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84) Observations of the planet Venus in archaic Uruk: the problem and researches — It is well known that the three heavenly bodies – the Moon, the Sun and the Venus – were worshiped as the deities Nanna, Utu and Inanna in Ancient Mesopotamia of the IIIrd millennium BC. Their symbols on seals were, respectively, a crescent, a disc and the eight-pointed star. Encountering an image of crescent on a seal we can therefore assume that the scene depicted on it has to do with the lunar deity Nanna; and the presence of entry ^dNanna in a text suggests that in epoch of this draft the moon was already worshiped as a deity in Ancient Mesopotamia.

Such statements, undoubtedly, are true for the second half of the IIIrd millennium BC and later on as there exist some text confirmations ¹⁾. But what can be said about earlier times? It is not known exactly whether Nanna, Utu and Inanna were originally astral deities. Thus it is natural to ask, whether Nanna, Utu and Inanna were always identified as luminaries in Ancient Mesopotamia, and if not always, then when did they acquire the astral meaning? Answering this question unambiguously now is not possible, yet we can make some assumptions.

First we see, that of the three pictographic signs in proto-Sumerian texts which stand for Nanna, Utu and Inanna two, namely ŠEŠ.KI (= Nanna) and MUŠ₃ (= Inanna), do not suggest astral meaning visually: they do not look as luminaries designated ²⁾. Perhaps, initially these signs were not introduced to refer to the Moon and Venus, and only later did they acquire the astral meaning ³⁾. This evidence, however, can only be seen as an indirect, as pictograms in proto-Sumerian texts do not always resemble the subjects referred to.

It would seem that the sign UD (= u₄, babbar), adopted to a deity Utu, had an astronomical meaning, though it also had other close interpretations: “day” ⁴⁾, “morning” ⁵⁾. In the early pictographic version it had probably represented the solar disk at the moment of its appearance over the east horizon between the two mountains ⁶⁾.

An important problem related to our theme is the use of determinatives in the proto-Sumerian texts. It is assumed that the names of some gods were recorded with determinative ^d already in archaic Uruk ⁷⁾. However, it does not apply to all gods. So the name of Nanna, for example, is seen with a determinative for the first time only in Fara and Abu Salabikh ⁸⁾ but earlier in archaic Uruk, Jemdet Nasr and Ur it is written without a determinative ⁹⁾. The same goes to the name of the sun god Utu ¹⁰⁾.

In regards to the goddess Inanna the situation is more complex. In the texts of Uruk a combination of signs AN MUŠ₃, presumably meaning ^dInanna¹¹), is encountered repeatedly. The texts in which AN MUŠ₃ is connected with U₄ “morning” or SIG “evening”, as well as EZEN “festival”, are of particular interest, since these signs allow an astronomical interpretation.

Various researchers translate these texts in a different manner. According to A. FALKENSTEIN (1935), a combination of three signs (AN MUŠ₃ U₄) = “(zum) Aufgang der Venus”, (AN MUŠ₃ SIG) = “«(zum) Untergang der Venus”¹²). According to M. GREEN (1980): SIG-EZEN-^dINANNA = “evening festival (or evening of the festival) of Inanna” and UD-(EZEN)-^dINANNA = “daytime/morning (of the festival of Inanna”¹³). According to R. ENGLUND (1988), AN MUŠ₃ U₄/SIG = “(offerings) for the morning and evening Venus (star)”, and a combination of the four signs EZEN ^dINANA.SIG/U₄ is translated as “...for the festival (?) of the evening/morning Venus” at the same paper¹⁴). According to a version of K. SZARZYŃSKA (1993): ^dInana-ud/hud₂ = “Morning Inanna”, ^dInana-sig = “Evening Inanna”¹⁵). The publication of 1998 by R. Englund translates the text as follows: EZEN U₄/SIG AN MUŠ₃ = “festival of the morning/evening Inanna”¹⁶). A. A. Vayman (1998) interprets the signs muš₃-an as nin₂-an, lit. “Lady of Heaven”¹⁷); K. WILCKE (1976) considers it possible to treat an-muš₃ as An-Inana “(deities) An (and) Inanna”¹⁸).

The cited translations can be divided into two main groups: in the first the researchers – A. FALKENSTEIN (1935), R. ENGLUND (1988), A. A. VAYMAN (1998), etc. – suppose that the goddess Inanna was already associated with the Venus as the morning and evening star in archaic Uruk, and so translate the text, in the second – M. GREEN (1980), R. ENGLUND (1998), etc. – it is only *the morning or evening festivals of Inanna* and the planet Venus is not mentioned in translations explicitly. Of the two approaches at present time undoubtedly dominates the first one¹⁹).

Almost all cited translations treat the sign AN standing alongside MUŠ₃ as ^d – a determinative in front of the name of Inanna. However, if AN is a determinative, you have to conclude that the texts themselves do not have direct evidence that Inanna is an astral goddess. Carrying out of the festivals in the mornings and evenings can not serve as a proof of her being astral. Assuming linkage of Inanna with the planet Venus for the epoch of archaic Uruk we rely not on the text data, but on the evidences of a much later period, where such a connection is reliably attested.

A somewhat different approach is based on rethinking of meaning of the sign AN in the texts under consideration. Already A. FALKENSTEIN noted that the eight-pointed star placed alongside the Inanna symbol in the Uruk texts may have some other meaning than “the goddess Inanna”²⁰). In fact, it is not clear what made scribes put a determinative in front of the name of Inanna if the names of the other astral gods (Nanna, Utu) at the same period were written without a determinative. Might it be AN had some other meaning?

The answer may be found in NISSEN, DAMEROW, ENGLUND 1990, 81; *ibid.* 1993, 34, Fig. 32, Text a, where a combination of the three signs AN MUŠ₃ SIG is translated as “(Fest des) Abendsterns (der Göttin) Inanna”, i.e. “(Festival of) evening star (of goddess) Inanna”. Very close interpretation, namely: UD-(EZEN)-MUL₀-INANA = “morning (festival of) Inanna, (when there is seen) the star” and SIG-(EZEN)-MUL₀-INANA = “evening (festival of) Inanna, (when there is seen) the star” is given in KURTIK 1999, 507; *ibid.* 2008 40. It is assumed in it that the sign AN, standing alongside MUŠ₃ in the texts from Uruk, is not a determinative ^d, as viewed in many modern studies, but the sign MUL₀ “star”, as follows from its outline, i.e. AN-MUŠ₃ = MUL₀-INANA, lit. “star of Inanna”²¹).

The eight-pointed star (AN) placed alongside the Inanna symbol (MUŠ₃) may have originally been introduced in order to indicate the specifics during the worships associated with Inanna, namely the presence of it in the evening or morning skies, to distinguish them from the worships when the star was not observed²²). The linkage “Inanna–Venus” was, apparently, already set in this period, and the evening and morning stars were considered as a single luminary. Viewing this in the course of the history of astronomy, this is a great achievement, no matter which way it was obtained. Later, the initial identity AN = MUL₀ was expelled with no trace by the meaning AN = diĝir. The identity AN = mul in later texts, as far as we know, was almost not used²³).

It is clear, that the notion of “star” and the idea of “god” have been closely related in archaic Uruk.

The decisive evidence in favor of assuming of the evening and morning star observations in Uruk and their connection with Inanna is presented by a cylinder seal from the collection of Erlenmeyer (№ 1). It shows in the immediate vicinity the symbol of Inanna (MUŠ₃), signs UD “morning”, SIG “evening” and the eight-pointed star (AN²). We also see a figure of standing bull, in front of him a sign EZEN³ “festival”, shown in a nonstandard manner (it resembles, rather, a drum) and three eight-pointed stars (MUL³) above him²⁴). Exact meaning of this image on a seal remains unknown²⁵). However, it is obvious that the symbol of Inanna is surrounded on it by pictures that may have or undoubtedly have astral significance, which makes it very likely that the sign MUŠ₃ has astronomical meaning as well.

It may seem surprising, but very little is known of textual evidence about the evening and morning Inanna in Mesopotamia of the IIIrd millennium BC., that derived not from Uruk²⁶). Epithets, containing explicit references to the observations of Inanna as the morning and evening star (= Venus), appear only in Neo-Sumerian period.

Thus, we see that almost all modern interpretations of the proto-Sumerian texts from Uruk, carrying a combination of signs AN-MUŠ₃-U₄/SIG, presume the astronomical observations of Inanna as the morning and evening star in archaic Uruk. Although this interpretation is more plausible, however, it seems, we can not state that it is definitely proved.

1) This proof may be, for example, the names and epithets of the Nanna, Utu and Inanna as astral deities, which first appeared in the Old Akkadian period and later. With respect to the Venus, see, for example, KURTIK, 2008: 41–43.

2) LABAT 1976, no. 103, 331; GREEN, NISSEN 1987, no. 374, 388.

3) The possible nonastronomical significance of MUŠ₃ in pictographic texts and on seals of Uruk see: STEINKELLER 1998, 89, note 17.

4) LABAT 1976, no. 381; ePSD, ud.

5) The meaning of U₄ = “morning” and SIG = “evening” in the texts of Uruk, see: ENGLUND 1988, 166–167; *ibid.* 1998, 127; SZARZYŃKA 1993, 8, n. 1.

6) LABAT 1976, no. 174. An anthropomorphic figure of the sun god Utu/Shamash rising between two mountains is a standard theme on the Old Akkadian seals: AMIET 1961, № 1486–1488; BOEHMER 1965, Abb. 392–438.

7) For example, ^dašgi, ^dirḫan, ^dnanše, ^dsud₃ *et al.*: GREEN, NISSEN 1987, 175, no. 31.

8) The reconstructions of the god lists from Fara and Abu Salabikh see: KREBERNIK 1986; MANDER 1986.

9) For example, in the administrative texts from Uruk, the form en-nanna, lit. “Lord Nanna” occurs seven times without a determinative: GREEN, NISSEN 1987, no. 388.

10) GREEN, NISSEN 1987; ENGLUND, GRÉGOIRE 1991; BURROWS 1935.

11) In the administrative texts from Uruk MUŠ₃ occurs 134 times in total; in the period of Uruk IV – 55 times, including 10 times with a determinative; in the period of Uruk III – 79 times, and 48 times with a determinative, GREEN, NISSEN, 1987, 248, no. 374.

12) FALKENSTEIN 1936, 48.

13) GREEN 1980 8, n. 34.

14) ENGLUND 1988, 167, n. 39.

15) SZARZYŃKA 1993, 9, n. 4; she comes to the conclusion that the goddess Inanna was already identified with the morning and evening Venus in archaic Uruk. The view of K. Szarzyńska was also adopted in SELZ 2000, 30, 39, n. 5.

16) ENGLUND 1998, 127.

17) VAYMAN 1998, 13–14.

18) WILCKE 1976, 74–75, § 1.1.

19) See, for example, a clear statement by P.-A. Beaulieu: “The appearance of the two deities Inanna-hú and Inanna-sig in such early texts is quite significant. They must obviously be interpreted as the two manifestations of Inanna as the planet Venus, the morning and evening star. This clearly indicates that the astral identity of Inanna was not the result of late, learned speculations, but indeed a very old and fundamental aspect of the goddess, with roots going back to prehistoric times.” BEAULIEU 2003, 104. See also COOLEY 2013, 165.

20) FALKENSTEIN 1936, 35.

21) In a subsequent publications of the texts from Uruk, appropriate combinations of signs are written as AN MUŠ₃ SIG and AN MUŠ₃ U₄, i.e. they do not explicitly assume that AN is a determinative, ENGLUND, GRÉGOIRE 1991, 89; ENGLUND 1994 141–142.

22) In most Uruk texts MUŠ₃ is used in contexts which do not prescribe its astral importance. A symbol of Inanna on seals for the most part also do not contain any astral indications. There it shows agricultural role of Inanna as a fertility goddess, see: AMIET 1961, no. 621, 623, 625, 636–639, 643–644, and others.

23) The only example known to us, the identity of AN = *kak-ka-bu* in the comments to *En.el.*, is of the later origin, CAD K 46a.

24) The impression of seal, see: NISSEN, DAMEROW, ENGLUND 1990, 45, Abb. 5a1; *ibid.* 1993, 18, Fig. 18 and P274834 in CDLI (http://cdli.ucla.edu/dl/tn_photo/P274834_d.jpg); the drawing of seal, see: VAYMAN 1998, 14, fig. 1.

25) H. Nissen interprets these pictures as ideograms and offers the following translation of the text: “Festival of the evening/morning Inanna (= Venus)”, NISSEN, DAMEROW, ENGLUND 1993, 17.

26) They come from Fara and Abu Salabikh, see: SZARZYŃSKA 1993, 8, n. 1; ALSTER 1976, 21, l. 10.

ALSTER, B. 1976: “Early Pattern in Mesopotamian Literature”, in: Kramer Anniversary Volume. Cuneiform Studies in Honor of S. N. Kramer, B. L. Eichler *et al.* (ed.), Kevelaer.

AMIET, P. 1961: *La glyptique mésopotamienne archaïque*, Paris.

BEAULIEU, P.-A. 2003: *The Pantheon of Uruk during the Neo-Babylonian Period*, Leiden–Boston.

BOEHMER, R. M. 1965: *Die Entwicklung der Glyptik während der Akkad-Zeit*. Berlin.

BURROWS, E. 1935: *Ur Excavations Texts*. Vol. II. Archaic Texts. London.

COOLEY, J.L. 2013: *Poetic Astronomy in the Ancient Near East. The Reflexes of Celestial Science in Ancient Mesopotamian, Ugaritic, and Israelite Narrative*, Winona Lake.

ePSD: The Electronic Pennsylvania Sumerian Dictionary (<http://psd.museum.upenn.edu/epsd/index.html>).

ENGLUND, R. K. 1988: “Administrative Timekeeping in Ancient Mesopotamia”, *Journal of the Economic and Social History of the Orient*, 31, Pt. 2, 121–185.

Id. 1998: “Texts from the Late Uruk Period” in P. Attinger *et al.* (eds) *Mesopotamien: Späturuk-Zeit und Frühdynastische Zeit*, Freiburg–Göttingen, 15–222.

Id. GRÉGOIRE, J.-P. 1991: *The Proto-Cuneiform Texts from Jemdet Nasr*, Berlin.

Id. 1994: *Archaic Administrative Texts from Uruk. The Early Campaigns*, Berlin.

FALKENSTEIN, A. 1936: *Archaische Texte aus Uruk*, Leipzig.

GREEN, M. W. 1980: “Animal Husbandry at Uruk in the Archaic Period”, *JNES*, 39, № 1: 1–35.

GREEN, M. W., NISSEN H. J. 1987: *Zeichenliste der Archaischen Texte aus Uruk*, Berlin.

KREBERNIK, M. 1986: “Die Götterlisten aus Fara”, *ZA*, 76, II: 161–204.

KURTIK, G. E. 1998: “Astralnaia simbolica v Drevnei Mesopotamii III tys. do n. e. [Astral Symbols in Ancient Mesopotamia of the Third Millennium B.C.]”, *Voprosy istorii estestvoznaniia i tekhniki*, 2: 20–44.

Id. 1999: “The Identification of Inanna with the Planet Venus”, *Astronomical and Astrophysical Transactions*, 17: 501–513.

Id. 2008: “Venera kak boginia Inanna/Ishtar v shumerskoi astronomii [Venus as the Goddess Inanna/Ištar in Sumerian Astronomy]”, *Voprosy istorii estestvoznaniia i tekhniki*, 4: 35–49.

LABAT, R. 1976: *Manuel d'épigraphie akkadienne*, Paris.

MANDER, P. 1986: *Il pantheon di Abū Sālabīkh*, Neapel.

NISSEN, H. J., DAMEROW, P., ENGLUND, R. K. 1990: *Frühe Schrift und Techniken der Wirtschaftsverwaltung im alten Vorderen Orient*, Berlin.

NISSEN, H. J., DAMEROW, P., ENGLUND, R. K. 1993: *Archaic Bookkeeping: Early Writing and Techniques of Economic Administration in the Ancient Near East*. Chicago; London.

SELZ, G. J. 2000: “Five Divine Ladies: Thoughts on Inana (k), Ištar, In(n)in(a), Annunītum, and Anat, and the Origin of the Title «Queen of Heaven»”, *Journal of Gender Studies in Antiquity*, 1: 29–62.

STEINKELLER, P. 1998: “Inanna’s Archaic Symbol” in *Written on Clay and Stone. Ancient Near Eastern Studies Presented to Krystyna Szarzyńska on the Occasion of her 80th Birthday*, by J. Braun *et al.* (Ed.), Warsaw.

SZARZYŃSKA, K. 1993: “Offerings for the Goddess Inana in Archaic Uruk”, *RA*, 87, № 1: 7–28.

VAYMAN, A. A. 1998: “Drevneishie pis'mennye i izobrazitel'nye svдетель'stva ob astronomicheskikh znaniakh v Shumere i Elame [The Earliest Written and Pictorial Evidences of Astronomical Knowledge in Sumer and Elam]”, in: Galanina, G. V., Ierusalimskaia, A. A. and Piotrovskii, Iu. Iu. (Eds.) *Ermitazhnye chtenia pamiati B. B. Piotrovskogo. Tezisy dokladov [The Hermitage Readings in Memory of B. Piotrovsky. Abstracts]*. Sankt-Peterburg, 13–17.

WILCKE, C. 1976: “Inanna / Ištar (Mesopotamien). A. Philologish”, *RLA* 5, 74–87.

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85) The fragmentary tablet L. 9376 — This text, possibly post-Sargonic, may be a later clay copy in modernized script of an otherwise unknown inscription of Eannatum I (or II?) of Lagash. If this proposal