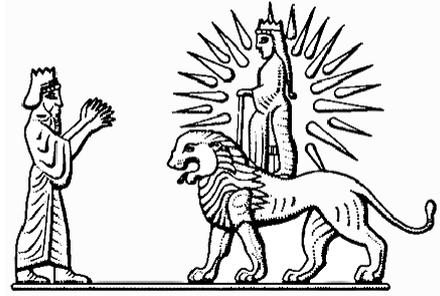


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“The Survival of Babylonian Wissenschaft in later tradition”

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M. J. GELLER London

The Survival of Babylonian Wissenschaft in Later Tradition

The Babylonian Talmud records an amusing anecdote which can only be appreciated by someone aware of an Akkadian idiom. A noted rabbi named Raba, who flourished in the early fourth century AD, is quoted as saying that when he saw asses carrying away dust, that he struck his hand on their backs and said, "Hurry, righteous ones, to perform the will of your Master."¹ What is the joke? Raba's pun is an allusion to the Akkadian phrase which appears several times in Seleucid chronicles and records, namely that "the dust of Esagil was removed," indicating rebuilding works in Babylon.² A local Babylonian hearing Raba's words would have understood it to mean that Raba approved of the renovation of the temple, although it is clear from the context that Raba actually has in mind that Babylon will become a wasteland. On one hand these observations might suggest that Rabbis may have actually visited Babylon in the fourth or fifth centuries, and that building works were still

ongoing.³ On the other hand, it is also clear that the Babylonian Talmud is hardly conscious of its role as witness to Babylonian life in the Parthian period, nor is much appreciation expressed for the greatness that was Babylon. The Talmud serves, somewhat ironically, as a major source of information for the end of Mesopotamian antiquity.

The survival of Babylonian or Assyrian intellectual heritage into later Classical antiquity is predicated on some form of translation of cuneiform literature into alphabetic scripts, and one presumes into the lingua franca of the day, namely Aramaic. Both the timing and processes of these transmissions are difficult to determine because of the lack of original manuscripts on parchment or papyrus which would supply the necessary data. The only Akkadian-Aramaic bilingual inscription known to me is the Tell Fekhrije statue inscription,⁴ which is historical but not literary, and a few Aramaic tablets have recently turned up

¹ A second anecdote in this same context provides additional background information. The fifth century scholar Mar bar Rabina, who, arriving at the city of Babylon, took some dust in his turban and threw it around to illustrate the prophecy of Is. 14:22-23 that Babylon will be swept away (b. Ber. 57b bottom). The juxtaposition of the two anecdotes probably indicates that both statements were thought to refer to Babylon.

² Grayson, *Assyrian and Babylonian Chronicles* (Locust Valley, 1975), 116:6; 117:13, 118:33, and A. Sachs and H. Hunger, *Astronomical Diaries and Related Texts from Babylon*, I, (Vienna, 1988) r. 14', reading sahar^{ha} šá é-sag-gil ... id-de-ku-ú. The phrase also occurs in a contract, CT 49: 6 = CT 4 (Bu 88-5-12,619), with an Aramaic docket mentioning removing the dust of the Esagil. All

of these contexts have now been discussed by G. F. Del Monte, *Testi dalla Babilonia Ellenistica* (Pisa, 1997), 13-16.

³ A third story in this same passage in Ber. 57b quotes Rabbi Hamnuna as saying, "'If one sees [the city of] Babylon, he should say, 'blessed be He who destroyed wicked Babylon.' On seeing the palace of Nebuchadnezzar, he should say, 'blessed be He who destroyed the palace of the wicked Nebuchadnezzar.' On seeing the lion's den or burning fiery furnace, he should say, 'blessed is He who wrought miracles for our ancestors in this place.'"

⁴ See for convenience J.C. Greenfield and A. Shaffer, "Notes on the Akkadian-Aramaic bilingual statue from Tell Fekhrye," *Iraq* 45 (1983), 109-16.

from the eighth and seventh centuries which contain Neo-Assyrian legal formulae.⁵ Hence, in order to reconstruct the transfer of literature from cuneiform to alphabets there are two main possibilities to consider. One is that Babylonian literature occasionally appeared to have been translated into Aramaic, Mandaic, or Syriac, although it has never been possible to identify the exact Akkadian source or *Vorlage* for a later Aramaic literary text.⁶ A second possibility is that already in the court of Assyria literary texts were being composed in Aramaic, without necessarily having been translated from an Akkadian original, since we know that Aramaic was widely used in Assyria from at least the seventh century BC. A good example of such a composition was the proverbs of Ahiqar,⁷ which became popular in Greek circles and were known to Clement of Alexandria and Strabo, as well as in rabbinic literature,⁸ and such Aramaic texts also facilitated the transmission of Mesopotamian culture into later periods. One important late source, however, which has yet to be properly mined for cuneiform relics is the Babylonian Talmud, a rich repository of information regarding Babylonian life in the second to fifth centuries AD.

There are several reasons why the Babylonian Talmud has been neglected as a wit-

ness to late Babylonia. First of all, the perspective of the 19th century *Wissenschaft des Judentums* school of interpretation of Jewish texts is that the Talmud was to be compared with Classical texts, mostly in Greek. There are several reasons for this approach, both valid and invalid. On one hand, when dealing with the Mishnah, Jerusalem Talmud, and various Midrashim, all of which were primarily composed or edited in Palestine, a considerable amount of Greek influence can be detected reflecting strong Hellenistic influences of the Roman East.⁹ Such is not the case, however, in the Babylonian Talmud, the Aramaic portions of which were composed in Babylonia, far removed from the Roman Empire and virtually any Hellenistic influence. Although some knowledge of Greek may have existed in Seleucid Babylonia among the ruling classes, or among some foreign peoples, certainly by the Parthian and later Sassanian periods Greek was not spoken and not known by the local population, including Babylonian rabbis.¹⁰ Despite the efforts of the *Wissenschaft des Judentums* school to de-orientalise Judaism by associating the Talmud with Classical texts, the Babylonian setting of the Babylonian Talmud cannot be disregarded. There are almost no Greek loanwords in Babylonian Aramaic,

⁵ See inter alia M. Fales, "An Aramaic Tablet from Tell Shioukh Fawqani, Syria," *Semitica* 46 (1996), 81-121; E. Lipiński, "Aramaic clay tablets from the Gozan-Harran area" *JEOL* 33 (1995), 143-50, and T. Kwasman, "Two Aramaic legal documents," *BSOAS* (forthcoming).

⁶ For an example of wisdom texts which appears to be from Akkadian, cf. R. Murray, "Aramaic and Syriac dispute poems and their connections," in M.J. Geller, J.C. Greenfield and M.P. Weitzman (eds.), *Studia Aramaica* (Oxford, 1995), 157ff, see pp. 158-60.

⁷ See J.M. Lindenberger, *The Aramaic Proverbs of Ahiqar* (Baltimore, 1983), 16-17, who argues that Aramaic was the original language of this text, rather than Akkadian.

⁸ *Ibid.*, 4-5.

⁹ S. Lieberman, *Hellenism in Jewish Palestine* (New York, 1962); *idem.*, *Greek in Jewish Palestine* (New

York, 1965); S. Kraus, *Griechische und lateinische Lehnwörter im Talmud, Midrasch und Targum* (Berlin, 1898).

¹⁰ The great differences between the cultural contexts of the two Talmuds – the Jerusalem and Babylonian Talmuds – were largely ignored in earlier studies. The cultural gulf between the Græco-Roman world of Palestine and the Parthian world of Babylonia was large. The very few Greek words, such as *sanegor* and *kategor*, which find their way into the Babylonian Talmud, were introduced into Babylonia as Greek loanwords in Mishnaic Hebrew or Palestinian Aramaic, although words such as "apikoros" for "apostate" is a misuse of the Greek term "Epicurean." For this reason, no Babylonian Amora can be demonstrated to have been influenced by Greek writers, nor is it likely for any aspect of scientific thought to have penetrated into Parthian Babylonia, the arch-enemy of the Roman Empire.

in contrast to Palmyrene Aramaic¹¹ or even the Aramaic of Palestine. On the other hand, one must not criticise the great 19th century pioneers of Babylonian scholarship in Germany too harshly: Akkadian was hardly well-known in their day, and only now has it become clear how many Akkadian loanwords one can find in Babylonian Aramaic, and especially in the Babylonian Talmud, many of which are still not recognised in standard dictionaries.

Then there is the problem of comparisons of texts. One difficulty is that specialists in comparative literature and cultural anthropologists look for mythology and literature overlapping between one society and another, but if one expects to find Gilgamesh or Adapa in the Babylonian Talmud, he will be disappointed. While mythology is culture specific, “science” (in the European sense) is universal, and therefore one actually finds technical terms and specific concepts known from Akkadian within Talmudic passages dealing with medicine and omens, or mathematics and astronomy, and these are the areas where one should begin to investigate. So the first task is to try to identify which texts in Aramaic seem to be either translated from an Akkadian *Vorlage*, or were at least loosely based upon Akkadian prototypes. The presence of Akkadian loanwords helps, of course, but only if contexts match as well. This is not a job for lexicographers, since if one has to look up the words in a dictionary, one is lost. The point is whether the context of an Aramaic passage resembles the context of an Akkadian passage, both in form and in content.

Once one identifies such loanwords and transmissions, the same question arises regarding when a presumed borrowing from

Akkadian into Aramaic took place. It may be worthwhile to glance at the other end of the spectrum, to see how long Akkadian survived. I have argued elsewhere that Akkadian was likely to have survived throughout the Parthian period, at least until the mid-3rd century AD. The so-called Græco-Babyloniaca tablets do not indicate that cuneiform was being rejected in favour of Greek scripts; on the contrary, the purpose of the Græco-Babyloniaca tablets was to preserve Akkadian, which was now being written on leather.¹² The crucial consideration for the use of scripts is the writing materials upon which the script is written: wedges were written in clay, alphabets on leather or papyrus, as a general rule. Hence, the use of transliterations into Greek script on Græco-Babyloniaca tablets was intended to preserve Akkadian by teaching scribes how to transliterate Akkadian when writing on leather, and does not represent a move towards Hellenisation of Babylonian culture.

The point is that even if Talmudic passages descend directly from older Aramaic translations of Akkadian texts, Aramaic “science” in the Babylonian Talmud was transmitted or translated while Akkadian was still a living language. This makes a quantitative difference to the accuracy of transmission. Jewish Aramaic parallels, for instance, have been found to such omen series as *šumma izbu*, *šumma ālu*, dream omens, physiognomic omens, and astronomical omens. Rabbinic literature records many omens listed under the rubric of *Darkei Ha-emori*, “Amorite Practices,” among which Giuseppe Veltri has found many parallels with Pliny, suggesting that some of the omen traditions in Palestine were based

¹¹ See D.R. Hillers and E. Cussini, *Palmyrene Aramaic Texts* (Baltimore, 1996), and particularly the glossary (pp. 333-421) with its large number of Greek etymo-

logies cited for Palmyrene Aramaic.

¹² See M.J. Geller, *Zeitschrift für Assyriologie* 87 (1997), 47-49.

upon Classical sources.¹³ Other omens however, have clearly Mesopotamian origins, such as a Talmudic omen regarding a snake: if a snake fell on the bed, it says: “he is poor, but he will end up being rich. If (the woman) is pregnant, she will give birth to a boy. If she is a maiden, she will marry a great man.”¹⁴ The 22nd tablet of the series *Šumma Alu* concerns itself with omens derived from snakes in the house, among which are omens in a broken passage which refer to a snake which falls upon a man’s bed. The initial omens are unfavourable, in that the man will suffer a calamity (*tīb le-mutti*), or that man and wife will divorce; the remainder of the text is fragmentary.¹⁵ The exact equivalent of the Talmudic statement, that a poor man will become rich, may well derive from *Šumma Alu* omens, since similar expressions appear in Akkadian omens, such as *šarû ilappin*, “a rich man will become poor,” or the reverse, *lapnu išarra*, “a poor man will be rich.”¹⁶

Another prominent Akkadian omen series, known as *Šumma Izbu*, was frequently copied in the scribal schools and is known from numerous manuscripts, but no Aramaic parallels have ever been noted for this text. The *šumma izbu* omens are concerned with various types of birth omens, usually consisting of strange or monstrous births, such as a woman giving birth to a bull or an elephant, ram, or cat, or a sheep

giving birth to a lamb with two heads, and the like.¹⁷ One usually considers such omens to be the product of a fertile Mesopotamian imagination or a fantasy which has no basis in reality, or perhaps a rumour of such an unusual event is enough to serve as the basis of the omen. It would not be so different from reports in modern tabloids which one finds in today’s supermarket, such as the *News of the World* or *National Inquirer*, in which such sensations are not uncommon.

It turns out, however, that the real nature of the *šumma izbu* omens can now be explained more effectively through reference to the Babylonian Talmud. The passage in the Tractate Niddah is not concerned with omens, but refers specifically to a miscarriage of stillbirth of a foetus (b. Nid. 23b). The lengthy discussion in the Talmud treats all manner of stillbirth, not as a predictive omen, but to try to determine whether the mother is unclean or not. The question is whether the discharge is actually a miscarriage or not, and as such it might be quite minute in size, but the discharged matter could take many different shapes. The passage of Niddah tries to give a complete list of various shapes the discharge could take, as a type of reference tool, probably drawn up from a list of gynaecological discharges or miscarriages, similar to the list found in the Akkadian *šumma izbu* omens.¹⁸ In the

¹³ G. Veltri, *Magie und Halakha* (Tübingen, 1997), 91-220.

¹⁴ Tosephta Shabbat 6, 16, see Veltri, *Magie* (above, n. 13), 130.

¹⁵ See F. Nötscher, *Orientalia* 39-42 (1929), 96-103.

¹⁶ *Keilschrifturkunden aus Boghazkoï* 37 168 r. 4, cited *CAD* Š/2 131. See other terrestrial omens recorded in b. Sanh. 65b, “A diviner is one who says, ‘his bread fell from his mouth,’ ‘his staff fell from his hand,’ ‘his son calls to him from behind,’ ‘a raven calls to him,’ ‘a deer crossed his path,’ ‘a snake is on his right and a fox is on his left.’” These omens may have parallels in Akkadian omen literature.

¹⁷ See E. Leichty, *The Omen Series Šumma Izbu* (Locust Valley, 1970). The first four tablets of the series concern

themselves with omens from human births, such as a woman giving birth to a wild bull, elephant, ass, ram, cat, or snake (ibid. I 11-16). Tablets six to seventeen are concerned with the *izbu*, translated by Leichty as ‘anomaly,’ but really referring to a malformed discharge or miscarriage, usually from a sheep (see Leichty, ibid., 3 n. 4). The latter tablets of the series comprise omens from individual animal births, namely from goats, cattle, horses, pigs, dogs, and gazelles (see Leichty, ibid., 3).

¹⁸ In fact similar categoric distinctions appear in both Talmud and *šumma izbu* omens. In b. Nid. 23a-24a, the initial discussion of an aborted foetus questions whether it takes the form of an animal such as a snake or type of bird (both of which types of foetus are mentioned in *Šumma Izbu* omens, I 16 and I 23). The Talmud then

same way, the Akkadian omens probably do not represent fantastic events or miraculous occurrences, but the example of a woman giving birth to an elephant probably describes some shape of an ordinary discharge or miscarriage.¹⁹ The juxtaposition of the two texts is therefore informative for both genres.

Another popular type of omens known in both Akkadian and Talmudic Aramaic were dream omens, and in fact both literatures include lists of dream omens which have independently been described as dream books. Oppenheim drew scant attention to the Talmud in his seminal work on Akkadian dream omens,²⁰ nor has anyone attempted to compare Akkadian and Talmudic dream reports. The usual starting point for discussing ancient dream books is the text of Artemidorus, although the eclectic collections of second century omens in Greek may have been drawn originally from a wide range of sources, including Semitic ones.²¹ One interesting comment in Artemidorus [book I] refers to the textual composition and sequence of dream omens, which Artemidorus describes as being organised from birth to death. It has escaped notice that Mesopotamian omens followed just this sequence. Although most of the Akkadian corpus of dream omens, known as

saqiqu, is too broken to determine any specific order, nevertheless one early collection of Akkadian omens is relatively complete. An Old Babylonian omen text from Susa, published by Scheil early this century, is difficult to read and interpret, but the tablet clearly commences with dream omens regarding birth and ends with omens referring to death.²²

Although mostly ignoring Oppenheim's work, Philip Alexander has made considerable progress in trying to explain Talmudic omens by comparing them with Artemidorus, having found a few important parallels between the Aramaic and Greek dream omens.²³ Nevertheless, his argument is weak; of the hundreds of Greek omens in Artemidorus and the dozens recorded in the Talmud, only a few can be considered as comparable. The Akkadian omens, on the other hand, offer a rich basis for comparison with the Talmud. For one thing, the thematic order of Talmud omens is typically Mesopotamian. Omens are listed in the Talmud, for example, as being derived from various types of plants, such as reed, gourd, or palm tree, or from seeing animals in a dream, such as an ox, ass, or elephant. Such lists are characteristic of Akkadian dream omens.²⁴ To counteract such dreams, the Akkadian text recommended the use of

proceeds to ask about the status of an aborted foetus with two backs and two spinal columns, which is typical of an *izbu* or malformed foetus described in Tablet VI of *šumma izbu* omens as being 'double,' ie. Siamese twins.

¹⁹ See b. Nid. 23b: "According to R. Meir, 'an aborted foetus which is like an animal, wild beast, or bird is a genuine embryo.' But the sages say that only if it has human features."

²⁰ See A. L. Oppenheim, *The Interpretation of Dreams in the Ancient Near East* (Philadelphia, 1956), 206.

²¹ See Artemidorus, *The Interpretation of Dreams: Oneirocritica* (Park Ridge, New Jersey, 1975), translated by R. J. White.

²² See Oppenheim, *Dreams*, 256-59, and V. Scheil, MDP 14 48ff.

²³ "Bavli Berakhot 55a-57b: the Talmudic dreambook in context," *Journal of Jewish Studies* 46 (1995), 231-48.

²⁴ See Oppenheim, *Dreams* (above, n. 20), 285 for similar examples. Likewise, b. Ber. 57a refers to dreams in which a man has sex with his mother, a betrothed virgin, a sister, or a married woman, which compares with the following Akkadian dream omens:

If a man has sex with the goddess Ishtar,
if he has sex with a god,
if he has sex with a king,
if he has sex with an important person,
if he has sex with a priestess,
if he has sex with a wife of the king,
if he has sex with a daughter of the king,
if he has sex with another man's wife,
if he has sex with a corpse, etc.

See Oppenheim, *Dreams*, 290, and J. Bottéro, *Mesopotamia* (Chicago, 1987), 117.

a ritual to be carried out “before he has placed his foot on the ground.”²⁵ The Talmud recommends something similar: if one has various types of dreams, he is repeatedly advised that “he should rise early” and recite an appropriate biblical verse to counteract any bad effects of the dream (b. Berakhot 56b).

Perhaps most significant is a common misunderstanding when comparing dream omens between different cultures: only the prodoses are relevant, but not the apodoses. The dream book collections from Mesopotamia, Egypt, and Greece are all similar in that they assemble lists of dreams, but the interpretation of dreams is always culture specific and will vary from one society to another. The task of modern research is to compare the collections and lists, to see what dreams were found to be of interest, and which were common to the various dreambooks, without including the apodoses within the comparisons, since they are probably irrelevant. There are two separate processes at work here, namely the collecting versus the interpretation of dreams.

As for medicine, there is a rich collection of medical lore in the Babylonian Talmud which derives from cuneiform sources, as can be demonstrated by the format of the texts and the number of Akkadian loanwords.²⁶ Of particular interest is b. Git. 68b-70a, which has been studied by G. Veltri, although without elaborating Akkadian parallels.²⁷ The main features of the Gittin passage is a collection of symptoms and recipes

arranged from head to foot, which is the usual format of a vademecum. Another important area of comparison is hemerologies, which relies upon astral magic in both Akkadian and Talmudic sources. Both Akkadian and Rabbinic sources list favourable and unfavourable days for a variety of domestic activities, such as getting married, building a house, or consulting a physician. Much work remains to be done on comparisons of these texts.²⁸

Suffice it to say that many Akkadian loanwords and expressions can be found in these passages which have not previously been recognised in the standard dictionaries. The obvious conclusion is that the Talmud preserved ancient science, but did not invent it. Hence the appellation of “Jewish medicine” for this period is probably inaccurate, except where medicine impinges on Jewish law, as when it concerns itself with circumcision or the ritual purity of women. Similarly, all aspects of the Babylonian calendar were adopted by the Rabbis, nor is there any reason to believe that Rabbis had a particular academic interest in astronomy which superseded the knowledge which they inherited from Babylonian schools. Rabbis probably adopted Babylonian science for their own use, and when they had questions or difficulties, they consulted their Babylonian colleagues – priests – for answers. It is likely that, at least until the 3rd century AD, these Babylonian scholars gave Rabbis their answers by reading from cuneiform tablets.

²⁵ *lāma šēpšu ina qaqqari iškunū*, see S. Butler, *Mesopotamian Concepts of Dreams and Dream Rituals* (Münster, 1998), 271, *et passim*.

²⁶ See M.J. Geller, “Akkadian medicine in the Babylonian Talmud,” in *A Traditional Quest, Essays in Honour of Louis Jacobs*, ed. D. Cohn-Sherbok (Sheffield, 1991), 102-12.

²⁷ Veltri, *Magie* (above, n. 13), 239-49, and this passage

has been studied by the present writer in “An Akkadian Vademecum in the Babylonian Talmud,” forthcoming volume edited by S. Kottke and M. Horstmanshoff.

²⁸ See Labat, *Mitteilungen des Instituts für Orientalforschung* 5 (1957), 317, and E. Reiner, *Astral magic in Babylonia* (Philadelphia, 1995), and the review of the present writer in *Orientalische Literaturzeitung* 93 (1998), 455-58, with a brief survey of Talmudic parallels.