

Fig. 15.64. Spring equinox symbols in various Egyptian zodiacs. Taken from [1100], [1062] and [544], Volume 6.

Dendera and Brugsch's Zodiac, qv in fig. 15.64 (DR and BR). It has the body of a beetle in Brugsch's zodiac, and all the heads are ovine, qv in fig. 15.64 (BR).

3) The row of several small snakes (cobras) with their heads raised, all facing the same direction. In the Round Zodiac of Dendera these snakes are placed on a dais, qv in fig. 15.64 (DR). In the P2 Zodiac from the inner chamber of Petosiris this row of snakes is topped by a most exotic symbol that looks like a winged eye with human legs, qv in fig. 15.64 (P2).

4) Symmetrical snake with two heads and wings on either side. There are identical little beetles in between the wings, qv in fig. 15.64 (EM). This symbol has already been discussed – it was also used for the autumn equinox point.

5) Figure on a crossed-out dais, qv in fig. 15.64

(EM). An identical symbol was used for the other (autumn) equinox point, qv above. The same zodiac could contain two different equinox figures on identical crossed-out daises (qv in the EM zodiac).

## 8.4. Symbols of the summer solstice point in Gemini. The "astronomical hieroglyph" of Gemini with a minimal horoscope

Symbols that indicate the point of summer solstice in Egyptian zodiacs are represented in figs. 15.65 and 15.66. Let us list them.

1) The actual figure of Gemini in Egyptian zodiacs is usually a composite symbol that unites the figure of Gemini with the Sun, Venus and Mercury. Therefore, the figure of Gemini, likewise the figure of Sagittarius as described above, can be regarded as a complex "astronomical hieroglyph".

The meaning of the astronomical hieroglyph of Gemini with the minimal horoscope being one of its parts is explained in fig. 15.67. The reference to Venus is the female gender of one of the Gemini figures (usually with a leonine face). Let us remind the reader that the latter is a symbol of Venus in the Egyptian zodiacs, qv in CHRON3, Chapter 15:4.8. Mercury is symbolised by the other Gemini figure, which is male and has a feather on its head – a symbol of Mercury. As for the feather being another symbol of Mercury, the reader can refer to CHRON3, Chapter 15:4.9, and CHRON3, Chapter 15:4.10. The Sun looks like a large circle over the head of the Venus figure of Gemini (see figs. 15.55 and 15.5).

It has to be said that the minimal horoscope per se cannot be of any assistance in the filtering-out of extraneous solutions, since it doesn't contain any nontrivial astronomical information. Nevertheless, the exact understanding of the meaning of such complex symbols is vital for the dating of Egyptian zodiacs. We shall witness this below, when we encounter a totally unexpected use of the "Gemini and Solstice" symbol. We shall see that a correct decipherment and dating of the entire zodiac is impossible without a clear understanding of the symbol's meaning. See our analysis of the EM zodiac in CHRON3, Chapter 18.

2) Male figure with a raised arm, qv in fig. 15.65 (DL, EM and AN; see also fig. 15.66). This figure is often (but not always) depicted standing in a boat. It

may have a planetary rod it its other hand, being a symbol of the Sun (which was considered a planet in ancient astronomy). The raised arm is a very explicit symbol of summer solstice, which was mentioned several times above. This sign isn't used to symbolise winter solstice.

Let us point out that this summer solstice symbol is usually interpreted by the Egyptologists as a sign of the Orion constellation, which isn't part of the Zodiac. This serves as the basis for involved theories about the "intrinsic meaning" of the Egyptian astronomical texts. A fine example is the book of R. Bauval and E. Gilbert entitled "Secrets of the Pyramids. The Orion Constellation and the Pharaohs of Egypt" ([114:1]). We shall refrain from disputing the fact that theories similar to the one put forth by the above authors may contain rational elements. However, it can a priori be said that any detail of such theories based on the interpretation of said symbol of summer solstice as that of the Orion constellation is definitely erroneous. As our research demonstrates, it is most likely that neither Orion, nor any other non-Zodiacal constellation, was ever depicted in the Egyptian zodiacs.

3) Solar bird sitting on a tall pole (see fig. 15.65 – DR and DL). Also a very explicit symbol used for the summer solstice point exclusively.

4) A variation of the above sign. A straight pole in the middle with a broken pole on either side, the two of the latter bent and facing opposite directions. The symbol obviously expresses the concept of local maximum (straight pole) with symbols of wavering height on either side (bent poles). It was used in Egyptian zodiacs for referring to the summer solstice point, which is indeed the point of the Sun's maximal elevation above the horizon. The middle pole could be complemented by the symbol of a snake coiled around it (see fig. 15.65 – EB and EM; also fig. 15.66).

5) A fantasy animal: a winged bull (or calf) with an ovine head, which has already been mentioned in the context of winter solstice symbolism. An identical sign was used in Egyptian zodiacs for referring to the summer solstice point, qv in fig. 15.62 (EM; also fig. 15.66). If the animal has four heads instead of one, the symbol in question shall refer to an equinox and not a solstice.



Fig. 15.65. Summer solstice symbols in various Egyptian zodiacs. Taken from [1100] and [544], Volume 6.

6) Fantasy bird with the head of a crocodile (or a ram). Apart from the usual wings, folded, the bird has another pair of spread wings similar to those of the bull with a ram's head mentioned in the previous section. We have only encountered this symbol in the point of summer solstice, which is the case with both zodiacs from Esna, where this bird has a crocodile's head (fig. 15.62 – EM and EB; also fig. 15.66). In

Brugsch's zodiac it has the head of a ram, as well as a feather and two little cobras with solar discs on their heads, qv in fig. 15.62 (BR).

7) A symmetrical snake with a head on either side of its body, qv in fig. 15.65 (EM and EB; also fig. 15.66).

8) A cobra with two heads on a forked neck. Its whole body is stretched upwards, with both heads raised, qv in fig. 15.65 (EM and EB; also fig. 15.66).



Fig. 15.66. Summer solstice symbols in the "Lesser Zodiac" of Esna (EM). On the bottom right we see a close-in of the two summer solstice symbols from the top part of the drawing. Previous illustration continued.

In order to conclude the present section, let us reproduce a drawn copy of the framing stripe of the Athribis zodiacs AV and AN (fig. 15.68). The entire row of symbols consists of the solstice and equinox symbols primarily (as described above). For example, the row of snakes all facing the same direction stands



Fig. 15.67. An "astronomical hieroglyph" – the constellation of Gemini with a minimal horoscope (the Sun, Mercury and Venus) in the summer solstice point. Based on the drawn copy of the DL zodiac from [1100], A. Vol. IV, Pl. 20.

for the spring equinox. The two braided snakes in the lower right corner correspond to the autumn equinox (or, possibly, the vernal equinox once again). The cobra on a dais with its neck stretched upwards (qv in the lower left corner of the drawing) is a solstice symbol, as we already know.

The entire lower part of the framing stripe is dedicated to the summer solstice. It also contains the secondary horoscope that was already discussed in CHRON3, Chapter 15:5.3. Underneath, at the very bottom, we see a separate symbolic scene, which is of the greatest interest to us. We shall discuss it in the following section.

## 9. AUXILIARY ASTRONOMICAL SYMBOLS IN EGYPTIAN ZODIACS

Apart from the figures of the primary and secondary horoscopes, as well as equinox, solstice and constellation symbols, Egyptian zodiacs may contain certain auxiliary symbols (or even symbolic scenes) that have special astronomical meaning. Let us list a few of them presently – namely, the ones whose astronomical meaning is the clearest. It has to be noted that the number of auxiliary symbols as encountered



Fig. 15.68. The perimeter strip from the Athribis zodiacs (AV and AN). It consists of equinox and solstice symbols primarily – a row of snakes facing the same direction stands for the spring equinox; the two braided snakes – for the autumn equinox (or, possibly, the vernal one once again); the cobra on a dais with its head raised represents the solstice point. In the bottom part of the perimeter strip we see summer solstice with a secondary horoscope, and below that – the scene with the Passover moon born and growing. Based on the drawn copy from [544], Volume 6, page 730.

in Egyptian zodiacs is rather small as compared to the symbols of constellation and planets as well as solstices and equinoxes, which we have considered above. We have failed to decipher the meanings of certain auxiliary symbols. However, this appears to be of little importance inasmuch as the astronomical dating of the zodiacs is concerned. Most probably, the auxiliary figures and scenes don't contain any new dating information. However, their presence once again proves the important fact that each Egyptian zodiac is designed not just as an astronomical description of a certain date, but also the whole year that contains said date. The date itself is transcribed as the primary horoscope of the zodiac, with the most astronomical detail. Shorter astronomical descriptions found in the same zodiac can stand for other days of the same year (for instance, the secondary horoscopes correspond to solstice and equinox days).

Certain Egyptian zodiacs contain more information than that, referring to some other astronomical events of the year they describe. For example, some Egyptian zodiacs describe the first vernal full moon with varying amount of detail. Let us remind the reader that the astronomical event in question is the basis for the calculation of the Easter date, which is why such symbolism of the Egyptian zodiacs is yet another proof of the fact that their authors were Christian, although likely to practise a different kind of Christianity from the one that we're accustomed to.

Let us provide a list of the auxiliary astronomical motifs that we have encountered in Egyptian zodiacs.

## 9.1. The Easter Full Moon

As we have just mentioned, some of the Egyptian zodiacs depict the first Easter Full Moon. Let us remind the reader of the astronomical event in question and its significance.

According to the ecclesiastical rules that set the Easter date, this festivity was linked to the first full moon that followed the vernal equinox. Christian tradition knows of a special book called the Paschalia, which contains detailed astronomical calendar tables used for calculating such full moon dates. The development of the underlying astronomical calendar theory, in particular, the so-called Methon Full Moon Cycle of 19 years, was one of the key problems of mediaeval astronomy. According to Scaligerian chronology, this problem was solved in the III-IV century A.D., and the resulting solution was recorded at the First Ecumenical Council of Nicaea as Easter Tables, which are used by the Orthodox Church to this day. In the West these tables were changed for another kind in 1582, during the famous Gregorian reform of the church calendar. Our research demonstrates that in reality the Orthodox Easter tables were compiled a few centuries later than the Scaligerian version of history claims – in the VIII century A.D. the earliest. This is directly implied by the astronomical content of the tables, qv in CHRON6, Chapter 19.

The astronomical focal point of the Easter tables is the first Easter full moon. It is believed to have been a crucial element of ecclesiastical tradition even before the Christian Paschalia was introduced. It was also used for calculations of the Easter date by the ancient Judeo-Christian Church, as well as the Judean tradition, qv in CHRON6, Chapter 19.

At any rate, the first vernal full moon was an important element of the ecclesiastical tradition completely unrelated to the ancient Egyptian beliefs, as the Scaligerian version of history tries to convince us. Therefore, if we are to believe this version, we should by no means encounter obvious vestiges of the "alien" Christian tradition in Egyptian zodiacs. In particular, there should be no artwork associated with the first vernal full moon rites. Nevertheless, such artwork does exist, and it is very explicit to boot. This once again proves our theory that the "ancient" (or, rather, mediaeval) Egypt was a Christian country, qv in CHRON5. The matter is that Christianity was still very different from its modern variety in the XII-XIV century A.D. The Egyptians preserved this tradition up until the XVI century or even later.

A good example is the symbol found at the bottom of the Athribis Zodiacs of Flinders Petrie (zodiacs AN and AV). We reproduce it in fig. 15.69. It is a symbolic scene whose meaning is perfectly clear, given everything we already know about the symbolism of the Egyptian zodiacs. The scene is to be "read" from right to left, which is the direction almost all of its figures are facing.

At the beginning (the first symbol of the procession from the right) we see the already familiar vernal equinox symbol that looks as a row of snakes, all



Fig. 15.69. The Athribis zodiacs (AV + AN). The symbolic scene with the Passover moon born and growing after the vernal equinox. From right to left: 1) spring equinox symbol that looks like a row of snakes all facing the same direction; 2) narrow crescent in a small boat – the birth of the Passover moon after the spring equinox; 3) full moon reflecting the solar bird in a large boat – the Passover full moon. Fragment of a drawn copy from [544], Volume 6, page 730.

facing the same direction. This is a reference to the day of vernal equinox, qv in fig. 15.69.

Next we have a small boat holding a circle that comprises a narrow crescent. It is guarded by two human figures located on either side. We see the birth of the new moon after the day of the vernal equinox, or the birth of the moon that shall become the Easter Full Moon 15 days later (see fig. 15.69). Bear in mind that the boats are used in Egyptian zodiacs as transposition symbols, telling us that the scenes they depict bear no relation to the date of the primary horoscope (transposition in time), and, occasionally, that they're also unrelated to the constellations where they are located in the zodiac (transposition in space).

Finally, the whole scene is concluded by a much larger boat that carries the Full Moon (with no crescent inside this time; the circle contains a bird instead). As we have already mentioned, the bird is an Egyptian symbol of the Sun. The entire Egyptian symbol in question is a reference to the Full Moon, which is perfectly correct astronomically. In other words, the Moon was reflecting the sunlight with the entire surface of the side visible to the Earth observer as a full circle. In other words, we see the first full moon after the vernal equinox, or the Easter Full Moon (see fig. 15.69).

The same Easter Full Moon is also reflected in both Athribis Zodiacs as an identical circle with a bird inside, both times in Libra, qv in fig. 13.9 above. Is this a random occurrence? Why did the Easter Full Moon end up in Libra both times?

There is nothing random about this fact. It is easy enough to realise that the Easter Full Moon always takes place in Libra or the immediate vicinity of this constellation. Indeed, let us consider the position of the Sun on the day of the Easter Full Moon. It can be calculated very easily. On the day of the Spring Equinox the Sun was in Pisces. We have seen this fact reflected in every Egyptian zodiac quite unambiguously. Furthermore, the Easter Full Moon takes place 15 days later than the corresponding astronomical New Moon, which takes place after the day of the vernal equinox in half of the cases. Alternatively, it can be said to occur 14 days after the crescent of the New Moon appears in the sky, since this only happens on the day that follows the precise astronomical New Moon date. Therefore, if the equinox falls in between the Full Moon and the New Moon, the distance between the equinox and the first New Moon that follows it shall equal 1 to 15 days. The Easter Full Moon can only occur 15 days later. Thus, in half of the cases the Easter Full Moon takes place about 15 days after



Fig. 15.70. The Passover Full Moon in Libra and the primary horoscope full moon in the Long Zodiac of Dendera. The Passover full moon is drawn as a circle integrated into the sign of Libra, as usual. The Moon in the primary horoscope is drawn nearby as a circle with a woman holding a stick, or a rod, in the middle. Fragment of a drawn copy from [1100], A. Vol. IV, Pl. 20.



Fig. 15.71. The Passover Full Moon and the Easter celebrations as reflected in the "Lesser Zodiac" of Esna (EM). We see a fragment that depicts the constellations of Pisces, Aries and Taurus. Underneath Pisces and Aries one sees two figures with lunar symbols over their heads. They have transposition signs under their feet – in other words, they bear no relation to the primary horoscope. One of these figures looks like an infant sucking on its hand; it stands for the new Moon. The two stars over its head might be a reference to its two days of age. The second figure is standing straight and holding a planetary rod. It is the full Moon. The scene is interrupted by a primary horoscope planet, and continued underneath the constellation of Taurus. We see a boat here, which serves as a transposition symbol. The scene above apparently refers to some seven-day feast of resurrection, which is related to the 15-day (full) vernal Moon. The celebration in question must be the Christian Easter, which corresponds to the drawing ideally. Fragment of a drawn copy from [1100], A. Vol. I., Pl. 87.

the equinox, and in the rest of the case this term approximates 30 days. The Sun shifts its position on the Zodiac by some 15-30 degrees over this time, and ends up in the constellation of Aries. If the vernal full moon comes particularly late, the Sun may pass the whole constellation of Aries over the course of this time (which occupies a mere 20 degrees of the ecliptic) and wind up in Taurus. On the contrary, if the vernal full moon came very early, the Sun shall be at the cusp of Pisces and Aries.

At any rate, the Sun must be in Aries or right next to this constellation on the day of the first vernal full moon.

Let us now recollect that when the Moon is full, it opposes the Sun as seen from the Earth. In other words, when we face the full moon, we shall have the Sun right behind us, otherwise we shall fail to see the entire sunlit half of the Moon, which cannot be full by definition in this case. Therefore, the Moon is on the opposite side of the Zodiac from the Sun on the day of the Full Moon. So, if the Sun is in Aries, the Moon shall be right across the zodiac – in Libra. The Easter Full Moon can therefore be found in Libra or close nearby.

This explains why the circle in Libra can be found in the majority of Egyptian zodiacs. This is the very Eater full moon. In certain cases, the circle could also stand for the Moon in the primary horoscope, but only when the horoscope Moon coincided with the Easter Full Moon. We shall encounter this in case of the Round Zodiac of Dendera. As for the Long Zodiac of Dendera, the primary horoscope moon was full as well, but fell on a different month than the Easter Full Moon, which is why there are two circles in Libra: one stands for the horoscope moon, and the other – for the Easter Full Moon, qv in fig. 15.70. We must add that in most cases the circle in Libra, which is constantly found in Egyptian zodiacs, simply cannot be related to the primary horoscope in most cases – it would be an astronomical impossibility. Neither the Sun, nor the Moon of the primary horoscope could wind up in Libra randomly quite as often. Moreover, in many Egyptian zodiacs, the ones from Athribis being no exception, the Sun and the Moon of the primary horoscope are explicitly indicated in other places – not in Libra. Nevertheless, they still have a circle in Libra. Therefore, in most cases the circle in Libra is unrelated to the primary horoscope, most likely referring to the Easter Full Moon.

The abnormally frequent incidence of circles in Libra in Egyptian zodiacs was already pointed out by N. A. Morozov. This is what he writes about the circle in Libra in Brugsch's zodiac, for example: "This very symbol of Libra with a solar circle at the beam is very common for the ancient astronomical zodiacs" ([544], Volume 6, page 697). N. A. Morozov is correct to point out the exceptionally frequent circle in Libra; however, he makes a mistake in his unjustified assumption that the circle in Libra is a solar symbol. Quite possibly, N. A. Morozov wasn't entirely sure of this, since he claims this circle to be a symbol of the Justice Goddess elsewhere (in his analysis of the Dendera zodiacs, qv in [544], Volume 6, page 658), also without providing any explanations.

The implication is that N. A. Morozov wasn't capable of deciphering the full meaning of the Egyptian astronomical symbol in question. His corollary was that the circle in Libra "cannot be a horoscope indication" ([544], Volume 6, page 697). However, this isn't true in some cases. As we have discovered in the course of our analysis of Egyptian zodiacs, in some cases the circle in Libra is directly related to the primary horoscope – this happens when the horoscope Moon on the zodiac coincides with the Easter Full Moon, a good example being the Round Zodiac of Dendera, qv below.

We can apparently see a similar representation of the Easter Full Moon in the Lesser Zodiac of Esna (EM). In fig. 15.71 we see a fragment of the zodiac in question that contains the constellations of Pisces, Aries and Taurus. Underneath Pisces and Aries we see two figures with circles on their heads. Each of these circles contains a crescent, which is a lunar symbol. Both figures stand on transposition symbols (a flower and a boat, respectively). Therefore, neither is part of the primary horoscope.

One of the figures is already familiar to us – an infant sucking on a thumb. This was a lunar symbol in Egyptian zodiacs, qv above. It has two stars over its head – apparently a symbol of the Moon being two days of age. The matter is that the narrow crescent of the New Moon can only be seen two days after the Moon goes out of sight. Therefore, from the point of view of the ancient astronomers, the new moon was already two days of age when it appeared in the sky.

The position of the second figure with an identical crescent over its head is different – it is standing tall and holding a sceptre, a whip and a planetary rod. This is also a symbol of the Moon – this time "grown up" and full. Also, the transposition symbol (the boat that supports the second figure) is temporal as well as spatial, given that the "proper" place of this Moon is on the opposite side of the Zodiac.

It has to be said that the full Moon is always found on the side of the Zodiac that opposes its "birthplace". The "nascence" of the Moon always takes place in the vicinity of the Sun, and it becomes full on the other side of the Zodiac. However, the Sun doesn't manage to get all that far way over the 15 days that it takes the Moon to become full – it only travels the distance of half a constellation on the Zodiac. Therefore, the Full Moon appears in the vicinity of the constellation opposite to the one where it was "born".

Nevertheless, the two transposition symbols make it feasible for both moons (the "young" and the "old") to be depicted side by side, which is the case with the Lesser Zodiac of Esna, without compromising the astronomical veracity. These symbols were widely used by the "ancient" Egyptian makers of the zodiacs.

However, there are quite a few more references to the Easter Full Moon in the Lesser Zodiac of Esna. The most interesting part comes later, underneath the constellation of Taurus, after the interruption of the whole scene by a solitary planetary figure – male, without any transposition symbols under it, qv in fig. 15.71. This must be one of the primary horoscope's planets. It is followed by a large boat, once again a transposition symbol. Over the boat we see a most remarkable scene, which is difficult to interpret in any other way but as a symbolic representation of the seven-day festivity