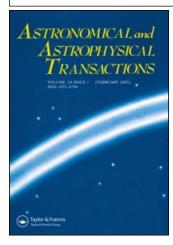
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THE IDENTIFICATION OF INANNA WITH THE PLANET VENUS: A CRITERION FOR THE TIME DETERMINATION OF THE RECOGNITION OF CONSTELLATIONS IN ANCIENT MESOPOTAMIA¹

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The author of the paper believes that the identification of Inanna with Venus as the morning or evening star chronologically preceded the time when the first constellations began to be recognized in Ancient Mesopotamia. If this is correct, the date of identification can be used as a reference point for the determination of the earliest probable limit for the epoch when in Mesopotamia the process of constellation recognition have been started.

The earliest known images with the symbol of Inanna date from the period of archaic Uruk. They can be divided into two groups: (1) the images on seals and ceramics where there are no astral attributes; (2) the pictographic texts where the picture of a star and the signs of a sunrise or a sunset are placed alongside the symbol of Inanna. The pictographic texts, however, admit also a non-astral interpretation, if the picture of a star is a determinative of a deity. The astral nature of Inanna for the Uruk period therefore cannot be considered as finally proved. The identification of Inanna with Venus is reliably certified on seals of the Early Dynastic Period where there are at once three astral symbols – the crescent, the solar disk and the star of Inanna.

KEY WORDS Astral symbols, Mesopotamia III millennium BC

The present work is written in the framework of more extensive research devoted to the early history of Mesopotamian constellations as an attempt to find an additional criterion providing a way of determining the time of the recognition of constellations in Ancient Mesopotamia.

It is well known that Inanna, the Sumerian goddess of love and conflict, was identified in Mesopotamia with the planet Venus as the morning and evening star. It is possible, however, to believe that the astral aspects of Inanna were not primarily inherent to her. Originally, Inanna was adored in Mesopotamia only as a local goddess of the city of Uruk with characteristic features peculiar to an urban deity,

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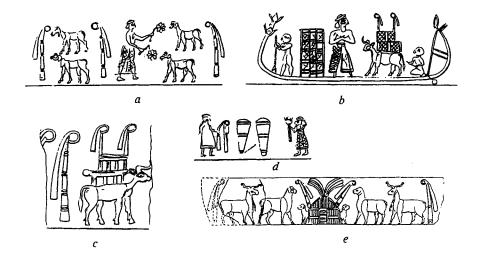


Figure 1 The Inanna symbols on the archaic Uruk seals: a, the ritual feeding of the temple herd (Amiet, 1962, Fig. 638); b, c, the transportation of the altar decorated with a pair of Inanna symbols (Amiet, 1962, Fig. 653, 655); d, a ritual scene: a man moves the Inanna symbol holding 'a plait' (Amiet, 1962, Fig. 649); e, a pair of Inanna symbols: 'the gate posts' at the sacred pen for cattle (Amiet, 1962, Fig. 623).

which included also the functions of the fertility deity;² the identification of Inanna with Venus had taken place at a later time.³

We assume that the identification of Inanna with the planet Venus chronologically preceded the epoch when Mesopotamians began to recognize the first constellations adored as gods.⁴ If correct, it is possible to use the fact of identification as a point of reference making it possible to determine the epoch where the symbolic

²In this connection see Goff (1963, p. 86), Jacobsen (1976, p. 135), and also the objections of I. M. Djakonov in the notes to the Russian edition of Jacobsen's book concerning the opportunity of Inanna identification with the goddess of sacred storehouse (Jacobsen, 1995, p. 6, 40).

³Thus we assume that in the case of Inanna the identification of a primarily non-astral deity with the heavenly body took place. The opposite point of view is formulated in the paper of Heimpel (1982, p. 12), who believes that the known image of Inanna has been formed as a result of supplementing the anthropomorphic features to a primarily astral deity. Accepting this hypothesis as possible for the Sun we, however, cannot accept it for Venus. As far as we know, in the second-first millennia BC all deities identified in Mesopotamia with constellations or seperate stars (planets) originally had an 'earthly' prehistory which had nothing in common with astrolatry. In this respect Inanna is not an exception.

This does not except the fact that in the course of Inanna astralization the merging in the single image of two deities, the non-astral (Inanna) and the astral, took place. However, the exclusively astral deity was a notion totally unknown to Mesopotamians.

⁴The identification in succession from the larger heavenly bodies to the smaller ones seems the most natural. It is obvious that the more significant deities should thus correspond to the larger heavenly bodies. Precisely this situation took place in Mesopotamia. The gods identified with the Sun, Moon and Venus (Utu, Nanna and Inanna) by their positions in the pantheon were much higher than the gods identified with constellations. It is possible to make a conclusion from here that the identification of Inanna with the planet Venus was chronologically happened in the beginning of the process of god astralization in Ancient Mesopotamia.

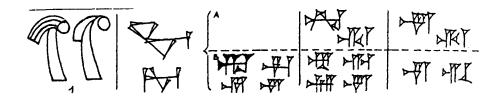


Figure 2 The history of the cuneiform sign MUŠ₃ designating the name of Inanna (Labat, 1976, p. 84-85, No. 103).



Figure 3 The various forms of the sign MUŠ₃ in the archaic texts from Uruk (Falkenstein, 1936, No. 208).

images of the gods and the objects related to them (known to us for the most part from the sources of the second-first millennia BC) began to be projected to the heavenly domain, this resulted in the development of the constellation system.

When was the goddess Inanna identified with the planet Venus in Mesopotamia? Unfortunately, as we shall see hereinafter, it is not obviously possible to answer this question unequivocally as the sources dated from the end of the fourth to the beginning of the third millennia BC relative to Inanna in this respect admit different interpretations, sometimes opposite in sense.

The first evidence about the worship of Inanna as a goddess in Mesopotamia dates from the epoch of archaic Uruk (the end of the fourth millennium BC). The sign used as a symbol of Inanna on seals and ceramics in this period resembles a sheaf or bunch of reeds (bulrush), densely tied, set vertically, the upper part of which represents a loop, the surplus going down like a maiden plait or a ribbon (Figure 1).⁵ It was found on cylinder seals for the first time in Uruk IV-III and was known also from the later pictures of Uruk origin.⁶ This symbol formed a basis for a cuneiform sign MUŠ₃ designating the name of Inanna in archaic and later texts (Figures 2–3). In E. van Buren's opinion, it is the single image of this symbol on seals that immediately represents the goddess Inanna.⁷ However, such symbols

⁵ "Schilfringbündel" (literally 'bundle of reed (in the form) of a ring'), according to Falkenstein (1936, S. 59), Wilcke and Seidl (1976, S. 75), or 'beribboned standard', according to Goff (1963).

⁶See Amiet (1962, Fig. 620-625, 627, 636-B, 637-B, 638, 643-644, 646, 648, 650-655, Pl. 48 bis. A), Goff (1963, p. 85, Fig. 244, 248-250, 252, 269-270, 285-286 and others). The earliest such image (though without 'a plait') P. Amiet dates from the epoch of Uruk V-IV (Amiet, 1962, Fig. 186). The provenance of some images is not exactly established, therefore basically it is possible that some of them are related not only to Uruk. In this connection see Goff (1963, p. 85), Frankfort (1955, Fig. 854).

⁷See Van Buren (1945, p. 44).

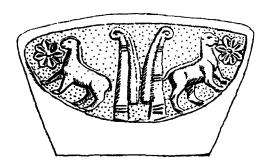


Figure 4 The alabastrine sculptured trough, Jemdet Nasr period (Goff, 1963, Fig. 470).

are found on seals and ceramics not infrequently in pairs – symmetrically at the entrance of a shrine or behind it – symbolizing 'the gate posts' (Figure 1e), and also as a part of the altar (?) located on a bull's back (Figure 1b,c). The object becoming the symbol of Inanna had, no doubt, a ritual application: it was moved during processions, transported on a ship (Figure 1b,c,d).

On the known images with the Inanna symbol on seals and ceramics there are no indications which would be possible to interpret as evidence of the astral meaning of Inanna. 10

There is also the cuneiform sign MUŠ₃ in its archaic form in many texts;¹¹ in particular in the texts from Uruk, that it is no wonder since this city was the centre

⁸'Gate post with streamer'; according to E. van Buren and others, through the loops of the posts was passed a pole supporting a reed mat blocking the entrance to a shrine (Van Buren, 1945, p. 43); however, to us the pictures are unknown where such a design would be represented in an explicit form.

⁹See Amiet (1962, Fig. 648-655), Goff (1963, Fig. 282, 347). On some seals the participants of the procession move the object, which became later a symbol of Inanna, held it for 'a plait' (Figure 1d); it is hard to tell if it was actually 'a plait' or 'a ribbon'.

¹⁰We know only two exceptions. On a cylinder seal from archaic Uruk we can see a symbol of Inanna, symbols of sunrise and sunset, a star, a bull with three stars above and a figure resembling 'a drum' in front of it, see Nissen *et al.* (1991, p. 45, Fig. 5a); the quotation is according to A. A. Waiman (1998, p. 13–14). The meaning of this image has much in common, probably, with the pictographic texts of the same period, which we shall discuss below.

In this connection, the symmetric picture on an alabastrine trough for cattle-feeding from Uruk dated from the Jemdet Nasr period (the beginning of the third millennium BC) is also of interest (Figure 4). Two symbols of Inanna with the ribbons inside are represented in its centre, as two sheep (on the right and on the left), the heads of which are turned to two eight-petaled rosettes. The image allows an astral interpretation if the rosettes are regarded as a heavenly – not a vegetable – symbol.

However, the latter seems to us to be improbable. Some pictures dated by the same period and varied in detail represent a 'ritual feeding of the temple herd' (this is the treatment of the topic accepted by Goff (1963, p. 61–62, Fig. 247–251)): a shepherd (or a priest) feeds the sheep with a vegetable; we can distinguish characteristic eight-petaled rosettes on it, and besides there is one (or more: usually two or three) symbols of Inanna (Figure 1a). The association of the Inanna symbol and the rosettes on these pictures has certainly a non-astral character. As the same symbols are represented on a trough we can judge that they also have no astral meaning.

¹¹See Green and Nissen (1987, No. 374), Englund and Grégoire (1991, p. 126), Englund and Nissen (1993, S. 259), Burrows (1935, No. 249).

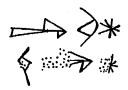


Figure 5 The archaic texts from Uruk: the image of a star near the Inanna symbol and the signs of sunrise or sunset (Falkenstein, 1936, texts No. 602 III, 606 Rs. 2).

of the worship of Inanna, where the divine service connected with the goddess was regularly carried out. As a rule, in the pictographic texts the sign $MU\tilde{S}_3$ is singly used and it is ordinary connected with the image of a star, and the names of temples and festivals (Figure 5).

In the Uruk texts K. Szarzyńska distinguishes three notations of the Inanna name connected, in her opinion, with three offering groups:

^d Inana - nun	'Princely Inanna',
$^{ m d}$ Inana - ud/hud $_2$	'Morning Inanna'
^d Inana - sig	'Evening Inanna' ¹²

The second and third notations, in her opinion, have a clear astronomical meaning: the offerings to Inanna are carried out in the morning and in the evening, because the goddess herself is identified with the planet Venus, which is regulary observed as the morning or evening star.¹³

Thus in the interpretation of the texts the author assumes that:

(1) the picture of star is a determinative of a deity before the name of Inanna;¹⁴

¹²See Szarzyńska (1993, p. 8 ff). The signs UD and SIG in their earliest form represent the pictograms of the rising and setting Sun (hud₂ is a phonetic variant of the sign UD). The UD is the solar disk appearing from the arc of a circle of greater diameter located below, SIG is the solar disk appearing from the arc of a circle of greater diameter located above; apparently, two signs display two moments in the observation of the Sun through round windows from within a temple; in the first case a window faces the east, in the second the west.

It is possible also that in the case of UD an arc from where the Sun-disk ascends symbolically represents two mountains, between which, on seals of the later times, an anthropomorphic figure of the solar god appears. See, for example Boehmer (1965, Fig. 392-438).

¹³K. Szarzyńska remarks that, though three mentioned epithets of Inanna do not occur later in Sumerian religious texts, there are a lot of expressions describing the astral status of Inanna that have a close meaning (Szarzińska, 1993, p. 9).

In this connection it is possible to add the following example: in the myth of Inanna's descent to the Nether World the goddess Inanna introduces herself to the guard at the gates in the following way: 'I am Inanna of the place where the sun rises' (me-e dga-sa-an-na ki-dutu eg-a-as) (Kramer, line 80; Heimpel, p. 10, note 4). As in the archaic texts from Uruk the position of Inanna relates here to the sunrise.

¹⁴The meaning of star in the archaic Uruk texts is similarly interpreted by M. Green (1980, p. 8, note 34), Green and Nissen (1987, No. 31), P. Huber (1977, p. 120-121) and Englund (1988, p. 167, note 39). According to Green, these texts represent an abridged variant of the record: UD-(EZEN)-dINANNA 'daytime/morning festival of Inanna', or SIG-(EZEN)-dINANNA 'evening festival of Inanna'.

According to A.A. Waiman, however, the picture of a star alongside the Inanna symbol means AN, i.e. 'heavenly' (Waiman, 1998, p. 13-14).

(2) the morning and evening festivals of Inanna in Uruk of the period in question was correlated with the appearence of the planet Venus as the morning or evening star.¹⁵

If the hypothesis of K. Szarzyńska is correct, the problem mentioned in the title of the present article can be regarded as solved: the goddess Inanna was identified with the planet Venus at the end of the fourth millennium BC. In our opinion, however, the mentioned texts from Uruk also admit non-astral interpretation.

Indeed, if the picture of a star placed alongside of the sign of Inanna is a determinative, we have to assume that in the texts there are no direct indications for the astral character of the goddess Inanna. The time of a festival (morning/day/evening) could be unconnected with the observations of heavenly bodies, as it, no doubt, took place in many other cases. In reconstructing the way which had led to the identification of Inanna with the planet Venus, it is plausible to assume that there existed a period when the morning and evening festivals of Inanna were regularly carried out, but the goddess herself was not yet identified with Venus. The present texts probably go back just to this period. It is especially probable because during the period Uruk III we have no untextual evidence indicating the astral character of Inanna.

It is naturally, however, to put the question: why is the name of Inanna written with a determinative in the period of Uruk III? The sign MUŠ₃ (in its wellknown archaic form) cannot be confused with any other cuneiform signs. For what is a determinative necessary?

In the time when these texts were being composed the system of determinatives was apparently already widespread.¹⁶ The question of using star pictures as determinative, however, is not quite clear. The names of some deities in this period and later continued to be written without determinative.¹⁷ The only exception here is the name of Inanna, though the situation here is not entirely clear.¹⁸

¹⁵It immediately follows from this that in the archaic Uruk the morning and evening star has already been regarded as a single heavenly body; that is (if it is correct) an important astronomical achievement.

 $^{^{16}\}mathrm{The}$ contents of lexical texts from Uruk testifies to that; in the corresponding lists of fish, cities and geographical names, birds, trees and wooden objects the signs KU_6 = 'fish', KI = 'earth', $MU\tilde{S}EN$ = 'bird', $GI\tilde{S}$ = 'tree' and so on, are written as if they were determinatives (Englund and Nissen, 1993, p. 230–231, 245–246, 249–250, 260). They occupy the same place (in the beginning or in the end) in the line where they should be put down if they were regarded as being determinatives.

¹⁷For example, ENLIL (England and Nissen, S. 210; Falkenstein, 1936, S. 36, Anm. 1; Green, 1977, p. 293–294). In the archaic texts from Ur without determinative the name of the moon-god NANNA was written down. According to Burrows, in the texts from Ur, which did not belong to school-texts, the image of a star was used mainly for designating the objects related to a deity, however, it was not used before the names of the gods themselves which were all well known. (Burrows, 1935, p, 5, 20), The star image before the names of deities as an indispensable element appeared for the first time only in the texts from Fara (Deimel, 1923, S. 1–4; Krebernik, 1986).

¹⁸In the archaic Uruk texts the sign MUŠ₃ was sometimes written without a determinative (Green and Nissen, 1987, No. 374), and in the texts from Jemdet Nasr always without a determinative (Englund and Grégoire, 1991. p. 126). In the texts from Ur, the sign MUŠ₃ was depicted both with a determinative and without it (Burrows, 1935, p. 27-39, No. 230-253). Obviously, we have here to deal with the unfinished system of designations.

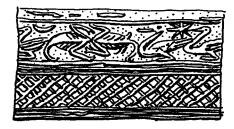


Figure 6 One of the earliest images of eight-pointed star on a seal, Jemdet Nasr period (Goff, 1963, Fig. 415).

The star image might be used here not as determinative, but in its direct meaning MUL_0 = 'a star, a heavenly body'. Then, instead of the readings suggested earlier we have: UD-(EZEN)- MUL_0 -INANNA 'the morning (festival of) Inanna, (when) the star (is observed)' and SIG-(EZEN)- MUL_0 -INANNA 'the evening (festival of) Inanna, (when) the star (is observed)'. A similar reading certainly assumes some relation between Inanna and the planet Venus as the morning and evening star; it could take place at that period when the correspondence between the goddess and the planet was being established.¹⁹

We have discussed three possible interpretations of the archaic texts from Uruk, in which the image of the star is alongside the sign of Inanna and the sunrise or sunset signs: (a) the image of a star is a determinative of a deity: Inanna is identified with the planet Venus; (b) the image of a star is a determinative of a deity: Inanna has no astral meaning; (c) the image of a star designates a star, a luminery, thus indicating a relation between Inanna and the planet Venus. Two of these interpretations assume the astral explanation of the texts, one is the non-astral. Unfortunately, it is impossible to make an objective choice between them.

At the end of the fourth to the beginning of the third millennia BC in Mesopotamia there existed simultaneously two groups of sources that reflected, probably, two forms of perception of the goddess Inanna: (1) the images on seals and ceramics not containing the astral attributes and (2) the pictographic texts where such attributes were present; in the first group the agricultural role of Inanna as the goddess of fertility was emphasized, or any other function related to fertility; in the second, the relation to the evening and morning appearances of the planet Venus.

We shall consider further the later evidence concerned with the astral meaning of the Sumerian goddess Inanna and her Akkadian equivalent Ishtar.

The latest known picture of the Inanna symbol in the form of 'the gate post with streamer' (the terra-cotta fragment of a mosaic frieze from Uruk) dates from the end of the Early Dynastic period.²⁰ Later, the symbols of Inanna were represented

¹⁹ As we already mentioned, probably the question here was not simply about a star as a luminous object in the night sky, but about the deity related to a star, which was later merged with the image of the goddess Inanna.

²⁰E. van Buren dates it as beloning to the period of Uruk I that approximately corresponds to the middle of the third millennium BC or a little later (Van Buren, 1945, p. 44); however, according to Goff, the given image dates from the Jemdet Nasr period (Goff, 1963, p. 116, Fig. 484).

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Figure 7 The image of an eight-pointed star (rosette?) among the monster-like figures on a seal from Šuruppak (Fara) (Frankfort, 1939, Plate XI b).

by an eight-pointed star (inscribed in a circle or not), on the one hand, 21 or by anthropomorphic images, on the other. 22

The eight-pointed star is one of the earliest Mesopotamian astral symbols. As an independent grapheme, which is impossible to confuse with any other images, it appears in the archaic texts from Uruk,²³ and on the seals of Uruk III and the Jemdet Nasr period (Figure 6).²⁴ Later, the number of similar images increases gradually.²⁵ It is not clear, however, when it acquired the meaning of the Inanna symbol.

The images of the eight-pointed star and the eight-petaled rosette at the end of the fourth to the beginning of the third millennia BC are sometimes treated as a single sign symbolizing Inanna. However, in our opinion, they are actually different symbols notwithsdanding the fact that they are both associated with Inanna. By its origin the eight-petaled rosette is a non-astral symbol; however later, owing to similarity of shapes, their meanings could be confused. 27

As to the Inanna symbol on seals, we can be certain of its presence only if the picture displays three astral symbols at once: (1) a crescent, (2) a solar-disk or

²¹A circle (a radiant disk) is a natural solar symbol. Since the period of the Akkade Dynasty (XXIV-XXII centuries BC), a four-pointed star inscribed in a disk is a standard symbol for depicting the solar deity Utu (Shamash) on seals, and later on boundary stones (*kudurru*) (Seidl, 1968, S. 98-99). Since the same time the astral symbol of Inanna (an eight-pointed star) was frequently inscribed in a circle. Why? The answer is probably in some poetic texts of the New-Sumerian period (XXII-XXI centuries BC); for example, in the hymn by Iddin-Dagan devoted to Inanna her shining in the night is compared with the light of day or the Sun (lines 5, 13, 113 and others), see Reisman (1973); the attribute of being solar is transferred to Inanna, therefore the solar disk is becoming her symbol.

The number of beams, which has the star used as an Inanna symbol, could sometimes differ from eight, see, for example Figure 9.

²²The collection of anthropomorphic images of Inanna (Ishtar), see Barellet (1955).

²³See Green and Nissen (1987, No. 31).

²⁴See Amiet (1962, Fig. 212), Goff (1963, Fig. 415). This symbol was displayed on the temple walls, in particular, on the walls of the Eanna temple in Uruk (Barrelet, 1955, p. 243, note 5).

²⁵The images of eight-pointed stars are rather rare in the Early Dynastic period, and not always are they easily distinguishable from the images of rosettes; see, for example, Figure 7 and also (Amiet, 1962, Fig. 720, 725, 792, 802, 894, 899, 935, 937, 1017, 1082, 1226 and others); in the period of the Akkade Dynasty they essentially increase in number.

²⁶See Barrelet (1955, p. 243, note 5), Labat (1976, p. 48).

²⁷See Van Buren (1945, p. 84).

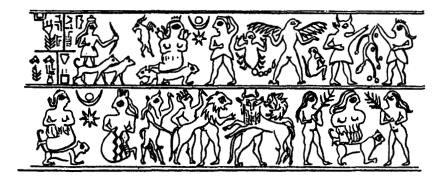


Figure 8 The solar disk, the crescent and the eight-pointed star alongside the anthropomorphic images of Inanna (Narunde?) on a lion (lions), Susa, the period of Akkade Dynasty (Amiet, 1962, Fig. 1363).



Figure 9 The solar disk, the crescent, the star (five-pointed!) and the sign of sunrise near the monster-like figures, the middle of the third millennium BC (Amiet, 1962, Fig. 1019).

a four-pointed star inscribed in a disc or not and (3) one more star, the eight-pointed as a rule, inscribed in a disk or not. A separately depicted star (even the eight-pointed! as, for example, in Figure 7) may not be connected to Inanna;²⁸ 'a crescent-star' combination on seals can designate the Moon and the Sun;²⁹ and only three astral symbols depicted in a row can be considered as the indisputable proof of the presence of the Inanna (Ishtar) symbol on the picture. For the first time in Mesopotamia, such images appear in the middle of the third millennium BC or slightly later (Figures 8–10).³⁰

There is the possibility, however, that among the astral images of the earlier period we can also find the single picture of Inanna as a star or the dual picture of Inanna as the star and the lunar crescent (as, for example, in Figures 6, 7 and

²⁸It can signify a determinative of god (DINGIR), or an astral determinative (AN) indicating that the figure near it belongs to the heavenly domain, or it can be simply a star as an element of the landscape.

²⁹The images of the Sun in the form of a star (four-, six-, five- and eight-pointed) were rather widespread, see Amiet (1962, Fig. 1017, 1063, 1249), Porada (1948, Fig. 195, 241), Seidl (1968, S. 98-99); in a hymn to Utu temple dated from the Akkade period, the solar god is directly called the 'star of the heaven' (mul-ana_x (=AN)) (Sjöberg and Bergmann, 1969, p. 45).

³⁰This criterion for recognizing the Inanna symbol on seals is suggested by E. van Buren (1945, p. 82).



Figure 10 The solar disk, the crescent, the star and the scorpion among the monster-like figures on a seal from Eshnunna, the middle of the third millennium BC (Amiet, 1962, Fig. 1041).



Figure 11 The eight-pointed star, the crescent, and the scorpion among the monster-like figures, the middle of the third millennium BC (Amiet, 1962, Fig. 1017).

11).³¹ But we can never be able to distinguish them reliably from the Sun images represented by a star, from the star images as an element of the landscape or the star as a determinative of a deity, or from the 'Sun-Moon' astral couple.

The anthropomorphic images of Inanna with presumably astral attributes appear no earlier than the middle of the third millennium BC. On one such (sculptural) picture from Susa dated from the time of the Akkade dynasty, the image of an eight-petaled rosette is represented in the base of its throne.³² On a seal from Susa, Inanna (Narunde?) is depicted sitting on a lion (lions), a solar disk, a crescent and an eight-pointed star being alongside her (Figure 8).³³ On seals of the Akkade period, a rising Sun-god was often depicted. On one such image (Figure 12) we see a bearded man with a saw in his hand climbing between two mountains; the man symbolizes the Sun-god. Close to him, a winged armed woman stands on the edge of the mountain.³⁴ The wings indicate her relation to the heavenly domain. She seems to be Inanna.

³¹See also Amiet (1962, Fig. 899, 937, 1017), Frankfort (1939, PI. XIV e, g, XV k, XVI f, h, XX a, b, XXI b, f) and others.

³²See Barellet (1955, p. 254, Fig. 20), Hartner (1965, Fig. 9a, p. 3-4, note 11). W. Hartner interprets it as an astral symbol, but the rosette, as we already mentioned, can also have a non-astral meaning.

This sculpture actually represents the Elamit goddess Narunde (Amiet, 1976, p. 38-39; Hinz, 1964, S. 44-45), which shared a number of traits with Inanna. Lions and the eight-petaled rosette depicted in the base of her throne were contained in the generally accepted set of Inanna's attributes.

³³See Amiet (1962, Fig. 1363), Frankfort (1939, p. 233, text-Fig. 71).

³⁴See Barellet (1955, Pl. XXI), Frankfort (1939, Pl. XIXa), Goff (1963, Fig. 720).



Figure 12 The winged armed goddess Inanna near the solar god Utu who appears between two mountains, the period of the Akkade Dynasty (Goff, 1963, Fig. 720).

The additional information on the problem under consideration could be the names and the epithets of Inanna found in the late Sumerian texts. However, as shown by Gelb, the variants of the Inanna name admitting an astral interpretation (like ^dNin-an-na, ^dNin-na-an-na, ^dGašan-an-na, i.e. 'The Mistress of the Heavens') are all of a sufficiently later time; the earliest forms of her name (^dInnin, ^dInnin, ^dIn-nin, ^aIn-nin, ^dIn-nin and others) do not contain astral components. In the collection of temple hymns attributed to Enheduanna, the daughter of Sargon the Ancient (XXIV-XXIII centuries BC), which dates in some parts from the Sargonic or even Pre-Sargonic times, only the name of the Inanna temple in Uruk is written using the form -an-na what indicates the relation to the heavenly domain, ³⁶ and, probably, reflects the heavenly status of the goddess Inanna.

Since the Neo-Sumerian time (XXI century BC) in literary and religious texts the astral status of Inanna (Ishtar) is determined by the epithet u₄-zal-le (the morning star) and by the expressions using the word usan (the evening star).³⁷ Similar definitions probably have the earlier prototypes that date from the middle of the third millennium BC.³⁸ At the end of the third to the beginning of the second millennia BC the most famous epithet of Inanna as the planet Venus is Nin-(an)-si₄-an-na 'The Shining(?) Mistress of the Heavens'.³⁹

Let us sum up the results obtained.

The earliest known evidence of the astral meaning of Inanna dates from the verge of the fourth-third millennia BC; however, they admit different interpretations; for

³⁵See Gelb (1960); Gelb assumes that various forms of Inanna name (Innin, Ninanna, Irnina) relate actually to the different goddesses united at the later time in one image; the representation of Inanna as an astral goddess thus is not certainly the earliest. In this connection see also Jacobsen (1976, p. 135); the syncretic character of Inanna is considered also by Vanstiphout (1984).

³⁶See Sjöberg and Bergmann (1969, p. 13. Hymn No. 16).

³⁷The review of the sources where Inanna is characterized as the morning or evening star, see Bruschweiler (1987); this work is quoted by us under the reference in Szarzyńska's paper (Szarzyńska, 1993, p. 9, note 4).

³⁸In this connection see Alster (1976, p. 116).

³⁹The earliest example, known to us, dates from the period of the Third Dynasty of Ur (Sallaberger, 1993, S. 104, Anm. 464), in this connection see also Heimpel (1982, p. 11).

this period the astral status of the goddess cannot be considered as finally proved.

Inanna's relation to the planet Venus is proved by seal pictures of the middle of the third millennium BC. This period witnesses a global changes in her status: the symbolism connected to Inanna's role as the goddess of fertility gradually fades away and instead the astral symbolism appears. Though the religious and literary image of Inanna (Ishtar) was not restricted by her role as the heavenly goddess, nevertheless, it was her astral symbolism that became widespread from the last third of the third millennium BC on.

If Inanna came to be identified with Venus in the middle of the third millennium BC (which is indicated by some seal pictures), and our initial assumption is correct, we can come to the conclusion that the process of constellation recognition in Mesopotamia started no earlier than the middle of the third millennium BC.⁴⁰

References

Alster. B. (1976) Journal of Cuneiform Studies 28, No 2, 109-126.

Amiet, P. (1962) La gliptique mésopotamienne archaique, Paris.

Amiet, P. (1976) L'art d'Agadé au Muséé du Louvre, Paris.

Barellet, M.-Th. (1955) Syria 32, No 3-4, 222-260.

Boehmer, R. M. (1965) Die Entwicklung der Glyptik wärend der Akkad-Zeit, Berlin.

Bruschweiler, F. (1987) La déesse triomphante et vaincue dans la cosmologie sumérienne, Leuven.

Burrows, E. (1935) Ur Excavations Texts 2, London.

Deimel, A. (1923) Schultexte aus Fara, Leipzig.

Englund, R. K. (1988) Journal of the Economic and Social History of the Orient 31, Pt. 2, 121-185.

Englund, R. K. and Grégoire, J.-P. (1991) The Proto-Cuneiform Texts from Jemdet Nasr, Gebr. Mann Verlag, Berlin.

Englund, R. K. and Nissen, H. J. (1993) Die lexikalischen Listen der archaischen Texte aus Uruk, Gebr. Mann Verlag, Berlin.

Falkenstein, A. (1936) Archaische Texte aus Uruk, Leipzig.

Frankfort, H. (1939) Cylinder Seals, Macmillan, London.

Frankfort, H. (1955) Stratified Cylinder Seals from Diyala Region, University of Chicago Press.

Gelb, I. J. (1960) Journal of Near Eastern Studies 19, No. 2. 72-79.

Goff, B. I. (1963) Symbols of Prehistoric Mesopotamia, Yale University Press, New Haven and London.

Green, M. W. (1977) Journal of Near Eastern Studies 36, No. 4, 293-294.

Green, M. W. (1980) Journal of Near Eastern Studies 39, No. 1, 1-35.

Green, M. W. and Nissen, H. J. (1987) Zeichenliste der Archaischen Texte aus Uruk, Gebr. Mann Verlag, Berlin.

Hartner, W. (1965) Journal of Near Eastern Studies 24, No. 1, 1-16.

Heimpel, W. A. (1982) Syro-Mesopotamian Studies 4, Issue 3, 9-22.

Hinz, V. V. (1964) Das Reich Elam, Stuttgart.

Huber, P. H. (1977) Scientists Confront Velikovsky (D. Goldsmith, Ed.), p. 117-144, Ithaca and London

Jacobsen, Th. (1976) Treasures of Darkness. History of Mesopotamian Religion, Yale University Press, New Haven and London (Russian transl.: see Jacobsen, 1995).

⁴⁰The other possibility is also plausible. If the identification of Inanna with the planet Venus already existed at the end of the fourth millennium BC, it means that we actually have no historical interval (the existence of which would be confirmed by the sources) when the goddess was not identified with Venus. Therefore, the fact of the identification moves away into remote prehistorical times, and the suggested criterion for the determination of the lower time-limit for the recognition of constellations in Mesopotamia does not then work.

Jacobsen, Th. (1995) Socrovischa tmi. Nauka, Moscow (in Russian).

Kramer, S. N. (1951), Journal of Cuneiform Studies 5, No. 1, 1-17.

Krebernik, M. (1986) Zeitschrift für Assyriologie 76, Halbband II, 161-204.

Kurtik, G. E. (1997) Institut Istorii Jestestvoznanija i Tehniki, Godichnaja Nauchnaja Konferentsia Pt. 1, p. 68-76, Moskva, Janus-K. (in Russian).

Labat, R. (1976) Manuel d'épigraphie akkadienne, Paris.

Nissen, H. J., Damerow, P., and Englund, R. K. (1991). Frühe Schrift und Techniken der Wirtschaftsverwaltung im alten Vorderen Orient, Berlin.

Porada, E. (1948) Corpus of Ancient Near Eastern Seals in North American Collections, Washington.

Reisman, D. (1973) Journal of Cuneiform Studies 25, No. 4, 185-202.

Sallaberger, W. (1993) Der kultische Kalender der Ur III-Zeit. Teil 1-2, Walter de Gruyter, Berlin-N.Y.

Seidl, U. (1968) Baghdader Mitteilungen 4, 1-220.

Sjöberg, A. W. and Bergmann, S. J. (1969) The Collection of the Sumerian Temple Hymns, Locust Valley, New York.

Szarzyńska, K. (1993) Revue d'assyriologie 87, No. 1, 7-28.

Van Buren, E. D. (1945) Symbols of the Gods in Mesopotamien Art, Roma.

Vanstiphout, H. L. J. (1984) Religion and Reason 31, 225-238.

Waiman, A. A. (1998) The Hermitage Readings in Memory of B. Piotrovsky. Summerized Reports, p. 13-17, St.-Petersburg (in Russian).

Wilcke, C. and Seidl U. (1976) Reallexikon der Assyriologie 5, Lief. 1-2, 74-89.