

SOLAR LIGHT AND THE SYMBOLISM OF THE NUMBER SEVEN

I

The symbolism of the number seven, already widespread in various cultures in antiquity, is frequently interpreted as derived from the seven planets known to the ancients. Such a link is clearly present in countless instances, but they all are relatively late. On the basis of what we know, the symbolic use of the number seven is earlier than the notion of the seven planets. What is more, the idea that there are precisely seven planets is by no means something that suggests itself automatically. Its emergence, indeed, required two outstanding discoveries.

In order to conceive of the seven planets as a group, it was necessary, first of all, to discover that the Morning star and the Evening star are in fact one and the same planet Venus. Otherwise there would be eight and not seven wandering stars. The recognition of the identity of the Morning and Evening stars was a Mesopotamian discovery, dated for several reasons (though not on direct evidence) to second millennium BC and certainly before 612 BC.¹ This knowledge reached the Greek world in the sixth century BC,² although popular language continued to differentiate the two.

Now the sun and the stars do not shine at the same time. Making a group that combines both the planets and the sun is certainly a nontrivial idea. Among other things, it requires tracing the path of the sun relative to the stars. This, second discovery is attested for the first time in the *Mul. Apin* – a text which is certainly older than

¹ See B. L. van der Waerden, *Science Awakening. II: The Birth of Astronomy* (Leyden – New York 1974) 56.

² The best part of ancient doxographic tradition attributes this discovery to Parmenides (28 A 1 DK), which probably points to its first mention in cosmological literature. Ibycus (fr. 331 Page), who may be older than Parmenides, seems to have mentioned the identity of the Morning and Evening stars in his poetry. See further W. Burkert, *Lore and Science in Ancient Pythagoreanism* (Cambridge, Mass. 1972) 307; cf. L. Zhmud, *Wissenschaft, Philosophie und Religion in frühen Pythagoreismus* (Berlin 1997) 211 ff.

the destruction of Nineveh in 612 BC, but hardly very much older. The discovery in question was, I believe, a recent achievement of the seventh century. Relating the course of the sun, not seen during the night, to that of the stars required both inventiveness and effort. Tracing the visibility of Venus could have provided some useful insights, but although this might have acted as a stimulus, the crucial motif for relating the course of the sun to that of the stars came about by way of relating the course of the sun to that of the moon. Dated eclipse observations were recorded by professionals in Mesopotamia at least since 747 BC.³ It was firmly established by the middle of the seventh century that a solar eclipse happens only at the time of a new moon.⁴ This will have suggested that the moon had something to do with the event⁵ (as Thales of Miletus soon ventured to assert⁶), and this in turn may have disposed the observers of the sky to think of mapping the night track of the sun. The point was thus to establish that “the Sun travels the (same) path the Moon travels”,⁷ while the discovery that the sun travels the same path that the five planets travel was probably just a byproduct.

³ A. J. Sachs, H. Hunger, *Astronomical Diaries and Related Texts from Babylonia*. I. *Diaries from 652 B.C. to 262 B.C.* (Wien 1988) 12: “eclipse reports preserved on tablets go back to the second half of the 8th century BC, thus confirming the well-known claim of Ptolemy (*Almagest* III, 7) that he had at his disposal more or less continuous eclipse records from the time of Nabonassar (747–734 B.C.) onwards”.

⁴ H. Hunger, *Astrological Reports to Assyrian Kings*, State Archives of Assyria VIII (Helsinki 1992) N. 47, 87 (written by Balasî, some letters by whom are dated to 672–667 BC – see: Simo Parpola, *Letters from Assyrian Scholars to the Kings Esarhaddon and Assurbanipal*, *Alter Orient und Altes Testament* 5/2 [Neykirchen; Vluyn 1983] II, 425), 344; A. Schott, Joh. Schaumberger, “Vier Biefe Mâr-Ištars an Asarhaddon über Himmelserscheinungen der Jahre – 670/668”, *Zeitschrift für Assyriologie* N.F. 13 (1942) 89–129 (a letter from Balasî, ABL 687, is cited on p. 100 in which there figures a possibility of a solar eclipse on 26th or 27th day of the month: this apparently reflects a stage at which a solar eclipse is certainly expected by the end of a month, but the connection of the phenomenon with a new moon is not yet firmly established).

⁵ Cf. O. Neugebauer, *A History of Ancient Mathematical Astronomy* II (Berlin – New York 1975) 550.

⁶ D. Panchenko, *Θαλής. Οι απαρχές της θεωρητικής συλλογιστικής και η γένεση της επιστήμης* [*Thales and the Origins of Theoretical Reasoning*] (Αθήνα 2005) 59–77.

⁷ *Mul. Apin: An Astronomical Compendium in Cuneiform*, ed. and transl. by H. Hunger and D. Pingree, *Archiv für Orientforschung* 24 (Horn 1989) 70 f. Note the continuation: “Jupiter travels the (same) path the Moon travels. Venus travels

Moreover, even with all necessary knowledge available, it is psychologically not easy to deny so obvious a similarity as that of the planets with the stars and, at the same time, their obvious dissimilarity with the sun and moon, and to arrive at the scientific conclusion that all the seven display similar movements relative to the so-called fixed stars.⁸ Nor did the common characteristics of their movements require the formulaic expression of the ‘seven planets’.⁹ One may therefore conjecture that it may well have been the already widespread symbolism of the number seven that made possible the emergence of the formula ‘seven planets’.

II

As a matter of fact the early texts of Mesopotamian, Indian, and Greek provenance display a frequent connection between number seven and the sun.

the (same) path the Moon travels. Mars travels the (same) path the Moon travels. Mercury whose name is Ninurta travels the (same) path the Moon travels. Saturn travels the (same) path the Moon travels. Together six gods who have the same positions, (and) who touch the stars of the sky and keep changing their positions”. The phrasing not only supports my proposal, but also invites a conclusion that the sun, moon and the wandering stars did not constitute for the compiler of the *Mul. Apin* a group of “seven planets”.

⁸ F. Boll, “Hebdomas”, *RE* 8 (1912) 2533 had already emphasized how nontrivial is the notion of the seven planets; he notes also the difficulty of observing Mercury and of the confident exclusion of comets from the group of planets.

⁹ Speaking of the sun, moon and the five planets is perhaps as common among the Greeks as speaking of the seven planets, for instance Plat. *Tim.* 38 c: ἥλιος καὶ σελήνη καὶ πέντε ἄλλα ἄστρα. See further W. Gundel, H. Gundel, “Planeten”, *RE* 20 (1950) 2023 f. Referring to the five planets is dominant usage in China, for instance: *Lung-Hêng: Philosophical Essays of Wang Ch’ung*, transl. by A. Forke (New York 1962) 268, 272. Much later *Chin Shu* (seventh century AD) displays a more complicated picture, and the expression “the five planets” emerges within the section on the “seven luminaries”.— *The Astronomical Chapters of the Chin Shu*, with amendments, full translation and annotations by Ho Peng Yoke (Paris – The Hague 1966) 127. An idea of “seven luminaries” may be a western import; on p. 55 of the cited translation of the *Chin Shu* (where one finds also a standard reference to the five planets) it appears in a context that strongly points to Greek influence – see Д. Панченко, “Греческое происхождение концепции небесной сферы в китайской космологии” (D. Panchenko, “Greek Origin of the Notion of the Celestial Sphere in Chinese Cosmology”), in: *ΣΥΣΣΙΤΙΑ. Παмяти Ю. В. Андреева* (СПб. 2000) 174–184.

This connection is well-attested already in Sumerian literature. The sun-god, “youthful Utu” gives seven warriors to Gilgameš (*Gilgameš and Huwawa* 34–50).¹⁰ We hear about “Utu’s river of the seven mouths” (*Lugalbanda and the Anzud bird* 35). Gudea, the king of Lagash, builds for Ningirsu a temple of seven divisions,¹¹ probably of seven floors, while Ningirsu has some characteristic features of the sun-god.¹²

In India, seven horses of the chariot of Surya, the sun-god are repeatedly mentioned in the Vedas. So *Rv* 1. 50. 8:

Seven bay mares drawing your chariot
conduct you, o far-seeing God,
Surya of the flaming hair.¹³

Greek material attests to the same idea. “And you will come, Circe says to Odysseus, to the island of Thrinacia. There in great numbers feed the cattle of Helios and his sturdy flocks, seven herds of cattle and as many fine flocks of sheep, and fifty in each. These bear no young, nor do they ever die” (*Od.* 12. 127–131; A. T. Murray’s transl.).¹⁴ Pindar speaks of Helios’ seven sons (*Ol.* 7. 132 and schol.; *Diod.* 5. 56. 3), a Hesiodic fragment mentions his seven daughters (fr. 311 Merkelbach-West = *Hygin. fab.* 154). His famous statue in Rhodes was seventy cubits high (*Strab.* 14. 2. 5).¹⁵ Symbolic representation of the sun

¹⁰ English translation of Sumerian texts is conveniently available at *The Electronic Text Corpus of Sumerian Literature*: <http://etcs1.orientst.ox.ac.uk>.

¹¹ A. Falkenstein, *Die Inschriften Gudeas von Lagaš* (Roma 1966) 133 f.

¹² F. X. Kugler, *Sternkunde und Sterndienst in Babel II* (Münster 1909/10) 135.

¹³ R. Panikkar, *The Vedic Experience: Mantramanjari* (Delhi 1994) 323. See also *Rv.* 4. 13. 3; 5. 45. 9; 7. 66. 15; *Atharv.* 13. 2. 4. See further W. Kirfel, *Die Kosmographie der Inder* (Bonn–Leipzig 1920) 20. For the seven streams frequently mentioned in the Vedas see *ibid.*, 11 f. Kirfel in particular observes: “Nicht immer erscheint es klar, ob unter denselben wirkliche irdische Gewässer oder himmlische Flüsse, vielleicht die sieben Strahlen der Sonne zu verstehen sind”.— In the Zoroastrian calendar of Iran, the seventh month was dedicated to Mithras, who has obvious connotations of the sun-light and celestial light in general. The date of the Zoroastrian calendar is, however, disputed; see V. A. Livshiz in Russian translation of E. J. Bickerman, *Chronology of the Ancient World*: Э. Бикерман, Хронология древнего мира (М. 1975) 320–332.

¹⁴ Aristotle was right to take the passage as referring to the number of the days and nights in a year (Fr. 398, 1 Gigon), though one need not assume that anybody ever suggested that a year really consists of 350 days and nights.

¹⁵ These examples were assembled already by W. H. Roscher, “Zur Bedeutung der Siebenzahl im Kultus und Mythos der Griechen”, *Philol.* 60 (1901) 368.

through the number seven was firmly established in the Roman epoch as well.¹⁶

We shall shortly see that a connection between the number seven and the sun is, so to speak, natural.

III

The number seven marks a most important period of the sun's movement. I mean its movement from solstice to solstice. During a half a year after the summer solstice the sun rises further and further south on the horizon and describes, as it seems, an ever shorter arc above the earth, while the nights get increasingly longer and darkness comes to occupy the larger part of a day: there begins a dark and cold season. So people are eagerly waiting for the reversed movement, from the winter solstice to the summer solstice, and note how the sun is now rising ever further north and moving higher above their heads. The winter is giving way to summer. Along with the solstices, the equinoxes too can be a focus of attention, because the spring equinox marks the transition to the summer half of a year, while the autumn equinox tends to coincide with the time of harvest.

The people of Mesopotamia, India, and Greece used a lunar or luni-solar calendar. Their sun returned from the winter solstice to the summer solstice in six months – that is, in the seventh. It may seem surprising that the division of a year of twelve months into two halves results in marking a half-year period by the number seven. Yet I imagine that just such straightforward arithmetic prevented scholars from looking in the right direction. First of all, a lunar month lasts roughly twenty nine and a half days; six months comprise one hundred seventy seven days, which is roughly five and a half days shorter than a half-year period. More important, perhaps, are the habits of reckoning. For instance, the Greeks employed inclusive reckoning far more frequently than we do. They would say that the Olympics take place in the fifth year. A lunar calendar could have provided an additional reason for inclusive reckoning. The new month was typically marked by the first visibility of a thin lunar crescent a couple of days after the time when the moon is in fact invisible in the sky. One month was thus a period between two first appearances of the lunar crescent. If a month is

¹⁶ *Ibid.*

marked by two crescent's appearances, then two months are marked by three, and six months are marked by seven such appearances.

Whatever conjectures we may form about the reasons why, we have an attested usage. "My working term of duty is seven months of the year", says Summer in the Sumerian *Dispute between Winter and Summer* (164–171). It is asserted in a Hippocratic treatise that "seven months' children are born on the one hundred eighty second day plus a fraction of a day" (VII, 436 Littré). Again a period of half a year is referred to as a seven months' period. An eloquent passage is found in Philo's *On the Creation*: "The sun, too, the great lord of day, bringing about two equinoxes each year, in Spring and Autumn, the Spring equinox in the constellation of the Ram, and the Autumn equinox in that of Scales, supplies very clear evidence of the sacred dignity of the 7th number, for each of the equinoxes occurs in a 7th month (ἑκατέρω γὰρ τῶν ἰσημεριῶν ἑβδόμῳ γίνεται μηνί), and during them there is enjoined by law the keeping of greatest national festivals, since at both of them all fruits of the earth ripen, in the Spring the wheat and all else that is sown, and in Autumn the fruit of the vine and most of the other fruit-trees" (*Opif. Mund.* 116, transl. by F. H. Colson and C. H. Whitaker).

An idea of a half-year period consisting of six months and yet marked by the number seven can be neatly illustrated by the Chinese diagram of the seven *heng*, preserved in the *Zhou bi suan jing*. It shows seven concentric circles separated by six intervals (Fig. 1).

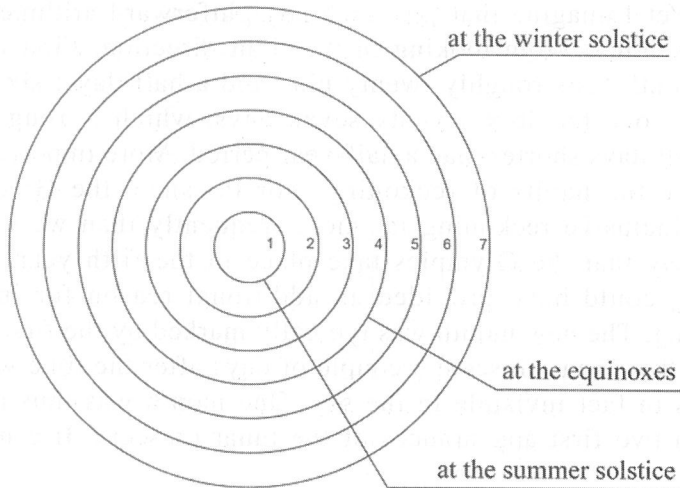


Fig. 1

Each circle represents the daily path of the sun at various seasons. According to the system of the *Zhou bi*, the sun orbits round the celestial pole, and it describes ever expanding orbits during one half of a year and ever contracting orbits during the other. The shortest, innermost circle corresponds to sun's daily path at the summer solstice, while the longest, outermost circle corresponds to that at the winter solstice. Each interval corresponds to the period of $30 \frac{7}{16}$ days. The total of six intervals corresponds to half a year, while both extreme circles can be said to be the seventh.¹⁷

It has been argued that the system of the *Zhou bi* derives from Ionian science.¹⁸ The formation of Ionian science was, however, intrinsically connected with the acquisition of astronomical lore of Mesopotamian provenance. The seven *heng* diagram is suspiciously reminiscent of Herodotus' description of the seven walls surrounding Ecbatana (1. 98) or the idea of the seven stages of the ziggurat.¹⁹

IV

It is appropriate to indicate that there could have been more impetuses for attaching particular importance to the number seven. The most conspicuous circumpolar constellation of the Great Bear consists of seven stars. They belong to the central place in the heaven – possibly the Great Lord's place. They appear never to set, which, in conjunction with their being near to the Great Immortal, may invite a symbolic interpretation in terms of immortality. A train of thought of this kind is likely to have lain behind some notions attested in Iran and elsewhere. But replacing (partially or completely) the pantheon exemplifying various natural powers with the Ruling One, along with evidence of a strong aspiration for attaining immortality (without which immortal celestial objects would be of little interest) are evident as an important tendency in the ancient world only from the be-

¹⁷ Chr. Cullen, *Astronomy and Mathematics in Ancient China: The Zhou bi suan jing* (Cambridge 1996) 183–187, 221–223.

¹⁸ D. Panchenko, "The City of the Branchidae and the Question of Greek Contribution to the Intellectual History of India and China", *Hyperboreus* 8 (2002): 2, 244–255.

¹⁹ For a new attempt to address the description of the walls of Ecbatana and the construction of ziggurats see forthcoming paper by P. James and M. van der Sluijs, "Ziggurats, Colours and Planets – Rawlinson Revisited" forthcoming in *Bibliotheca Orientalis*.

ginning of the sixth century BC,²⁰ which is too late to be playing crucial role in the spread of the symbolism of the number seven.

Many scholars have thought an explanation to this symbolism in the lunar phases.²¹ There are of course some texts from late antiquity that make an explicit link between the lunar phases and the number seven. Yet this route does not seem to me very promising. Of all phases of the moon, only two naturally command attention – the full moon and the new moon; and only those phases are associated with eclipses (lunar and solar respectively). I do not see what could have invited comparable attention to the intermediate phases. Further, a lunar month does not consist of 28 days. The synodic month lasts roughly 29 1/2 days, and the sidereal month is about 27 1/3 days. When one already has an idea of the importance of the number seven, it is easy to adapt it to the length of the synodic month, but this is not the same as saying that the idea itself is readily derives from the length of the month.

In both cuneiform and classical texts, the number seven repeatedly appears in conjunction with the Pleiades, a conspicuous constellation with a role in calendar.²² They are even called “the seven gods” in the *Mul. Apin* (1. 1. 44). It can be argued, however, that the definition of this constellation was subject to change and it did not invariably include seven stars; even when agreement in respect to the group of the stars constituting the constellation became well-established, the ancients still disagreed whether it consisted of seven or six stars.²³ The association between the seven and the Pleiades was thus very likely secondary, and even if not, the constellation itself was not of sufficient importance to trigger that widespread symbolism we are talking about.

Finally, Mesopotamian texts, especially Sumerian, display a consistent use of the number seven that is not obviously related to

²⁰ Cf. Д. В. Панченко, “Феномен осевого времени” (D. Panchenko, “The Phenomenon of the *Achsenzeit*”), *Древний мир и мы* 3 (Санкт-Петербург 2003) 11–43.

²¹ For instance Boll (n. 8) 2550–2553.

²² See H. Hunger and D. Pingree (n. 7) 131 (with ref.); Hes. *Erg.* 384; 614 ff.; Plin. *NH* 18. 222; F. K. Ginzel, *Handbuch der mathematischen und technischen Chronologie* (Leipzig 1911) II, 310 f.; 345; R. Hannah, *Greek and Roman Calendars* (2005) 20–27.

²³ See for instance Arat. *Phaen.* 257 f. and further H. Gundel, “Pleiaden”, *RE* 21 (1952) 2498.

natural phenomena and cycles. It has been observed that the number seven repeatedly represents an idea of completeness.²⁴ I imagine that this is a case of a further development, not surprising for a culture in which symbolical thinking seems to have been deeply grounded.²⁵ One may consider the possibility that the association between the number seven and the idea of completeness derives from the sun's completing its way from solstice to solstice in the seventh month. However, a cycle of a year's length would fit better with the idea of completeness, and so another explanation may seem preferable.

There are a number of Sumerian incantations in which seven heavens and seven earths are mentioned. Wayne Horowitz, who studied them, is hesitant as to whether or not these incantations refer to seven superimposed heavens and earths. In particular he observes that "a tradition of seven heavens and earths does exist in later Hebrew and Arabic traditions, yet no surviving Mesopotamian text preserves a cosmos that includes more than three heavens and earths".²⁶ I am not sure that seven earths are as characteristic for the Hebrew tradition as seven heavens, and in any case the seven earths seem derivative already in Sumerian texts. The incantations in question, as well as some other texts, display a kind of complementary logic: if there are seven gods, there must be seven bad demons; if seven gods of the broad heaven are invoked, one should also address seven gods of the broad land.²⁷ It is quite likely, therefore, that seven earths emerged to match seven heavens.

Now we may recall the diagram of the seven *heng*. Let us suppose that the seven *heng* showing seven solar orbits at seven different seasons are also intended to show them at seven different levels. This is hardly the case with the compiler of the *Zhou bi*, but elsewhere it may well indeed be the case.²⁸ For the apparent size of the

²⁴ Kugler (n. 12) 192–197; W. Horowitz, *Mesopotamian Cosmic Geography* (Winona Lake 1998) 208–220, esp. 216: the numeral seven is sometimes translated from Sumerian into Akkadian as *kiššatu* 'all, entirety'.

²⁵ How else can one explain the emergence of sexagesimal reckoning if not as a way of conforming to the number of days and nights in each of the twelve months of a year?

²⁶ Horowitz (n. 24) 220.

²⁷ Cf. Kugler (n. 12) 196 f.

²⁸ Cullen (n. 17) 183 notes that the word *heng* has a range of meanings including 'cross-wise, level'. He tentatively suggests that the use of the term in

sun does not appear to us to vary in the course of a year, and this is difficult to square with the assumption that the sun's winter track is significantly farther from us than the summer track. The difference in height can be thus thought of compensating for the increasing distance in horizontal plane – all the more so in that the summer noon sun appears to us indeed to be much higher than the winter noon sun. And so we arrive at the idea of completeness as represented by the sun's shift from the uppermost heaven to the lowest heaven and vice versa.

This interpretation also brings us back to two hints offered at the end of the preceding section – that a diagrammatic representation of the seven *heng* has ultimately a Mesopotamian (rather than Ionian) origin and that the idea of a seven-stage ziggurat may also derive from an interpretation of the movement of the sun in the course of a year.

V

Among the Greeks, it was Apollo who enjoyed the strongest connection with the number seven. Apollo was ἑπταμηνιαῖος, born in the seventh month (*schol. vet. in Pind.* Drachmann vol. 2, p. 2, 1; *schol. Callim. Hy.* P. 128 Schn. Arnob. 3, 10). When he was born, the swans made seven circuits round the island of Delos (*Callim. Hymn. in Del.* 249–251). Apollo's birthday took place on the seventh day of a month – so already Hesiod (*Erga* 770 f.).²⁹ His festivals were celebrated on the seventh day of a month – at Delphi, at Athens, in the cities of Peloponnesus, at Cyrene.³⁰ His lyre has seven strings. The Muses accompanying him are repeatedly said to have been seven, etc., etc.³¹

connection with solar orbits may imply a reference to the “different levels of the noon sun in the sky at different seasons”.

²⁹ See also commentary by West: M. L. West (ed.), Hesiod, *Works and Days* (Oxford 1978) *ad loc.*

³⁰ The importance of this fact was emphasized by M. P. Nilsson, *Geschichte der griechischen Religion* I (Munich ³1967) 561 (usually Greek festivals were celebrated at the time of full moon).

³¹ See Roscher (n. 15) 360–368; idem, “Die Sieben- und Neunzahl im Kultus und Mythos der Griechen“, *Abh. Sächs. Ges. Wiss., Phil.-hist. Kl.* 24 (1904) 1, 8 ff. A connection between Apollo and the number seven appears also in a late Archaic text from a bone plaque found at the island of Berezan and published in 1986 by A. S. Rusajeva; for the interpretation see W. Burkert, “Olbia and Apollo

Does this connection of Apollo with the number seven point to his connection with solar light? For the majority of nineteenth-century scholars, the close relation of Apollo to the sun was self-evident, while for the majority of twentieth-century scholars, this idea seemed no longer worthy of consideration. When twentieth-century scholars are generous enough to mention the antiquated view, they cite the fundamental work by L. R. Farnell, *The Cults of Greek States*.

Farnell argues that in the historical period the Greeks “did not identify or associate Apollo and Helios in cult or habitual conception”.³² He observes that “the stories told about the one god are not – with one possible exception – told of the other ... Nor are the attributes and emblems of the two divinities such as to suggest any affinity of nature. Apollo has little to do with horses or the chariot, but the Aryan or at least the Hellenic sun-god was pre-eminently the charioteer”.³³ Farnell admits that there is some slight evidence from ritual that contradicts to his thesis, but “it would indeed have been surprising”, he replies, “that Apollo, with his marked interest in agriculture and vegetation, should never have allowed some recognition of Helios in his worship”.³⁴

Farnell’s discussion of the issue is certainly helpful. One may, however, observe that its results are rather trivial inasmuch they amount to the obvious fact that in the historical period the cult of the sun typically occupied a most insignificant place among the Greeks. The scholars who completely deny the solar character of Apollo have still to account for many facts. Apollo is repeatedly assimilated to the sun by Greek literati beginning with fifth century.³⁵ What made such an assimilation both possible and suc-

of Didyma”, in J. Solomon (ed.), *Apollo. Origins and Influences* (Tucson – London 1994) 49 ff., esp. 56. For the use of the number seven in general see also J. Mansfeld, *The Pseudo-Hippocratic Tract ΠΕΠΙ ΕΒΔΟΜΑΔΩΝ Ch. 1–11 and Greek Philosophy* (Assen 1971).

³² L. R. Farnell, *The Cults of Greek States* IV (Oxford 1907) 137.

³³ *Ibid.*, 141 f.

³⁴ *Ibid.*, 143.

³⁵ P. Boyancé, “L’Apollon solaire”, in: *Mélanges d’archéologie, d’épigraphie et d’histoire offerts à Jérôme Carcopino* (Paris 1966) 149–170 suggests that all early instances of a close association between Helios, or the sun, and Apollo can be plausibly explained in terms of the influence of people like Pythagoras and those who composed the so-called Orphic poems, or those who used Ionian science for theological or quasi-theological purposes. The question, however,

cessful? There emerge epithets of Apollo like Ἐφῶς (the god 'of dawn', on a small island off the Bithynian coast)³⁶ or Ὠριμέδων (an inscription of Tenos).³⁷ There remains a likely interpretation of the name Φοῖβος as containing the root of φᾶος 'light'. Further, both Apollonius' poetry and Apollodorus' prose recount how Jason prayed to Apollo when the Argonauts found themselves and their ship in complete darkness, and the god lit with a flash a nearby island (Apoll. Rh. 4. 1701–1710; Ap. *Bibl.* 1. 26. 1). Here the connection of Apollo with light is evident, but it cannot be explained in terms of a new fashion of relating Apollo to the sun since the sun is not involved. "Radiance shines around him", says the poet of the hymn to Pythian Apollo (24/202), and he offers a somewhat more elaborate description in another passage: "Then, like a star at noonday, the lord, far-working Apollo, leaped from the ship: flashes of fire flew from him thick and their brightness reached to heaven" (253/441 ff., H. G. Evelin-White's transl.). The solar character of Apollo is not to be approached in too narrow a way. Here and there Apollo is connected with celestial light, of which the sun is clearly the most important source and instance.

Interestingly, two of three authōrs who provide the earliest attested cases of the assimilation of Apollo with the sun, Herodotus (7. 37) and Oenopides (41 A 7 DK), do so in connection with Apollo's function as a god of prophecy. Now, the oracle at Didyma was run by the priests named Branchidae. They were believed to have been descendants of Branchos, and the mother of Branchos was said to have been impregnated by the sun.³⁸ The temple in Didyma had no roof. One may suspect that the reason for this was to keep the sacred area open to the rays of the sun. A testimony, though from quite a late epoch, tells us that a prophesying priestess, with a branch in her hand, dipped her feet and her garment in the sacred spring

remains of whether this is the whole story. To the instances of early assimilation of Apollo with the sun noted by Boyancé and also by U. von Wilamowitz-Moellendorff, *Der Glaube der Hellenen* I (Berlin 1931) 256, by H. A. Cahn, "Die Löwen des Apollon", *MH* 7 (1950) 198 n. 65 and W. Burkert, *Greek Religion* (Cambridge, Mass. 1985) 406 n. 55, we may add a passage from Herodotus (7. 37).

³⁶ Discussed by Farnell (n. 32) 139.

³⁷ Discussed by Farnell, *ibid.*; cf. Wilamowitz-Moellendorff (n. 35) 255 n. 2.

³⁸ *FGrHist* 26 F 1. 33 (Conon); see further Escher, "Branchos", *RE* 3 (1897) 813 f.

and inhaled air rising from water (Iambl. *Myst.* 3.11). Is it wrong to note, in this connection, that air rises from water because it is vaporized by the sun?

Turning to Delphi, the poet makes the Pythian Apollo boast over the defeated monster: “‘Here shall the Earth and shining Hyperion make you rot’. Thus said Phoebus, exulting over her: and darkness covered her eyes. And the holy strength of Helios made her rot away there; wherefore the place is now called Pytho, and men call the lord Apollo by another name, Pythian; because on that spot the power of piercing Helios made the monster rot away” (369 ff., H. G. Evelin-White’s transl.). Plutarch, who was a priest at Delphi, is aware of an old idea according to which the power of the sun still plays an essential role in the process of prophesying: “Those, however, who had reached the conclusion that the two are the one and the same god very naturally dedicated the oracle to Apollo and Earth in common, thinking that the sun creates the disposition and temperament in the earth from which the prophet-inspiring vapours are wafted forth” (433 d–e, F. C. Babbit’s transl.). It is doubtful, of course, that the interpretation cited by Plutarch reflects an ancient idea, yet it provides a curious parallel to what we hear in respect to Didyma. In any case it was logical to attribute the gift of prophecy to a god distinguished for his universal knowledge. And the sun-god is most obvious candidate. The sun oversees all things – so Helios is characterized in Homer (*Il.* 3. 277; *Od.* 12. 323). The motif reappears elsewhere in Greek literature, and it is also attested in Mesopotamia.³⁹ For the Assyrians and Babylonians, moreover, one of the attested ways to know future was by addressing the sun-god Shamash.⁴⁰

The question arises: why, then, must we recover the solar character of Apollo in such an indirect way? Part of the answer coincides with the answer to the question of why the cult of Helios was for centuries so marginal among the Greeks. It is neither very hot nor very cold in the Aegean, and the winter is not very long. The sun does not thunder in the sky, and his rays, unlike lightning, do

³⁹ For the parallels see M. L. West, *The East Face of Helicon* (Oxford 1997) 358.

⁴⁰ I. Starr (ed.), *Queries to the Sungod: Divination and Politics in Sargonid Assyria*, State Arhivies of Assyria IV (Helsinki 1990).

not kill. Further, the sun-god is a deity that can be seen every day and that behaves in a most regular way, except for very rare occurrences of solar eclipses. It is not easy to perceive a supernatural personality in such a natural object. The sun-god as a ubiquitous witness is a good subject for stories, and so he is not neglected in either Mesopotamian or Greek narratives. But he is not the best deity from whom to expect help. Sun-gods are revered mostly by mighty rulers or theologians, rather than by common people. Typically, as it seems, only those sun-gods acquired prominence who were not just sun-gods, but who managed to combine their connection with the most conspicuous object in the sky with powers and qualities characteristic of a human individual. And when this happens, the features that originally marked his divine character tend to retreat into the shadows.

To sum up, strong link between Apollo and the number seven confirms rather than undermines my thesis of an important connection between the emergence of the symbolism of the number seven and the phenomena related to the sun.

The link between Apollo and the number seven does not stand in the way of the idea of a northern origin of Apollo, though it was Ulrich von Wilamowitz-Moellendorff who maintained it did.⁴¹ It is indeed very likely that the symbolic use of the number seven radiated from Sumer. But the diffusion of such an idea does not require the diffusion of a divine character along with it. One can easily imagine people adopting a foreign tradition according to which particular gods must be worshiped on specific days – for instance, the god celebrated as a giver of light must be worshiped on the seventh – and according to which a particular number relates to a particular deity in a more general way as well. It is, further, not clear when and where the idea of solar connotation of the number seven reached the worshippers of Apollo.⁴²

⁴¹ Wilamowitz-Moellendorff (n. 35) 328: “Eigentlich sollte die Heiligung der Siebenzahl im Dienste des ἑβδομαγέτης zum Beweise genügen, dass er kein Hellene, kein Indogermene sein kann”.

⁴² For instance an axe found not far from Kiev in the context of the bronze age culture of *mnogovalikovaja* ceramics (about the middle of the second millennium BC) displays a representation of seven animals near a palm tree with the sun-wheel above it – С. С. Березанская и др., *Культуры эпохи бронзы на территории Украины* [S. Berezanskaya et al., *The Cultures of the Bronze Age in Ukraine*] (Киев 1986) 21, fig. 6. 20 and 40 f.

There was plenty of time and plenty of space for this idea to travel.⁴³

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Широко распространенное в древних культурах символическое применение числа семь обычно возводят к представлению о семи планетах. Судя, однако, по дошедшим текстам, символика числа семь предшествует представлению о семи планетах, и скорее само это в высшей степени специфичное представление сформировалось под влиянием укорененной привычки придавать значение числу семь. Вместе с тем в ряде древних текстов это число тесно связывается с солнцем. В “Одиссее” Гелиосу принадлежит по 7 стад коров и овец. Ему приписывали по 7 сыновей и дочерей. Его статуя на Родосе была высотой в 70 локтей. В Ведах неоднократно говорится о 7 конях, запряженных в колесницу Солнца. Уже у шумеров солнечный бог, юный Уту, дает в помощь Гильгамешу 7 воинов. Другой текст говорит о “реке Уту, имеющей 7 устьев”. Гудеа, правитель Лагаша, строит для Нингирсу храм, состоящий, по одному толкованию из 7 этажей, по другому – из каких-то иных 7 блоков. Между тем описание самого Нингирсу очевидным образом включает черты солнечного бога. Число семь мерит столь важный период в движении Солнца, как прохождение от солнцестояния к солнцестоянию. Все упомянутые выше народы имели лунный календарь. Удалившееся от них зимой Солнце возвращалось к ним через шесть месяцев – на седьмой. Как показывают тексты, именно так сказали бы и греки, и шумеры. Тесная и специфическая связь Аполлона с числом семь свидетельствует, наряду с другими данными, о том, что причастность этого бога к небесному, в частности солнечному свету действительно является исторически важ-

⁴³ A shorter version of this paper’s argument was published on suggestion by Simo Parpola in the *International Database of the Melammu Project: The Intellectual Heritage of Assyria and Babylonia in East and West* and also as a part of my Russian publication “Hdt. 7, 37: Аполлон как бог солнечного света (тезисы доклада)” [“Apollo as a God of Solar Light”], in: *Материалы XXXV международной филологической конференции. Вып. 5: Классическая филология* (Санкт-Петербург 2006) 3–6. I am grateful to David Konstan and Peter James for their comments on the final draft of this paper.

ной его характеристикой (как полагали многие ученые XIX века в отличие от большинства ученых XX века). Однако эта связь не доказывает его восточное происхождение. Роль семерки в культе Аполлона и рассказах о нем легко могла быть заимствованным дополнением к сложившемуся уже образу.

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