as Jupiter - possibly, due to the fact that Jupiter cast bolts of thunder and lightning over the land, "making it bright" after a manner.

Without going into further details concerning the translation of hieroglyphic inscriptions, we should point out that this identification of Jupiter was in fact confirmed by our study of the Egyptian zodiacs. Solutions based on the planet in question (as well as other planets) ideally correspond with the whole body of astronomical information that we have found in the Egyptian zodiacs. At the same time, no deviations from planetary identifications can lead to ideal solutions, as our experiment demonstrates (at least, such is the case with zodiacs rich in content, like both of the Dendera zodiacs).

The hieroglyph that looks like a pair of horns with a circle inside would also be drawn as a hat or a detail of Jupiter's headdress. This fact was discovered by

the authors in the course of their study of the zodiacs. For instance, in the Greater Zodiac of Esna (EB) we see a pair of curved horns on the head of the last figure in Jupiter's procession with a circle between them, qv in fig. 15.35 (EB). Let us point out that the drawing of Jupiter in the EB zodiac hadn't been identified in advance – it took sorting through all possible options and extensive astronomical calculations. See more details on how it was done in the section on the dating of the EB zodiac. In fig. 15.35 (EB) we only cite the final result of identifying Jupiter on the zodiac. A magnified drawing of Jupiter from the EB zodiac can be seen in fig. 15.36.

It turned out to correspond with the respective figures of Jupiter from the Dendera zodiacs, although this hadn't been obvious initially due to the fact that the shape of horns on the last figure in Jupiter's procession in the EB zodiac differs from that of the hornshaped hieroglyph from the Dendera zodiacs. In the Dendera zodiacs the hieroglyph horns are stretched upwards with a characteristic curve, whereas in the "Greater Zodiac of Esna" they are turned sideways in such a way that they form a straight line, qv in fig. 15.25 (DR, DL and EB). Nevertheless, the symbol appears to be one and the same - a circle between the horns.

By the way, if we are to take a closer look, we shall see that similar undulated horns crown the head of Jupiter on the Long Zodiac of Dendera as well. They are complemented by two cobras and a tall hat, which precludes us from observing the similarity with the headdress from zodiac EB. Nevertheless, once observed, the similarity becomes obvious, qv in fig. 15.35 (DL and EB).

The circle between the horns as a part of Jupiter's headdress can also be seen in the procession that depicts Jupiter in the Lesser Zodiac of Esna (EM, in fig. 15.35). Let us pay attention to the headdress worn by the third and the seventh (last) figure in the procession. It comprises both kinds of horns with a circle that we have referred to above. The wide undulated horns with a circle on top comprise the lower part of the headdress, whereas the vertical horns with a circle of their own top it, qv in fig. 15.35 (EM).

Thus, a pair of horns with a circle in the middle is a frequently-encountered attribute of Jupiter in the Egyptian astronomical symbolism.

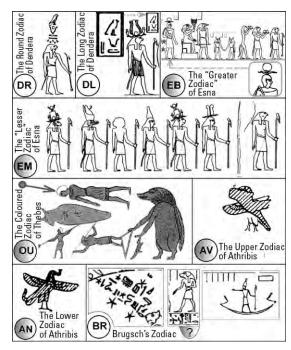


Fig. 15.35. Jupiter in the primary horoscope of various Egyptian zodiacs. Cells with grey circles refer to calculated identification of the planet with all possible versions taken into account. The spring equinox symbol in cell EB, which wound up inside the Jupiter procession, was deliberately made smaller for better representation. The zodiacs of Petosiris are not represented. Fragments taken from [1100], [1062] and [544], Volume 6.

Another zodiac for which we had identified Jupiter prior to the beginning of calculations is the zodiac of Brugsch (excepting the "horoscope without rods", qv in fig. 15.35 (BR). Let us remind the reader that Brugsch's zodiac contains a total of three main horoscopes – the "demotic horoscope", the "horoscope without rods" and "the horoscope with boats". We already mentioned this above, and will address the issue at length in the section on the dating of Brugsch's horoscope.

In the "demotic horoscope" we see the name of Jupiter written next to that of Saturn in the two lines directed towards the head of Leo, qv in fig. 15.35 (BR). Brugsch interprets them as "Hor-pe-Setah" and "Hor-pe-Kah" ([544], Volume 6, page 697). He is of the opinion that they're the names of the planets Saturn and Jupiter. As is the case with Saturn, we shall

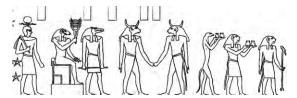


Fig. 15.36. Jupiter in the Greater Zodiac of Esna (EB). Jupiter is represented by the procession of figures that we see. A male figure is in front; the last figure in the procession is also male and has undulated horns turned sideways with a circle in the middle on its head. The procession also contains the spring equinox symbol that looks like two figures with crescents on their heads holding hands. This symbol has got nothing to do with Jupiter. Taken from [1100], A. Vol. I, Pl. 79.

trust Brugsch's translations, seeing as how there are no other planetary signs in the present horoscope except for the inscriptions with their names. Let us point out that we shall get a valid solution if we use Brugsch's translation – apparently, his translation is correct, or we would have come up with a meaningless answer.

In all the other zodiacs represented in fig. 15.35 Jupiter was found after sorting through a number of possible versions. We shall relate how it was done in each exact case below, in the sections dealing with the dating of the zodiacs.

Let us point out that in the zodiacs of Athribis Jupiter is drawn as a bird with the head and the tail of a serpent, which one sees quite well in the Lower Zodiac of Athribis (fig. 15.35 AN). In the Upper Zodiac of Athribis the bird that stands for Jupiter is in a very poor condition, the only part that didn't take much damage being one of the wings. It is therefore difficult to tell anything about how its tail and head are drawn, as one sees from fig. 15.35 (AV). However, judging by how all the other planets are drawn identical in both zodiacs of Athribis, one may suggest that this Jupiter bird also had a serpent's head and tail. Identifying Jupiter as the bird with the serpent's head concurs with the idea of the Egyptologists that Jupiter was drawn as a bird with a snake's tail ([544], Volume 6, page 731). However, we weren't taking this idea into account. Our identification had been purely formal and based on computer calculations involving different versions. See the chapter on the datings of the Athribis zodiacs for more details.

Jupiter ruled over Thursday, the fifth day of the week counting from Sunday. The Latin name of Thursday is Dies Jovis, or "the day of Jove (Jupiter)", qv in [393], page 41.

4.7. Mars in the primary horoscope

Drawings of Mars in the primary horoscopes of various zodiacs can be seen in fig. 15.37. Each of the drawing's cells corresponds to a single Egyptian zodiac, whose abbreviated name can be seen in the circle. If the circle in question is shaded grey, it means that Mars in the present zodiac was found through calculations involving a multitude of options. Alternatively, Mars had been found instantly, during the preliminary analysis.

Drawings of Mars from the zodiacs of Petosiris are missing from fig. 15.37. We shall discuss them below.

In fig. 15.37 one sees three different drawings of Mars from the zodiac of Brugsch (cell BR in fig. 15.37), since, as it has already been mentioned, we have discovered three primary zodiacs on the horoscope of Brugsch - the "demotic subscript horoscope", the "horoscope without rods" and the "horoscope with boats", qv above. In the first horoscope the name of Mars is written in demotic script. The inscription in question was read and translated by H. Brugsch, who had been the first one to study this zodiac. Brugsch's translation was used by N. A. Morozov as well. He writes that "near Virgo, closer to Leo, we see a demotic inscription saying Hor-Teser, or "the planet Mars" ([544], Volume 6, page 697). In the two other horoscopes from Brugsch's zodiac Mars is drawn as a male figure with the head of a falcon, qv in fig. 15.37 (BR).

As one sees from fig. 15.37, nearly all of the Egyptian drawings of Mars are similar - a male figure, usually on its own, with the head of a falcon. We find the EB zodiac (from the Greater Temple of Esna) and the Athribis zodiacs of Flinders Petrie to be the only exceptions. In the zodiacs of Athribis Mars is drawn as a bird with a long serpent-like tale. In the "Greater Zodiac of Esna", as we shall see below, there are no figures with falcon heads whatsoever. Here we see Mars as a man with a whip on his shoulder, holding a planetary rod, with a human face in this particular case, qv in fig. 15.37 (EB).

Identifying the lone male figure with the head of a falcon as Mars is a tradition that originates in Brugsch's interpretation of the hieroglyphic inscription found near this figure in the Long Zodiac of Dendera. Brugsch read it as "Hor-Tos" (Hor-Teser, or Hor-Tesher) and translated it as "the Red planet", or Mars, which is the only planet known for its red glow.

Such identification of Mars in the Long Zodiac of Dendera was subsequently accepted by N. A. Morozov and all the other researchers of the Dendera zodiacs. Respectively, a similar figure was chosen as the representation of Mars on the Round Zodiac of Dendera. Here we see it stand a little bit above Capricorn, almost on the back of the latter, qv in fig. 15.38. The uniformity of Martian symbolism in both zodiacs is also emphasised by the fact that in both hieroglyphic inscriptions we find over the heads of these characters on the two zodiacs we see the same bird-like symbol – a goose, or possibly an ibis, qv in fig. 15.37 (DR) and also in the photograph of Mars from the Round Zodiac of Dendera (fig. 15.38). In both illustrations one can plainly see the inscription over the head of Mars that consists of two hieroglyphs looking like different species of birds with stars below them. According to the translation made by the modern French Egyptologist S. Cauville, the present inscription identifies this figure from the Round Zodiac of Dendera as Mars.

We have adhered to this identification of Mars in the Zodiacs of Dendera from the very start, as one sees from fig. 15.37 (DR and DL). The circles with the indications of both Dendera zodiacs aren't shaded in fig. 15.37, which, as we have agreed above, means that the present planet had been identified unambiguously a priori, and we didn't take any other options into account. Let us emphasize that this only concerns the figures of Mars found in the Zodiacs of Dendera, Brugsch's zodiac and the "Coloured Theban" zodiac OU (see the unshaded circles in fig. 15.37 (DR, DL, OU and BR). Below we shall see that there were no other options for identifying Mars in these zodiacs. In all other cases presented in fig. 15.37 we have exhausted all possible identification options for Mars.

Tuesday is the day of the week that was governed over by Mars (the third day in a week counting from Sunday). The Latin name for Tuesday is Dies Martis, or "the day of March" ([393], page 41).

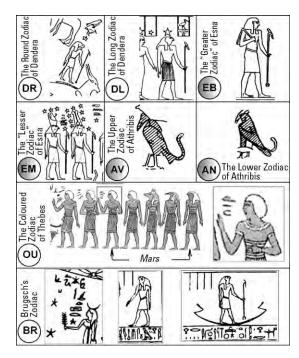


Fig. 15.37. Mars in the primary horoscope of various Egyptian zodiacs. Cells with grey circles refer to calculated identification of the planet with all possible versions taken into account. The zodiacs of Petosiris are not represented. Fragments taken from [1100], [1062] and [544], Volume 6.



Fig. 15.38. Mars in the primary horoscope of the Round Zodiac from Dendera (DR). From a modern photograph of the Round Zodiac kept in the Louvre (France). Taken from [1101], page 255.

4.8. Venus in the primary horoscope

Venus as represented in the primary horoscopes of various zodiacs can be seen in fig. 15.39. Each of the drawing's cells corresponds to a single zodiac whose abbreviation we see inside the circle. If the circle in question is shaded grey, Venus in the present zodiac was found after we exhausted every possible option in computations - otherwise, its identity was known to us a priori.

The drawings of Venus from the zodiacs of Petosiris aren't present in fig. 15.39. We shall mention them below.

Three different drawings of Venus are given for Brugsch's zodiac in fig. 15.39 (BR) – one for each of the three abovementioned primary horoscopes of the zodiac, namely, the "demotic zodiac", "zodiac without rods" and the "zodiac in boats". In the first the name of Venus was written in demotic script and written by Brugsch. N. A. Morozov, who had used Brugsch's translations in his research, describes the inscription as follows: "We see the demotic inscription Pe-Nether-Tau, or the Morning Star (Venus) between Scorpio and Sagittarius, curved towards the head of the latter" ([544], Volume 6, page 697). In the two other horoscopes from Brugsch's zodiac we see Venus represented as figures, qv in fig. 15.39 (BR). In one of them (the "horoscope with boats") the figure of Venus is easily recognizable. However, in the "horoscope without rods" Venus looks rather odd for the Egyptian astronomical tradition. However, some of the distinctive characteristics that we find in other Egyptian drawings of Venus are present here as well. We shall address it in more detail below.

In fig. 15.40 one sees a fragment of the EB zodiac from the Greater Temple of Esna. In particular, we see Venus as two figures bearing rods - the female figure followed by the male figure with a leonine head. In front of Venus we see Mars with a rod in his left hand and a whip in his right.

If one is to approach the search of Venus in the Egyptian zodiacs sensibly, it presents us with a minimal amount of problems as compared to all other planets (among the ones drawn as human figures in the Egyptian zodiacs). Indeed, Venus is the only female figure among all the planets. Let us remind the reader that Venus is always a woman in mythology ([532], page 121). Another "female planet" (the Moon) was usually drawn as a circle or a crescent - confusing it for Venus is therefore an impossibility. One would think it relatively easy to specify the location of Venus in the zodiac – it should suffice to find a female planetary figure to identify the planet without any uncertainty whatsoever, since there shall be just one female planetary figure in the Egyptian zodiacs, as we are about to witness. We shall thus identify it as Venus.

We have done just that in our research. Computer calculations demonstrated this approach to have been correct. N. A. Morozov, whose identification of Venus in the Zodiacs of Dendera has been meticulously verified by the authors and proven correct, had done the very same thing. Let us point out that the female figure from an Egyptian zodiac often has several additional characteristics that identify it as planet Venus. We shall discuss this in detail below.

However, Heinrich Brugsch, the famous Egyptolo-

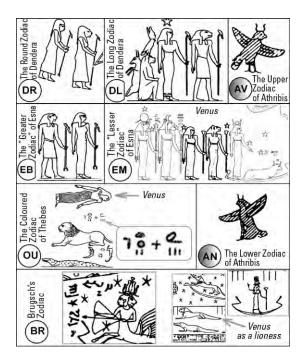


Fig. 15.39. Venus in the primary horoscope of various Egyptian zodiacs. Cells with grey circles refer to calculated identifications of the planet with all possible versions of identifying birds as planets taken into account. The zodiacs of Petosiris are not represented. Fragments taken from [1100], [1062] and [544], Volume 6.



Fig. 15.40. Venus and Mars in the primary horoscope of the EB zodiac from the Greater Temple of Esna. Venus is drawn as two figures with rods – a female one followed by a male figure with a leonine head. In front of Venus we see Mars with a staff in his left hand and a whip in his right. Taken from [1100], A. Vol. I, Pl. 79.

gist of the XIX century, had made a grave mistake concerning Venus, which, odd as it would seem, one still comes across as it is copied from research to research and appears on the pages of books written on the subject of the Egyptian zodiacs to this day, qv in [1062], page 30, for instance. However, as early as in the first half of the XX century N. A. Morozov pointed out Brugsch's error and explicated the reasons for its existence well enough. Those are as follows.

When H. Brugsch was deciphering the astronomical content of the Round Zodiac of Dendera, trying to estimate the position of Venus thereupon, he had for some reason completely disregarded the symbol consisting of two wayfaring women side by side with planetary rods in their hands, qv in fig. 15.39 (DR). The reason for this might be the fact that this symbol wasn't signed in the Round Zodiac, while Brugsch was basing his planetary identifications on the interpretation of hieroglyphs for the most part. We see none of those next to the wayfaring women, which isn't the case with any other planetary symbols in the Round Zodiac, qv in fig. 15.39 (DR). Nevertheless, it is the only female planetary symbol in the entire Round Zodiac.

All of this notwithstanding, Brugsch didn't think of counting these female figures as planets. Instead, he suggested to use the male planetary figure with a double face, no less - the one that we see near Pisces in the Round Zodiac and in Aries in the Long Zodiac, qv in fig. 15.45 (DR and DL) below. Brugsch was motivating this by his interpretation of the hieroglyphic inscription that he had found near this figure in the Long Zodiac - namely, "god (or goddess) of the morning". Apparently, he had been of the opinion that this

inscription might only stand for Venus, yet there is another astronomically valid version - Mercury.

This fact was discovered by N. A. Morozov. When he was verifying Brugsch's identifications, he noticed the fact that the inscription in question might just as easily refer to Venus as to Mercury, since the latter is an inside planet, just like the former, which means that the distance between them and the Sun is smaller than that between the Sun and the Earth. There are two such planets - namely, Venus and Mercury. Their "inside disposition" (as related to the telluric orbit) results in limited visibility of these planets from the Earth – one only sees them in the morning or in the evening, when the Sun isn't too far away from the line of the horizon. Mercury is closer to the Sun than Venus, and so the name "god of the morning" fits it even better. Furthermore, the Egyptologists are well aware of the fact that the name "morning star" could refer to both Venus and Mercury in the Egyptian inscriptions ([1009:1], page 117). However, there are other planetary symbols for Venus in the Dendera Zodiacs, and they fit the planet a great deal better. We are referring to the abovementioned pair of wayfaring women carrying rods from the Round Zodiac and the girl with the rod accompanied by a male figure with a leonine head that we see in the Long Zodiac ([544], Volume 6, pages 652 and 659). See also figs. 15.41 and 15.42.

Let us point out that the true figure of Venus as seen in the Long Zodiac is so close to Mercury (mistaken



Fig. 15.41. The Round Zodiac of Dendera (DR). N. A. Morozov's correction of Brugsch's error in the identification of Venus. Brugsch had suggested that Venus should be identified as the two-faced male figure (highlighted by dots). Morozov subsequently demonstrated the figure in question to be Mercury, since the two women with rods (also highlighted by dots) are much more likely to represent Venus. Based on the drawn copy of the Round Zodiac from [1062], page 71.

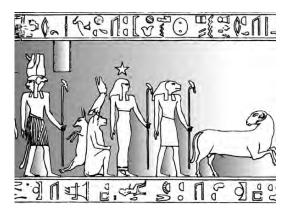


Fig. 15.42. Long Zodiac of Dendera (DL). N. A. Morozov's correction of Brugsch's error in the identification of Venus. Brugsch had suggested that Venus should be identified as the two-faced male figure (on the left of the picture). Morozov demonstrated it to be Mercury, since Venus is represented by the young woman with a rod preceded by an auxiliary male figure (Morozov was using a bad copy and presumed the other figure to be female as well). Morozov is perfectly correct, since Venus would always be drawn as a woman, or a woman accompanied by a man (the way we see it in the present drawing), but never a single male figure. Based on the "Napoleonic" copy of the Long Zodiac ([1100], A. Vol. IV, Pl. 20).

for Venus by Brugsch) that the hieroglyphic inscription that he had discovered could indeed refer to Venus, just as he had thought, qv in fig. 15.42. In other words, it is possible that Brugsch's interpretation of the inscription was correct, unlike his presumption that the inscription in question really referred to the neighbouring figure of Mercury. At any rate, Brugsch's mistake with Venus became perfectly obvious after Morozov's research, and the constant recurrence of this mistake in the works of the Egyptologists is odd at the very least, if not to say suspicious.

Morozov himself wrote the following in this respect: "we see a wayfarer wearing the headdress of a head priest in Aries; he bears a rod, which is a mark of a planet. The head with two faces, one of them human and the other aquiline, could be identified as Mercury who keeps popping up from both sides of the Sun; however, Brugsch says we have an inscription that says "Pnouter-Ti" here – "god (or goddess) of the morning", identifying the figure as Venus because of this. However, one could doubt his guess. We see the drawing that stands for the dusk and the dawn

as two little beasts with their backs grown together to the right of this figure. Above them we see two young women bearing rods, one of them has a human face and the other - a canine one; this must be the double drawing of Venus as the morning and the evening star" ([544], Volume 6, page 653; see also fig. 15.42).

Morozov's text contains a minor error here - we see just one young woman bearing a rod in the Long Zodiac and not two. The second figure with the rod and a "canine snout" is in fact male, qv in figs. 15.42 and 15.39 (DL). However, in general, Morozov points out Venus in the Long Zodiac perfectly correctly. It looks like a young woman with a rod accompanied by a male figure (which Morozov mistook for the other young woman - see fig. 15.39 (DL). For the most part, the female planetary figure of Venus is accompanied by yet another planetary figure, which might either be male or female. However, we shall see that "male" planets were never drawn by Egyptians as surrounded by female planetary figures - and, in particular, Venus was never drawn as a lone male figure anywhere either in Egyptian astronomical symbolism – or European, for that matter; Venus is always a female character in astronomical symbolism as well as mythology ([532], page 121). Drawing Venus as a female is a rule of old astronomy rigorously followed in the Egyptian zodiacal tradition.

On the other hand, the two-faced male figure is an ideal symbol for Mercury. Bear in mind that Mercury (or Hermes in Greek mythology) is a male character ([532], page 361). As for the double face – from the astronomical point of view, it is most likely to stand for an inside planet that one sees in the morning and in the evening. Such planets cannot be observed in between since the rays of the Sun render them invisible. They used to be considered "double" planets in ancient astronomy, since it was presumed that the morning and evening manifestations of these planets were different celestial bodies ([544], Volume 6, page 697). It was only later that the astronomers managed to get an understanding of the matter at hand. The Egyptian zodiacs already reflect the astronomically correct understanding of the nature of such planets, which serves as indirect proof of the relatively late origins of the Egyptian zodiacs. However, the remnants of the old concept of the inner planets being the morning star and the evening star are still present in the Egyptian

symbolism, reflected in the two faces of Mercury and the double drawings of Venus. Thus, Venus is drawn as two planetary figures at once in the zodiacs of Dendera and Esna (see fig. 15.39).

Thus, the astronomical ambiguity of Venus as an inside planet was reflected in the Egyptian zodiacs in the fact that it would be represented by a pair of planetary figures - two women or a man and a woman.

One wonders how the Egyptologists explain the presence of a certain female planetary figure amidst the constellations, at a considerable distance from Mercury that they already identified as Venus? They are left with no opportunity of identifying it. Indeed, the real figure of Venus is obviously a problem - the learned scholars have no idea as to what to do with it. The in-depth study of the Round Zodiac carried out by Sylvia Cauville, a contemporary French Egyptologist ([1062]) remains perfectly silent on the subject of the two female planetary figures that represent Venus, qv in fig. 15.39 (DR) - as if said figures didn't exist. Nevertheless, we see attempts of astronomical explanation made for every other figure that we find in the vicinity of the constellation belt in the Round Zodiac in [1062]. Leaving the question of their validity aside, we feel obliged to mention the fact that the stubborn reticence of the Egyptologists in re the true figure of Venus from the Round Zodiac indicates the fact that the Egyptologists are apparently aware of Brugsch's opinion that Venus is represented by the two-faced male figure in the Egyptian zodiacs. It becomes unclear what exactly might preclude them from correcting Brugsch's error. Could it be that it's considered mauvais ton for an Egyptologist to mention the errors made by the eminent specialists? In that case it is most likely that the Egyptologists simply aren't interested in the correct astronomical datings of the Egyptian zodiacs for they have been aware of the fact that such datings will blatantly contradict the chronology of Egypt that they adhere to ever since the publication of N. A. Morozov's works.

By the way, despite referring to the reproduction of Mercury from the Round Zodiac published in [1062] as to Venus, Sylvia Cauville nevertheless translates the hieroglyphic inscription over the head of Mercury as "le dieu du matin", or "the god of the morning", the word for "god" being explicitly male in gender, which once again emphasizes the male sex of the figure in

question - obvious even without commentary, qv in fig. 15.45 (DR) below, for instance. Let us point out that Egyptian hieroglyphs have special indicators of the female gender ([370], page 19) that aren't present in this inscription, which utilises the male gender, as it is obvious from Cauville's translation.

It has to be said that in certain cases Egyptologists do identify Venus and Mercury in the zodiacs correctly, the female planetary figure as Venus and the two-faced male one as Mercury. However, this only appears to apply to the Egyptian zodiacs which weren't studied by such classics of Egyptology as H. Brugsch. Thus, their interpretation does not present the risk of contradicting the opinion of an eminent figure of authority. For example, the modern specialists in the astronomical texts of the "ancient" Egypt, the wellknown Egyptologists O. Neugebauer, R. Parker and D. Pingree provide an interpretation of the planetary symbols from the zodiac P2 from the inner chamber of the tomb of Petosiris in [1291], the work that we already discussed above. Planets are drawn as busts in this zodiac, two of which are female (see fig. 15.43). One of them is marked by a crescent and can thus be unambiguously identified as the Moon, qv in fig. 15.43. The other female bust must therefore represent Venus, whereas the two-faced male bust is Mercury. After all, if we are to go by Brugsch's idea that the twofaced male figure on the zodiacs of Dendera identifies as Venus, the two-faced bearded bust from Zodiac P2 should symbolise Venus with one of its faces. However, we find this to be impossible here, qv in fig. 15.43. Otherwise one would have to ascribe the bearded face to Venus, as well as identifying the "vacant" female bust with some purely "male" planet. Let us also point out that there are none of the auxiliary symbols in the zodiac P2 that one finds in the Zodiacs of Dendera, for instance. The quantity of busts corresponds to the number of planets precisely, and the issue of identifying Venus and Mercury is solved unambiguously. Therefore, Brugsch's error is perfectly obvious here.

Let us return to fig. 15.39. In the "Coloured Theban" zodiac OU we have a single candidate that can be identified as Venus, namely, the female figure over the constellation of Leo, qv in fig. 15.39 (OU). Planetary figures have no rods in this zodiac. See more on the "Coloured Theban" zodiac below, in the section related to the dating thereof.