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E-mail: claroscuro.cedcu@gmail.com

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Author(s)/Autor(es): Markham Geller

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Alternative voices in Babylonian medicine

*Markham Geller**

Abstract

The usual approach to Babylonian medical writings is to assume a monolithic corpus of data presented in either recipes, lists of drugs, or collections of symptoms for prognosis and diagnosis. Despite the lengthy period of documentation of Babylonian medicine, no attempt has been made to view the acquisition of Akkadian medical knowledge as a dynamic process, which also needed to adapt to changing expectations. The present paper[1] will survey Babylonian medicine while seeking out the cacophony of different voices, ending with the intriguing question: who controls the narrative?
Key-words: Babylonian medicine; Diagnostic Handbook; witchcraft; 'hand' (of gods, demons, ghosts); medical incantations

Voces alternativas en la medicina babilónica

Resumen

El enfoque habitual de los escritos médicos babilónicos es asumir un corpus monolítico de datos presentados en recetas y listas de medicamentos o colecciones de síntomas para el pronóstico y el diagnóstico. A pesar del largo período de documentación de la medicina babilónica, no se ha intentado analizar la adquisición de conocimientos médicos acadios como un proceso dinámico, que también necesitaba adaptarse a expectativas cambiantes. El presente

*University College London, Reino Unido. E-mail: m.geller@ucl.ac.uk
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artículo examinará la medicina babilónica mientras busca la cacofonía de diferentes voces, terminando con la intrigante pregunta: ¿quién controla la narrativa?
Palabras clave: Medicina Babilónica; libro de diagnóstico; brujería; mano (de los dioses, demonios, fantasmas); encantamientos médicos

The usual approach to Babylonian medical writings is to assume a monolithic corpus of data presented in either recipes, lists of drugs, or collections of symptoms for prognosis and diagnosis, either belonging to the professional cadre of the *asû*-physician or *āšipu*-exorcist-priest-healer. The material is usually divided into binary categories of 'medicine' and 'magic', with a grey area belonging to 'witchcraft' which spans both genres, which was addressed by both 'magical' incantations and 'medical' recipes (see Schwemer 2019: 39-41). This approach to Babylonian medicine does not compare well with Greek and later Roman medicine, which developed competing schools or philosophies in the medical arena, such as Methodists, Dogmatists, Empiricists, and even within Hippocratic medicine, different voices can be heard[2]. These voices are easier to identify when names can be attached to their writings, such as Diocles (van der Eijk 2000) or Herophilus (von Staden 1989), but the multivalent character of Greek medicine, with its different approaches to understanding disease and therapies, is universally accepted. So why should Babylonian medicine have been so harmonious, without dissenting opinions or approaches? Furthermore, over the lengthy period of documentation of Babylonian medicine (extending well over a millennium), no attempt has been made to view the acquisition of medical knowledge as a dynamic process, which also needed to adapt to changing expectations. The present paper will survey Babylonian medicine while seeking out the cacophony of different voices.

The oldest era providing data on Babylonian medicine, from the so-called Old Babylonian period and roughly contemporary with Hammurabi of Babylon (c. 18th century BCE), hardly provides a complete picture of diagnosis and therapy, because of the many gaps in the textual record[3].

[2]For concise discussions of the various medical philosophies (Dogmatists, Empiricists, Methodists), see especially Nutton 2018: 331-337, Temkin 1956: xxv-xxvii, and Tecusan 2004: 4. Differing philosophical approaches within Classical medicine are discussed by van der Eijk 2018: 304-307 and Jouanna 1999: 49-50, 350-351.

[3]For a selection of OB medical texts in translations, see Schwemer 2010: 35-38 (TUAT NF 5) and for Old Babylonian treatments for eye disease, Geller and Panayotov 2018: 3ff. An important inventory of Old / Middle Babylonian tablets of omens, medicine, lexical and literary texts has been published by Finkel 2018: 25-31.

What is clear, however, is that there was a relatively clear distinction between medical and magical therapies, and that medical texts from this period do not generally incorporate incantations into prescriptions. Moreover, the prescriptions which are preserved generally reflect simple rather than compound recipes, with the latter becoming standard practice in later periods. In fact, this transition from simple to compound recipes may indicate an improved knowledge of pharmacology, since compound recipes may have included additional drugs to counteract potential side-effects of a prescription. The extent of this process, however, is difficult for us to assess, with vast majority of the many drugs in the Babylonian pharmacy remaining unidentified. By the end of the 2nd millennium BCE, Babylonian physicians were producing much more elaborate prescriptions which formed the basis for medical therapies in ensuing periods (see, for example, BAM VII, No. 1). A 12th century BCE scholar, Esagil-kīn-apli, was attributed with creating a new medical corpus, as recorded in later catalogues from the city of Assur, and it was this scholar who was credited with editing medical, magical, and diagnostic texts, as was the case later with Hippocrates. In both cases, the corpora were much too large and multifaceted to have been realistically created by a single individual, but it was convenient in both instances to be able to assign authorship to this complex process (see Geller 2018: 43-48). The legacy attributed to Esagil-kīn-apli is considerable, preserved in three lengthy cuneiform catalogues listing a myriad of 'tablets' (compositions) on medicine, magic, and diagnostics, all relevant to healing arts in some form or another[4]. Although these catalogues are only known from archives of the cities of Nimrud and Assur, within a few decades the Assyrian king Assurbanipal assigned his cohort of expert scribes the task of creating standard editions of all medical and magical lore within the framework of his Nineveh Royal Library, and it appears likely that the resulting treatises were structured according to the earlier catalogues[5]. The colophons from the Royal Library medical tablets indicate that this genre of texts did not belong to an older traditional 'canon' but that Assurbanipal's scribes were responsible for creating standard editions, which later influenced archives in Babylon, Uruk, Sippar, Borsippa, and other important sites and centres of learning. However, within this enormous effort at standardising

[4]The catalogues were collectively studied by the *BabMed* ERC Advanced Grant project team, published in Steinert 2018.

[5]On this important insight relating the Assur medical catalogue to the Nineveh medical library, see Panayotov 2018: 94-106.

all medical knowledge, we can still detect the presence of conflicting opinions and approaches to therapy.

Within the province of medicine proper (excluding healing magic), the Assur Medical Catalogue lists some 90 different treatises by their opening lines or incipits, as titles of the compositions. These are organised into two different categories, with the first listing all treatises dealing with diseases closely associated with specific parts of the anatomy (cranium, eyes, ears, neck, nose, teeth, bronchia, stomach, epigastrium, abdomen, kidney, rectum, legs), with the second group of texts addressing general conditions and syndromes of a more general or universal nature (seizures, 'hazards' [i.e. wounds, seizures], feelings of maleficent influences and divine anger, anxiety [including stroke and paralysis], worry, impotence, as well as dermatological, gynaecological, and veterinary conditions) (Steinert 2018: 203-291, 339ff.). This is hardly a taxonomy of disease by modern standards, but it shows a general pattern of distinguishing between anatomical and non-anatomical diseases and condition.

The medical treatments are complex, utilising a large repertoire of organic and non-organic ingredients, as well as numerous forms of manipulating the ingredients in preparation for administering them through various methods, which included ingestion, potions, clysters, bandages, massage, and fumigation[6]. The meagre data on surgery probably refers almost exclusively to bloodletting, but only as an exceptional measure[7]. Comparisons with the Hippocratic Corpus highlight three main characteristics distinguishing Babylonian medicine from its later Greek counterparts. 1) Babylonian medicine lacks any discussion of medical theory, including any references to bodily humours or even the principle of opposites (cold versus hot, dry versus wet, dry versus moist, etc.). This does not mean, however, that Babylonian medicine was devoid of theory in general, but that it was implicit rather than explicit, and that there was room for conflicting theories. 2) Babylonian recipes incorporate a fair amount of what is usually considered to be 'magic', consisting of incantations and medical rituals, but the medical 'incantations' differ in form and context from exorcistic incantations from the extensive Sumerian-Akkadian magical corpus. 3) Prognosis and diagnosis were the formal tasks of the *āšipu*-exorcist-priest

[6]There is no up-to-date study of medical procedures beyond the older publications of Herrero (1984) and Goltz (1974).

[7]See Stol 1989: 164, discussing bloodletting in relation to ophthalmology, and the present author will be publishing an article on bloodletting in Mesopotamia in a forthcoming number of *Aestimatio*.

rather than the *asû*-physician, and a lengthy compendium of diagnostic omens (symptoms) was attributed to a specialist *āšipu*. However, this meant that descriptions of symptoms in medical prescriptions often differed from the diagnostic omens, leading to a division between 'magical' and 'medical' diagnoses of the same diseases[8]. In other words, all these three areas created conditions for conflicting opinions and approaches, which need to be explored in turn.

The binary opposition of magic and medicine within Babylonian *Heilkunde* has never been satisfactorily resolved, between those who believe that these are two sides of the same coin or radically different approaches to therapy. One concept, however, which all would agree with is that magic and medicine in Mesopotamia were in some respects complementary and that any possible theory of medicine has to take magic into account. The problem is that the term 'magic' covers a broad spectrum of activity and belief, much of which has little to do with therapy or healing arts.

One of the key issues in studies of Babylonian medicine is to what extent the gods and religion in general had a role to play in both diagnosis and therapy. Opinions vary in regard to whether gods were perceived as playing a decisive role in determining the outcomes or whether Babylonian medicine had developed a more 'secular' approach to therapy, which did not contradict belief in the gods but at the same time did not rely upon divine assistance as a factor in identifying and treating disease, or its eventual results[9]. The point of contention revolves around a single expression commonly encountered in medical texts, that a particular disease was associated with the 'hand' of god, ghost, demon, or other agents, and these expressions are interpreted as indicating the personal involvement of the divine or demonic world in the health of the patient. The strongest advocate for this interpretation is Nils Heeßel, who describes the expression 'hand of a god' (*qāt* + divine name) as 'the divine causal agent of an illness' (Heeßel 2018: 135), usually instigated by the patient having broken a taboo, either intentionally or accidentally (ibid. 137). For Heeßel, this information was required in order for the healers to identify a deity to whom appropriate prayers on the patient's behalf

[8]See the description of symptoms from urine in BAM VII No. 4 13'-16' with a parallel text from the Diagnostic Handbook, ibid. No. 49 ii 14'-20', indicating that these notations originated from different scribal workshops. A more detailed comparison is given in Steinert 2021: 495.

[9]Nutton (2018: 317-318) raises a similar point in reference to Hellenistic and Roman medicine, arguing that 'almost all doctors acknowledged divine intervention in health and illness', while the 'secular' approach of Greek medical writings remained popular among Romans.

could be addressed (Heeßel 2000: 75-96). Although Heeßel acknowledges that the label *qāt* + agent could indicate specific diseases, in his world view the overall meaning of the phrase was essentially religious, that the patient's disease resulted from personal interventions, rather than from natural causes. However, while Heeßel has offered a seemingly convincing explanation based on a literal reading of the data, there is another way of examining the evidence which reaches very different conclusions. A lengthy counterargument, laying out the case for a non-religious interpretation of the 'hand' of a deity-ghost-demon data, remains unanswered (Geller 2016: 204-207). The main thesis against personal involvement was that the 'hand' formulation was typical of omen texts, which freely associated events with divine or demonic activity, since omens were not intended to identify causation. As Francesca Rochberg has clearly pointed out, Babylonian science was not oriented towards 'causation' or causes, but it operated by associating events or phenomena in an 'if P then Q' relationship, which also applies to the present case (cf. Rochberg 2009: 7-12). The description of symptoms followed by a "*qāt* + divine name" notation is not intended to provide causation of the disease, but simply that the disease (not the patient personally) has some kind of association with a particular deity, demon, or ghost[10]. By the same token, the Diagnostic Handbook collection of symptoms employed the methodologies of omen literature, as illustrated by the first two tablets of the compendium, which resemble the terrestrial omens of everyday life collected in the composition best known as *Šumma ālu* omens. For example, in these introductory 'chapters' of diagnostic omens, if the healer encountered a pig or brick or pregnant woman while *en route* to the patient, this would probably indicate that the patient would die[11]. Moreover, the Diagnostic Handbook, with its impressive 15,000 entries, was not describing the symptoms of individual patients but rather symptoms associated with *diseases*; we have no way of knowing how many individual

[10]See Backsay 2021: 284, *šumma* SAG.KI.DAB.BA ŠU.GEDIM.MA *ina* SU NA *iltazzazma*, 'if headache (or) Hand of a Ghost is present in a man's body' (with a variant reading SAG.KI.DAB.BA *lû* ŠU.GEDIM.MA), indicating that the Hand of a Ghost is a medical symptom in this context, to be treated therapeutically by external bandages. Bacskay provides all relevant bibliography on previous editions of this recipe. Scurlock 2006: 5-20 provides a useful description of symptoms attributed to a ghost, but she fails to distinguish the descriptions clearly in terms of whether they occur within medical recipes, diagnostic omens, or incantations.

[11]See George 1991: 142-145 and the recent explanatory discussion in Steinert 2021: 496, e.g. that seeing a corpse is a positive sign since it means that the gods have chosen someone else to die instead.

patients would have been associated with any single symptom. In this case, there would be little point in assigning divine intervention to a disease, if no single individual was being referenced by this information. Moreover, there are instances when the 'hand' of a god is specifically described as an ailment[12], and other cases in which one medical condition characterised as a 'hand' (of a ghost or deity) actually develops into a second disease[13]. Finally, an extensive table of correspondences is attached to one 'chapter' of the Diagnostic Handbook (Tablet 33), which provides technical disease names for diseases otherwise labelled as 'hands' of particular gods; the exceptional tabular format is significant[14]. All of these points have been made previously but remain unchallenged so far.

But there is more to the story. We will need to explore the rationale behind this type of 'if P then Q' type of logic in diagnostic omens, with the underlying supposition that if we can find rational explanations for associating disease symptoms with various gods or demons or ghosts, this further weakens the argument for a deity or demon's personal involvement or intervention in the patient's suffering or therapy. One way of explaining these 'hand' of a god, ghost, or demon associations with disease can be understood in an environment of infectious diseases or epidemics, for which there were no effective countermeasures beyond strict hygiene and even quarantine. One reason for associating disease symptoms with gods is because the divine names were often associated with specific institutions or activities which were perceived as potential arenas in which disease could spread, in the form of pernicious or deadly epidemics. One example is the goddess Ištar, a goddess of love possibly associated with brothels and with symptoms associated with 'fornication' (*nāku*). Similarly, the toilet demon Shulak's 'hand' was invoked, alluding to the hygiene dangers which latrines posed and were recognised in antiquity. Symptoms associated with the bellicose deity Nergal could be associated with army encampments, notorious for the spread of disease. The sun god Šamaš was the patron of justice, and law courts were another possible arena where crowds would gather, while Marduk, as head of the pantheon, represented the royal palace

[12]As for instance, the reference in the Diagnostic Handbook (17: 59 = Scurlock 2014: 165) to ŠU ^{d}*ra-'-i-bi*, 'the Hand of Anger'. The term *ra'ību* is listed as a medical condition influenced by zodiac-oriented spells, see Geller 2014: 36.

[13]See the Diagnostic Handbook Tablet 28: 1, 7, and 11, in which the 'hand' of a ghost or Ištar can 'turn' into the disease ANTAŠUBBA (probably stroke or seizure) or vice versa; see Scurlock 2014: 211, 213. These references clearly demonstrate the 'hand of a ghost' or 'hand of Ištar' are pathologies.

[14]As discussed in Geller 2016: 205.

as another arena of potential contamination. The storm god Adad, on the other hand, may have associated disease with inclement weather or floods, and all of these associations were introduced by invoking the 'hand' of these deities. The 'hand' of the patient's city god is self-explanatory, since markets or gatherings at the city gate would have offered numerous occasions for the spread of infectious pathogens. These are only a few examples of the rationality of associating the 'hands' of deities (or demons) with disease[15].

The most common reference to 'hands' refers to ghosts, who also disturbed a patient's composure by whispering threats into the ears. Here is an example:

> If (a patient's) temple affects him and he continually calls out (and) blood runs out of his nose, **hand of a ghost**.
> If his temple affects him and ditto, his temple-blood vessels are pulsating greatly (and) the upper part of his head (feels) separated, **hand of a ghost**; he will die.
> If his temple affects him and ditto, his temple-blood vessels are pulsating greatly (and) the upper part of his head (feels) crushed, he will die.
> If his temple affects him and he continually calls out: 'my belly, my belly,' **hand of a ghost**, deputy of Ishtar; he will die; variant: **hand of a ghost**; if (the condition) is prolonged, he will die.
> If his temple affects him and ditto, he vomits a lot and cannot take up his pallet, **hand of a ghost**; he will die.
> If his temple affects him and lasts from sunset till the third night watch (var. it keeps him awake at night), he will die.
> If his temple affects him and from sunrise to sunset it hurts him (var. it does not let up, it will let up); **hand of a ghost**.
> If his temple affects him and blood flows from his nose, **hand of a ghost**.

[15] A good example of this kind of loose association between disease and agency (without suggesting causation) is a Nimrud recipe (ND 5488/2, see Geller 2000: 335-336) against stroke (ANTAŠUBBA), which refers to the patient being affected by the Hand of Ištar, Lilû-demon, or 'whatever evil'. Remedies call for the external application of powders (or dust) of various places, and semen or blood from mostly non-domesticated animals, as well as the use of a Pazuzu-figurine, a combination of medical and magical therapies. The association between the medical condition and these agencies is likely to refer to contact between the patient and some type of contamination, rather than to personal intervention of a deity or demon.

> If his temple affects him and his neck sinews continually hurt him, **hand of a ghost**.
> If his temple affects him and his eye sinews continually hurt, **hand of a ghost**.
> If his temple affects him and he becomes hot (and) chilled and his eyes are inflamed, **hand of a ghost**.
> If his temple affects him and has vertigo (his face spins); he gets up but falls down, **hand of a ghost**.
> If his temple affects him and paralysis grips his body, but he does not sweat, **hand of a ghost**.
> (Scurlock 2014: 29 and 34)

In addition to these, the Diagnostic Handbook frequently refers to the ghosts of father or mother, brother or sister, or simply family ghosts, all of which are easy to comprehend under conditions of epidemics, when family life and close proximities presented serious threats to personal health. It is easy to imagine that as successive members of the same family succumbed to a highly infectious virus or pathogen, that ghosts of the deceased would be associated with the presentation of symptoms in a surviving family member[16].

One final argument for a different view of the 'hand' of gods or ghosts is that these designations are not evenly distributed within medical literature. The expression itself, 'qāt + name', is relatively seldom within therapeutic prescriptions, which corresponds to the fact that therapeutic texts rarely offer prognoses; these characteristics may reflect the different approach (and voice) of the asû-physician as opposed to the āšipu-exorcist-priest. Although from a modern perspective, the Diagnostic Handbook and therapeutic prescriptions are grouped under the heading of medicine (since both deal with disease symptoms), in fact these text types originated within different scribal workshops reflecting different attitudes. The Diagnostic Handbook, belonging to a healer-priesthood, was aware of the benefits to patients of placing gods and demons and ghosts in the forefront of diagnosis, as a way of explaining the presence of disease within popular culture. Nevertheless, within the Diagnostic Handbook itself, an unnoticed process was taking place, even within clerical healing circles. The tendency within multi-tablet

[16]See STT 89: 182, Stol 1993: 96, the patient having an attack of some kind (*ṣibtu*) calls out, 'my father, my mother, my brothers, my sisters have died' (*abī ummī ahhūya ahātūya imūtū*). See also Scurlock 2006: 9, and especially the description from the Diagnostic Handbook (Tablet 16) cited in Steinert 2021: 502, associating fever with the patient being affected by the ghost of his father or mother.

'series' or compositions was for later periods to contribute additional texts or 'tablets' to a composition, as is clear from lengthy incantation compilations, such as Udug.hul incantations (Geller 2007: xiii-xvi). A simple perusal of the Diagnostic Handbook shows that the 'hand' notations occur more frequently in the earlier tablets, which probably represented the older components of the series. As already mentioned, Tablet 33 of the Diagnostic Handbook provides technical nomenclature corresponding to 'hands' of various gods. However, what is noticeable is that in other later tablets of the Handbook, the number of references to 'hands' tends to decline considerably[17].

One possible explanation for this tendency is that the higher number 'tablets' of the Handbook were later compositions dating from the first millennium BCE, when expectations for more accurate diagnoses may have increased and pressure was mounting for technical terms for disease to replace the rather vague associations with 'hands' of gods or demons or ghosts. Nevertheless, this does not mean that we should discount or ignore passages within either the Diagnostic Handbook or therapeutic corpus which refer to the 'hand' of god, ghost, or demon, since it is probable that many exorcists and even physicians in later periods preferred to remain with the traditional designations of disease symptoms as having a more 'religious' orientation, especially since technical disease names are often not self-explanatory and certainly less comprehensible to an average patient. As

[17]The distribution of references to a Hand of a god, ghost, demon, or other entity is uneven within the 40 tablets of the Diagnostic Handbook; we exclude Tablet 33 with its unusual tabular format of alternatives to 'hands' of deities. The following tabulation of references to 'hands' shows a clear pattern (with numbers in parentheses indicating tablet numbers of the Diagnostic Handbook). NB. this tabulation ignores entries with three or less occurrences within the Diagnostic Handbook: Adad (3, 5, 7, 9, 10, 12, 13, 14, 15). Ardat lilî (3, 4, 17, 26). *Dapinu* [Jupiter] (3,9,12, 16); *eṭemmu*-ghosts (4, 6, 8, 9, 10, 12, 13, 15, 17, 18, 19, 22, 26, 27); *ilu*-god [including city god] (3, 4, 5, 6, 9, 10, 12, 13, 14, 15, 16, 18, 19, 22, 23, 28, 29); Ištar (3, 4, 5, 6, 8, 9, 10, 13, 14, 15, 16, 18, 19, 22, 26, 28, 29). Kūbu (3, 4, 6, 12, 13, 17, 18); Lamaštu (11, 12, 13, 16, 18, 19); *māmītu*-oath (13, 14, 22, 23, 28); Marduk (4, 5, 9, 12, 13, 16, 22, 29); Nergal (12, 13, 14, 15); Ninurta (5, 7, 9, 17, 18, 21); Sîn (3, 4, 5, 6, 9, 10, 12, 13, 15, 16, 17, 18, 19, 28, 29); Šulpa'ea (4, 12, 15, 22). What this data shows is that common tropes, such as the Hand of a god, Hand of Ištar, or Hand of a ghost tended to be fairly standard throughout the Diagnostic Handbook (although still more common in earlier tablets), while references to hands of other gods (Marduk, Nergal, Ninurta, Šulpa'ea) appear less frequently in later tablets of the Diagnostic Handbook. Even references to Hand of Sîn are clustered mainly in earlier tablets, and the same applies to non-deities, such as the hands of the oath, or demons such as Ardat lilî, Lamaštu and Kūbu.

mentioned above, it is important to register and give credit to dissenting voices[18].

Of relevance to the question of involvement of deities and demons was the commonplace use of incantations within medical recipes, which gave both Babylonian and Egyptian medicine the appearance of being 'magical' in comparison with Hippocratic treatises. Although different conditions no doubt applied to Egypt, within the Babylonian medical sphere incantations and rituals performed key explanatory functions which could not be accommodated by actual recipes and prescriptions. For the most part, the medical incantations and 'rituals' (actually, additional medical procedures not included within recipes) offered aetiologies of disease to attempt to explain their origins and characteristics, since philosophical or didactic tracts were not part of Babylonian literary culture. Moreover, these medical incantations had little in common with spells within magical compendia, which were characterised by adjurations of demons and ghosts and direct prayer-like appeals to deities (see Collins 1999: 39). Most medical incantations are in Akkadian only, rather than in the more traditional bilingual Sumerian-Akkadian format of exorcistic incantations. Furthermore, medical incantations do not usually allude to the hallmark conversation between the gods Ea and Marduk (based on the Sumerian gods Enki and Asalluhi), a basic component of exorcism, in which the patient's troubles were noted during a brief formulaic dialogue between the two gods[19]. Medical incantations tend to view disease within creation mythologies as belonging to the earliest phases of the cosmos[20]. The following example will illustrate the difficulties in interpreting the medical corpus, in this case dealing with an 'incantation' within a group of recipes for stomach disorders known as *kīs libbi*. The translation below makes several assumptions about esoteric orthography, since on the surface the text appears to refer to the goddess Zarpanitu (Marduk's spouse) and to the god Enlil, neither of whom has any known association with stomach symptoms or treatments. For this reason, this difficult text appears to be composed in a series of

[18]Heeßel 2018: 138-140 provides reference to two medical texts with 'hands' (SBTU 3, 84 and CTN 4, 72), neither of which represents a standard medical treatise, such as those best known from the Royal Library of Nineveh.

[19]The Ea-Marduk dialogue was occasionally adapted to include other gods, such as Girra (in Udughul Tablet 13-15, cf. Geller 2007: 15). Exceptionally, the Ea-Marduk dialogue is alluded to in a bilingual incantation in the Anti-Witchcraft Corpus, cf. Abusch-Schwemer 2011: 420-421.

[20]See numerous examples in Appendix B in Collins 1999: 329-336.

Sumerian logograms, probably to be read out in Akkadian, but meant to look mythological[21]:

> If a man suffers from stomach distress (*kīs libbi*), have him ride on a pack-boat on that day, you have him float downstream and recite an incantation thus:
>
> Incantation: at the seat (of disease), the great mountain lady (= *fever*)[22], ditto. The windpipe[23] doesn't exude (blood, phlegm)[24], it's burning (*ṣarpanītu*[25]) is in place above[26], while (the patient is) taking a step[27], while squatting (lit. sitting on his feet), placed *upside down*, under – over[28]. Incantation. You recite this incantation and one should recover.

According to this interpretation, the god names of Enlil and Zarpanitu are allegories, and the descriptions of how the fever attacks the body is based upon succeeding lines in the same text, which have the patient squatting (lit. sitting) over his own feet, or alternatively turning the patient upside down[29]. The incantation is a way of formalising the procedure as if in a cosmic context, to give it more authority.

[21]BAM 574 I 4-7, DIŠ NA *ki-is* ŠÀ GIG *ina* UD *šá-tu ana* ^{giš}MÁ.GUR$_5$ U$_5$-*šú* E$_{11}$-*šú-ma* TU$_6$ *ki-a-am* ŠID-*nu* ÉN É.NU.RU DÚR.GAR:RA DAM.GAL! KUR MIN: GI ^{d}EN.LÍL.Á.E NU.UB.ZUM ^{d}*Zar-pa-ni-tum-ša* IGI GÁL.LA GUB-*a* GÌR.A.NI GUB.BA GÌR.A.NI DÚR.RA^{du-ra} GÌR IGI.GÁL GUB GÌR IGI GÁL TU$_6$.ÉN TU$_6$ *an-ni-ta* ŠID-*nu-ma* TI. (The text has been collated by J. C. Johnson and K. Simko, but I have interpreted some readings differently).

[22]Interpreting Akk. *aššatu* as a pun on *išatu*, 'fever', since mountain fever was known to Akk. medicine.

[23]Interpreting GI ^{d}EN.LÍL as the 'reed of (lord) wind', meaning the windpipe. The writing is a broken orthography for ^{d}*en-líl-lá-e*.

[24]Interpreting Sum. ZUM as *hiālu*, 'exude', which is a common correspondence.

[25]The /*ša*/ sign does not fit with the rest of the Sum. inc., so it is attached to *ṣarpanītu* as an allegorical noun for 'burning' (from *ṣarāpu*, burn). It is "its burning", an uncomfortable feeling referring back to the windpipe, which is a sensation often occurring when one has heartburn.

[26]Interpreting Sum. IGI as 'above', corresponding to UGU.

[27]Corresponding to Sum. gìri-gub and Akk. *kabāsu*, 'to tread'.

[28]Interpreting Sum. GÌRI as 'under', one of the known meanings (lit. foot), and IGI as 'over'.

[29]See BAM 574: 11, 13, 14, now being edited by. J. C. Johnson and K. Simko (forthcoming), which reads, NA BI *ina* UGU GÌR^{II}-*šú tu-še-šab-šú*, 'you have that man sit over his two feet' and *ina* UGU GÌR^{II}-*šú uk-tam-ma-as-ma ú-šab*, 'he is to kneel over and sit on his two feet'. Alternatively: SAG.DU-*su ana šap-la-nu* GAR-*an* GÌR^{II}-*šú ana* AN.TA-*nu tu-šá-qa*, 'you place his head under and raise his feet above.'

Another possible area of implicit theory concerns drugs and their effects, especially in the light of the almost universal pharmacology theory of opposites (cold vs. hot, wet vs. dry, and vice versa), and these may also include other factors in opposition, such as sweet and bitter. Although the theory at first glance seems quite straightforward, in practice it is difficult for us to gauge, without any privileged information from ancient physicians, which plants and minerals were considered to be hot or cold, or wet or dry, and the same applies to diseases in general; it is difficult for us to assess what were the *perceived* effects on the human body of plants and minerals deemed to be hot, cold, wet, or dry. Nevertheless, some provisional suggestions can be made, based upon a unique text labelled as the Apothecary's Handbook (BAM No. 1)[30]. The text is divided into three columns with many horizontal rulings between entries; the first column lists *materia medica*, the second column identifies the diseases which these drugs could treat, and the third column provides rudimentary details of how drugs are to be administered (i.e. internally or externally, and in what forms). Without pressing the point too far, some of the entries may indicate the use of opposites in drug therapies, if some basic suppositions turn out to be correct. Here are a few examples: ll. 7, 10 'root of thistle / thorn which the sun has not witnessed when you uproot it': this may suggest a drug which is both 'cold' and 'wet (fresh)', picked before being warmed by the sun. A similar idea occurs with 'fresh field clod'-plant (l. 143) which is inserted into the rectum against a 'burning anus'. Since the description leaves no doubt about the problematic anus being hot, it may be fair to assume that 'fresh' indicated qualities of *cold* and *wet*. Other drugs for a similarly burning anus were *girgirû* and *urnû*-mint (l. 142-143), suggesting that these might also be 'cold' drugs. Similarly, the seed of a 'field-clod' plant was also useful against *šīqu* (lit. 'irrigation'), probably referring to a 'wet' cough. Another seemingly clear case is the drug *šizbānu* or 'milk-like' plant, perhaps referring to its sap, which is designated as a 'drug for internal fever' (l. 151) and is hence potentially to be classified as 'cold'; it was also useful against cough (l. 99), which might be thought of as 'hot', particularly if accompanied by a fever. The roots of two drugs (licorice, *šunû*, as well as 'dog's-tongue'-plant) were all employed against 'phlegm' (ll. 108-110), suggesting drying qualities. The disease *samānu* was treated with a drug imported from two different mountainous regions, as 'not dried out' (l. 80), but since elsewhere one of the drugs for this same disease was 'ghee' (*himētu*), it may be safe to

[30]The text was edited and commented upon by Attia and Buisson (2012) and translated and further discussed in Geller (2021).

assume that *samānu* was a 'dry' disease. This type of analysis raises many problems which will not be easy to resolve, such as whether paralysis could be considered 'cold' or sun-stroke as 'hot', since the texts themselves offer no explicit guidance. Nevertheless, the important point is that pharmacological theories were probably actively employed by Babylonian apothecaries, but not necessarily in harmonious agreement. For instance, the entry in the Apothecary's Handbook (BAM 1: 29-34) give the following drugs for 'bile' (or gall-bladder): *ṣiburu*, *ittû*-bitumen, *merginu*, *ka'u*-fungus, *tullal*, and tamarisk-leaf, to be administered in beer (see Geller 2021: 21). On the other hand, a text dealing with *suālu*-cough provides a parallel for drugs against bile to be imbibed in beer, consisting of completely different ingredients: 'single'-plant, tamarind, licorice root and peel, bat quano and garlic (Geller 2021: 6, citing BAM 578 i 20-26). Once again, different approaches can be seen.

Witchcraft and the so-called 'anti-witchcraft corpus' present special problems for an overall assessment of Babylonian medicine, since it forms a large block of material which can be seen as a different approach to symptoms and disease. Although witchcraft was the result of human agency, it resulted in both medical and non-medical difficulties for the patient or client, which required counter-measures of both magic (rituals and incantations) as well as medical-like recipes and prescriptions (Schwemer 2019: 52-55). The question is whether witchcraft itself - covering numerous subtopics - represents an alternative to either magic or medicine, while resembling both genres.

There is no question about anti-witchcraft measures having a different 'voice' than either exorcism or medicine, while having a respectable pedigree which goes back at least to the early second millennium BCE (and perhaps earlier). This takes the form of Sumerian incantations to dissolve the harm caused by spells (so-called *ušburruda* incantations), which were occasionally copied into the medical corpus as well. Human agency was also occasionally acknowledged in the Diagnostic Handbook, since the 'hand of mankind' and other allusions to witchcraft are occasionally found, and this presented different sorts of problems for both diagnosis and therapy. Treatments designed to handle symptoms associated with angry gods or vicious demons or unsympathetic ghosts require an assortment of strategies, usually attempting to appease or coerce these antagonistic forces. Ailments caused by exposure to witchcraft take on a very different character, by adopting a far more aggressive tone in attacking witches and agents of witchcraft, even though they remain anonymous and unknown to the patient

or practitioner. Within the context of untrammelled infectious disease environments or epidemics, it is easy to imagine how such images occur, when neighbours and acquaintances are suspected of being disease vectors, even when resulting from casual contacts. It is easy to forget that witches can include almost anyone from the patient's immediate environs, including members of one's own family.

At this point, having marked out different possible approaches to healing therapies, a couple of sample texts should be viewed in parts, as possible examples of alternative voices within Babylonian medical theory. The first of these, known as STT 89, originates from the workshop of an *āšipu*-exorcist, presumably from the one who carries out prognoses and diagnoses[31]. The fact that this text is only known from a provincial archive in Sultantepe may be coincidence. It was considered by Stol (1993: 91) to be an older 'alternative' version of the Diagnostic Handbook, organised according to diseases rather than symptoms (see also Heeßel 2018: 138), but neither of Stol's seemingly rational assumptions can either be proven or substantiated, as either an 'alternative' series of diagnostic omens (not known from elsewhere) or being older than other recensions of the Diagnostic Handbook from other sites. There is no question, however, that this Sultantepe text is thematically similar but quite different in detail from the Diagnostic Handbook, and as such may well represent another approach to prognosis and diagnosis, without reference to the better-known recension known from multiple sites and copies. The text of STT 89 comprises extracts from two 'chapters' (Tablets 33 and 34) of a subseries of the Diagnostic Handbook designated by its rubric, *ana marṣi ina ṭehêka*, 'in your approaching the patient', referring to exorcist-priest visiting the patient to provide a prognosis and diagnosis[32], similar to what happens in the Diagnostic Handbook, but not reduplicating the same data or procedures[33]. In this particular case of Tablet 33, the text focuses on three conditions thought to be associated with witchcraft, namely 'cutting-off-the-breath' (*zikurudû*), 'hatred' (*zīru*), and aphasia (*kadabbedû*). These are three separate conditions which have little in common with each other in a

[31]STT 89 = Stol 1993: 91-98 and Abusch-Schwemer 2011: 434-443 (obv. only). There is a new copy of the obverse by Daniel Schwemer in Abusch-Schwemer 2011, plates 125-128.

[32]Perhaps *kāšipu*, see the discussion below.

[33]One of the key differences between STT 89 and the Diagnostic Handbook is that the former contains prescriptions, which the latter composition only includes exceptionally in tablets 29 and 31 (noting that tablet 30 is fragmentary).

physical sense, but they are all conditions characterised by both physical and psychological symptoms.

The condition of *zikurudû* or its 'hand' does not feature in the standard edition of the Diagnostic Handbook, which is already an indication of being an 'alternative' diagnosis. The condition was glossed literally in Akkadian as *nikis napišti*, 'cutting off the breath / throat', although usually the condition is normally designated with its Sumerian loanword[34]. The idea of the shortness of breath explains many of the physical symptoms associated with this condition, such as vertigo, numbness, feelings of paralysis and pain, and mental fog (or forgetfulness), all of which can be associated with influenza causing breathing difficulties. The concept of the 'breath being cut off' has psychological dimensions as well, since the unusual expression used in STT 89 and in Maqlû incantations (but not in standard medical texts)[35] is *našparāt zikurudâ*, 'reports of *zikurudû*', which are threatening notices or warning messages sent to the patient within the framework of witchcraft[36]. Another unusual feature of these STT recipes is that occasionally a prognosis is offered, which is not typical of medical prescriptions. For instance, one prescription predicts that, once sorceries are performed, *ana ešeret ūmī īrik-ma imât*, '(the illness) will last for 10 days, and he will die' (Abusch-Schwemer 2011: 440, 34). Finally, a further unusual prognostic phrase is used throughout, *amassu iqatti*, 'his matter will end' (cf. Abusch-Schwemer 2011: 440, 33), indicating a grave prognosis for the patient, a phrase not found in the Diagnostic Handbook. The condition of *zikurudû* is exclusively associated with human activity, since the prescriptions repeatedly insist that *ipšū epšūšu*, 'sorcery has been performed against him,' providing the context for the illness. There is no room for doubt here, that a physical and psychic illness can be directly caused by human agency, which places these prescriptions into a different

[34]See Mayer 1993: 322, editing BMS 12: 108.

[35]Cf. the anti-witchcraft context of BAM 214 iii 10 = Abusch-Schwemer 2011: 253,85", and cf. the note ibid. 189.

[36]STT 89: 12 and Abusch-Schwemer 2011: 436 and 439: [*ana* NA BI *n*]*a-áš-pa-rat* ZI.KUR$_5$.RU.⟨DA⟩ IGI M[U]L DÙ-*šú* ÚŠ, 'The "breath-being-cut" has been carried out under the stars, he will die.' The term *našpartu*, most commonly referring to written forms of business and administrative transactions, can also refer to ominous messages from gods. The term occurs repeatedly in Maqlû incantations (Abusch 2015: 106, 126, 130, 132 = Maqlû V 88, and VII 7, 74, 109), warning of negative consequences. The threatening connotations of this term can be compared to the receipt of an official letter in a brown envelope in our own times, usually indicating an unfulfilled financial or bureaucratic obligation.

category of diagnosis than those normally encountered in the medical corpus. One wonders whether every āšipu would have agreed with or accepted these diagnoses and prognoses, or whether they represent an alternative approach not shared by those who composed the Diagnostic Handbook, hence a dissenting voice. The attribution of illness to witchcraft is not a major theme within the standard series of prognostic and diagnostic omens.

Tablet 33 of *ana marṣi ina ṭehêka*, a subseries of the Diagnostic Handbook, also refers to a condition simply known as *zīru* (HUL.GIG), manifested in both physical and psychological symptoms (fever, impotence), but not represented in the Diagnostic Handbook or in standard medical prescriptions[37]. The same applies to *kadabbedû*, a type of aphasia possibly associated with stroke, while Tablet 34 of the subseries mainly features the ailments of *antašubbû*, *bennu* and lugal-urra, usually associated in modern terminology with stroke and epilepsy or seizure (see Stol 1993: 16). As with the symptoms cited above, the reverse of STT 89 offers a combination of physical and psychological symptoms, although in this case patterns of abnormal behavioural dominate. The unusual feature of Tablet 34 of *ana marṣi ina ṭehêka* is the prescription for 'epilepsy' (^{d}LUGAL.GÌR.RA / lugal-urra): 'you should not make a prognosis for his recovery' (*ana bulluṭišu qība lā tašakkan*) (STT 89: 136 = Stol 1993: 93). We will encounter this phrase again.

A decisive feature of STT 89 as 'alternative' is the detail of symptoms associated with sorceries carried out on specific days of certain months and in the presence of specific stars or constellations (Pleiades, Gula, Ursa Minor, Šulpa'ea, Ereqqi[38], etc.), and in the months which follow a general sequence (months VII, XI, XII, then IV in a broken passage, then IX, X, XI). There are intriguing parallels in this text with another unique tablet from the same site (STT 300), which provides exact days of the months for rituals to counteract such human agency sorceries (see Geller 2014: 47-57)[39]. Moreover, the

[37]See STT 89: 78, 82, 89, cf. Abusch-Schwemer 2011: 441. It is important to note that this is not hatred stemming from gods, but from other people, usually perceived as anonymous witches.

[38]Ereqqi also occurs in a fragentary *zikurudû* prescription, AMD 8/1 424.

[39]A similar idea occurs in Mandaic, in the Book of the Zodiac (Asfar Malwasha), which advises as follows: *l-daiua d̲-atia b-srin u-tlata b-iahra u-b-srin u-arba b-iahra bišia hinun la-tiqrublḫ aminṭul d̲-la-mitasia*, 'For a demon (*daeva*) which comes on the 23rd of the month or 24th of the month: they are evil! Do not approach him because it is not treatable.' Not only is there a reference here to ominous days of the month, the healer is told not to approach the patient, which corresponds closely to the main title of STT 89, *ana marṣi ina ṭehêka*, 'in your approaching the patient'. The further instruction

medical conditions mentioned in STT 89[40] include *zikurudû*, *zīru*, *kadabbedû*, *antašubbû*, *bennu*[41] and lugal-urra (*bēl ūri*)[42], as well as the 'Hand of Sīn'[43], and these same conditions also feature in STT 300. As has been previously established, STT 300 presents a text genre which remained influential in later periods, since the monthly prescriptions for rituals against aggressive magic later became the basis for zodiac-oriented astral magic / medicine, as known from tablets from Uruk and elsewhere (see Geller 2014: 27-42). The importance of astral magic and medicine is that it was innovative, hence a departure from standard medical theory and practice, focusing on the influence of astrology and melothesia, and it was significant enough to have influenced Greek astrology (see Rumor 2021: 14). The importance of the connections between the two Sultantepe tablets is that STT 89 represents the diagnostic component of a medical system also known from STT 300, which later developed into a full-blown astral medicine. The origins of this system can be traced back to the late second millennium BCE[44] and as such represents a dissenting voice within the context of the vast majority of medical texts known from other archives or the medical canon from Nineveh.

Another text, this time from the Nineveh Royal Library, also showing non-standard formats and contents, is BAM 580, which lacks a modern text edition. It has a partial parallel in the Nimrud text CTN 4 116, which has only been partially edited in BSOAS (Geller 2000: 336-339). The importance of this text is that it includes a lengthy aetiology of the existence of skin

to avoid making a prognosis is the equivalent of withholding treatment in a difficult or hopeless case. The rest of the Mandaic passage is also reminiscent of Akkadian texts mindful of days of the month: *l-daiua d-atia b-srin u-hamsa b-iahra ramia u-mpagim u-mabkia u-ramia qala sablḫ marirta d-aria ᶜu diba ᶜu tirba u-pušʿrʾ b-miša halia u-šuplḫ bpagrḫ u-rmilḫ b-nhirḫ u-tlilḫ b-ṣurḫ u-mitasia*, 'For a demon who comes on the 25th of the month: he throws down and harms and causes weeping and hollers (lit. throws the voice); take for him gall of lion or wolf or fat and melt in sweet oil and smear it on his body and put it in his nostrils and hang it on his neck and it will be treated.' (See Drower 1949: 79-80 = AM 124: 1-3).

[40]Presented in tablets 33 and 34 of the Diagnostic Handbook subseries, with the rubric *ana marṣi ina ṭehêka*.

[41]An alternative designation is *rihūt Šulpa'ea*, 'Spawn of Šulpa'ea,' mentioned in STT 89 but probably a synonym of *bennu* 'epilepsy', see Geller 2014: 80.

[42]The association of 'lord of the roof' with epilepsy is also known in Aramaic and Syriac, treated in convincing detail in Kwasman 2006.

[43]Although Hand of Sīn does not appear per se in STT 300, the 'hand of a god'-disease appears together with *antašubbû*, *bennu*, and ᵈLUGAL.GÌR.RA (STT 300 l. 15, see Geller 2014: 48).

[44]Cf. Stol 1993: 91, referring to a Middle Babylon witness to the *ana marṣi ina ṭehêka* Series from the late 2nd millennium BCE.

lesions, known as *simmu*[45], which is described as originating in primordial times, in concert with other incantations (duplicated within the medical corpus) explaining a similar idea (Collins 1999: 233-259). It is difficult to assess these incantations when they appear as individual compositions and are also reproduced within medical prescriptions: were they conceived and promoted by an *āšipu*-exorcist or an *asû*-physician? This will not be an easy question to answer. What is clear is that many of the incantations, such as the one just cited, which were also reproduced within medical compendia, were already known from Old Babylonian period copies from the 2nd millennium BCE, which suggests that they were quoted and adapted by whoever composed the medical texts. These incantations do not generally refer to 'hands' of gods or ghosts or demons, but to technical disease names, such as *girgiššu* or *epqēnu* or *šagbānu* or many others, most of which we cannot identify (see Collins 1999: 279-304, categorising these as 'various diseases'), and the incantations try to establish the origins of these diseases within the natural environment. It is difficult to establish what the original purpose of these incantations were when originally composed, or why they became incorporated into medical texts a millennium later, assuming that they had maintained their popularity during this long intervening period. It may be that these medical incantations, with their reliance upon technical disease vocabulary, represented a dissenting voice within approaches to healing, which departed from the more standard bilingual incantations and the focus on gods intervening with the health of mankind.

In the case of BAM 580, the general contents of the text is not typical of other types of medical prescriptions, although like others it includes symptoms and drugs; both symptoms and drugs tend to be unduplicated in other parts of the medical corpus. For instance, one passage merits scrutiny within the context of the present discussion.

BAM 580 col. iii 1'-5'

> 'Who are you?' is its name; the Hand of Ningeštinanna .... If it is]
> the Hand of N.: you should not make a prognosis (*qība lā tašakkan*). If (it is) a *lesion* and
> [...blood] flows, he will die. You should not make a prognosis. If it is a lesion [.....]

[45]The translation of *simmu* as 'wound' or 'lesion' is technically correct but not entirely satisfactory, since the Sum. logogram governing this term is GIG, a general notation of pathology corresponding to Akk. *murṣu*. The idea may be that *simmu* refers to a skin lesion as an indication of internal disease, as well as describing a superficial sore or wound.

> you can make a prognosis for his recovery: to remove it, *haltappānu*, leaf of [...]
> bray these 2 drugs together, [mix them in ...] in the fat of sheep kidney,
> you decoct in a copper vessel, you spread it on *steppe*-leather, he will get better[46].

As in the diagnostic text above, the expression 'to make (or not to make) a prognosis' is normally the prerogative and job of the *āšipu*-exorcist rather than *asû*-physician, which is somewhat surprising in this context, a medical prescription. The expression *qība šakānu* 'to make a prognosis,' also occurs in *sagallu*-texts dealing with foot-disease, which may not be coincidental, since many of these texts consist predominantly of incantations rather than recipes. The contents of BAM 580 and CTN 116 is mainly devoted to *simmu*-lesions, which offers rather unusual treatments to be applied externally as bandages (such as the use of goat and ox blood, etc.). The phrase also occurs exceptionally in the Diagnostic Handbook (Tablet 22, 2-3): 'if weakness regularly occurs with him and his epigastrium bothers him but he is greatly bloated, his illness is 'Hand of Mankind': his figurine has been laid down (in a grave); the exorcist ought not to make a prognosis for his recovery'[47].

These examples of medical texts with uncharacteristic phraseology are not simply deviant manuscripts within a monolithic system of diagnosis and prescriptions, but they represent different opinions and approaches to healing, which rely heavily upon incantations, the prognostic activities of the exorcists[48], and more attention being paid to illnesses associated with witchcraft, indicating fear of aggressive human agency.

The final question among this data is who controls the narrative? In later periods of medicine, during the Middle Ages, medicine was dominated by what Roger French (2003) referred to as 'rational and learned scholars', who controlled knowledge of medicine as well as its applications. They

[46] [*attama*]*nnu šumšu qāt* ^{d}*ningeštin*-[*anna ..... šumma*]
^{d}*ningeštin-anna qība lā tašakkan šumma simmu* [.....
illak imât qība lā tašakkan šumma simmu [.....
ana balāṭišu qība tašakkan ana nasāhišu haltappāna artu x [.....
x *šammī annūti mithariš tasâk ina šaman kallāt immeri ina* [.....
ina takkusi tarabbak ina mašak ṣēri teṭerri iballuṭ

[47] *šumma rimūtu imtanaqqassu rēš libbišu uṣabbassu magal innesil murussu qāt amelūti ṣalmūšu šunūlu mašmaššu ana balāṭišu qība lā išakkan* (cf. Scurlock 2014: 185).

[48] See STT 89 127, *mašmaššūssu teppuš*, 'you should perform its exorcism' (slightly differing from Stol 1993: 93).

competed with less conservative approaches to medicine, which were less reliant upon philosophy but concentrated on effective therapy, and this tension was a continuous feature of pre-modern medicine. Since there were few actual technological advances separating late antique and medieval medicine, in some ways the social patterns are comparable. Pet theories and approaches were widely accepted until challenged by crises, such as epidemics or infectious disease, while technical science was often in competition with conservative religious ideas, which relied heavily upon trust in the divine for healing. When the rational and learned scholars controlled the narrative, their own theories (based on philosophy) tended to dominate medicine.

In the Mesopotamian context, the question of controlling the narrative may be more relevant than usually perceived. Instead of a binary system of *āšipūtu* 'exorcism' and *asûtu* 'medicine', a third discipline may have been influencing approaches to medicine, the office of the *kāšipu* (KA.PIRIG) expert associated with prognosis and diagnosis[49]. This discipline may have been open to new ideas and concepts, influenced by advances in astronomy and astrology, which produced alternative forms of diagnosis and therapy. The picture is still very opaque and difficult to put into sharper focus, but distinguishing between what appear to be standard and deviant prescriptions and observations may point to a much more multifaceted view of Babylonian medicine.

Abbreviations

AM	Asfar Malwaša (Book of the Zodiac)
AMD	Ancient Magic and Divination (Brill)
BAM	Babylonisch-Assyrische Medizin (de Gruyter)
BMS	Babylonian Magic and Sorcery (L. W. King)
STT	The Sultantepe Tablets, published by Gurney, Finkelstein, and Hulin
TUAT	Texte aus der Umwelt des Alten Testaments (Guterslohar Verlag)

[49]The KA.PIRIG is known almost exclusively in colophons of Diagnostic Handbook tablets, but since this title makes little sense, even in Sumerian, we would suggest interpreting it as Akk. *ka-šīpu*(GÌR), as a rhyme with *āšipu*, indicating someone able to use specialist magical knowledge to affect a prognosis and diagnosis.

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