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Some Remarks on Babylonian Pharmacology

Reginald Campbell Thompson's *Dictionary of Assyrian Botany*, published in 1949 eight years after his death, represents the first attempted major study of Mesopotamian texts dealing with plants, although without having available a full text edition of the many lists of medical plants from cuneiform sources. In fact, we still lack an edition of the plant lists, although the late Franz Köcher devoted much of his life to this very enterprise, without completing it. Campbell Thompson's *Dictionary* consisted of comments on extracts from these lists, in which plant names were identified according to arbitrary etymologies and other data rather loosely collected from many different sources, with the final result being virtually unusable for the study of Mesopotamian plant names. The classical study of Semitic plant names remains Immanuel Löw's *Die Flora der Juden* (1924–1934), which has never been superseded, but Löw could not make accurate use of plant names from cuneiform sources. Bearing these difficulties in mind, we can still make use of recent publications to get some idea regarding Babylonian pharmacology – the academic study of medicinal plants, which existed as an academic discipline in Babylonian academies.

The most important of the cuneiform plant lists, a medicinal handbook of plants, has now been edited (Attia and Buisson 2012) and provides a host of useful information about how plants were studied and used. This particular list is organised into two distinct columns, with each column subdivided into three sub-columns; the first sub-column gives the name of the plant listed with other plants (presumably of similar qualities or characteristics), with the second sub-column giving the disease for which the plant could be deemed effective, while sub-column three offered hints to how the plant was administered in recipes. The text opens, for instance, with six plants for “tooth-disease”, all to be applied directly to the affected tooth (Attia and Buisson 2012, 26, 1–6), followed by two plants for a tooth falling out (*ibid.* 8–9) and four other plants for weak teeth (*ibid.* 11–14).¹ These groupings, however, are interrupted by notes on roots of thorny plants, which have to be uprooted during non-daylight hours (lit. “unseen by the Sun-god”) (*ibid.* 7, 10), the first of which is also useful against worms, while the second against teeth falling out. The final entry for plants used in dentistry gives the instructions that they are to be rubbed onto the tooth before eating (*ibid.* 15–16).

The subject matter then shifts dramatically, without any logical transition between themes. A single entry (*ibid.* 17) recommends the sprout of tamarisk to coun-

¹ It is difficult to know from these lists whether these plants each represent a ‘simple’ drug or whether plants listed against the same disease with the same instructions for use might be components of a compound recipe against the disease.

teract the harm of a “hand of a curse/oath” (*qāt māmīti*), which is most likely a metaphoric name for a common disease, known by other technical names elsewhere. The only instruction is that the remedy is to be drunk on the last day of the month, suggesting that this entry may have originated in a ritual rather than purely medical context. Other plants listed on the obverse of the tablet were to be used against a variety of other diseases (according to ancient classifications of disease), such as “stricture of the bladder”, “bile”, bowel-disease, fevers, flatulence, lung-disease, cough, stomach (or liver)-disease, jaundice, rectal disease, etc., with other diseases known only by an Akkadian name but not identifiable in modern pathology. The administration of these various plants is fairly standardised, such as drinking them in wine, beer, or oil (ibid. 24–35), or rubbing the body externally with oil (ibid. 40–52), with the occasional instructions deviating from this pattern, such as the repeated instruction (not seen so often in recipes) for the patient to be given pressed oil on an empty stomach and for his tongue to be seized (to make him vomit), and finally he is given the drug to drink (ibid. 28: 42).

As is often the case, the systematic presentation of data on the obverse of the tablet breaks down on the reverse, much of which is devoted to plants which appear in terrestrial omens known as *Šumma ālu*. In these cases, instead of the plants being associated with diseases or recipes, they are described as either *a-dar* or *a-dir*, “to be feared” or “gloomy”, with the final column listing unfavourable predictions, such as stormy weather, wild animals, disease and plague, etc. (ibid. 29–30). This association between certain aspects of medicine and divination is not entirely coincidental, since Babylonian medical diagnosis consists primarily of diagnostic omens, which are similar in format to *Šumma ālu*-omens. However, diagnosis and therapy are clearly differentiated in Babylonian medicine, and there is little which can explain the conundrum, that most of the reverse of this tablet of the Pharmaceutical Handbook is devoted to omens; there is no established connection between medical recipes and omen literature. It may be that this selection of predictions culled from omens was thought to have some general connection with health and disease, such as predictions that the “flesh of the people is not good” (ibid. 30), but even if this were to be the case, the connection with plants and trees in the first sub-column remains mysterious.

We turn now to another genre of Babylonian pharmacology, which probably developed within the same scholastic circles as the Pharmaceutical Handbook, but with more explanatory material. The text is known as *Šammu šikinšu* (lit. “a plant, its nature”), providing a substantial amount of descriptive material regarding the physical appearance and use of medicinal plants (see Stadhouders 2011 and 2012). This text has a very stylised structure, each entry beginning with the same phrase, “a plant, the nature of which is like (another named plant)”, followed by a brief description of the plant and finally giving the plant’s technical name. The structure is: an unnamed plant, its nature is like plant B, has fruit / leaves / milky sap, etc., and it is called plant A. The entry often then proceeds to give useful hints as to

how this plant was to be prepared and administered in medical recipes, with much more detailed information than in the Handbook. Here are two examples, following H. Stadhouders's translation:

1. The plant whose appearance is like (that of) the dog's-tongue plant; *Variant*: The plant whose appearance is like (that of) the *haltappānu*-plant, whose leaves are long, whose fruit is like (that of) Adad's-*qiššu*-gourd, which is tall, whose seed is arranged in threes like the *tubbāqa*-plant – that plant is called *šināzi*-plant; *tubbāqānum*-vegetable is how they call it in Hittite; it is good against the sting of a scorpion. You dry it, pound it, then he shall drink it in beer and he will be cured. (Stadhouders 2012, 12)
2. The plant whose appearance is like that of *urnū*-mint, whose fruit is as dark as (that of) the *ašāgu*-thorn – that plant [is] called myrrh; it is good for the rectum. You insert it in his rectum when still fresh and he will be cured. (Stadhouders 2012, 11)

Often plants are described as being “good” for more than one illness, such as a plant called *ašqulālu* which is good for “shivering fever, inflammation from sun-heat”, as well as for witchcraft (ibid. 5).

One interesting feature of the explanatory *Šammu šikinšu* text are references to plants as being useful against various diseases and conditions described as being the ‘deputy spirit’ of a god (*šēdu šanū*; see Stadhouders 2012, 16–17). This formulation is related to traditional terminology in Babylonian diagnostic omens attributing diseases to the ‘hands’ of various gods and demons, which were probably technical names for diseases. One important (and related) explanatory text known as *Simmu Šikinšu* (lit. “a skin-lesion, its nature”) provides a table of the technical names of skin diseases and symptoms opposite an associated “hand of a god” label, which is frequently found in medical diagnoses (but not often in medical recipes) (see Heeßel 2000, 357–358). In other words, the “hand of a god/demon” label developed over time into a technical term for a specific disease. In a similar way, references to a disease name in explanatory plant lists (*Šammu šikinšu*) as a “deputy spirit” (*šēdu šanū*) fits this pattern; Stadhouders translated this term for “spirit” (*šēdu*) in this phrase as “power”, which effectively removes theology from disease terminology in favour of the technical name of a disease delegating for the god's role in illness. Babylonian scholars were hardly non-believers but in later periods they preferred more precise nosological terms to the more vague theological description of a disease as the ‘hand’ of a god or other supernatural agent.

Finally, explanatory texts such as *Šammu šikinšu* probably originated in the same scribal academies that produced the Pharmaceutical Handbook, but it is difficult to explain why no commentaries on medical texts (using the plant lists) have as yet appeared in the large libraries and archives in Nineveh, Assur, or Nimrud, but are only known from later Babylonian archives (see Frahm 2011, 230).

Bibliography

- Attia, A. and G. Buisson. 2012. "BAM 1 et consorts en transcription". In: *Journal des Médecines Cunéiformes* 19. 22–50
- Frahm, E. 2011. *Babylonian and Assyrian Text Commentaries: Origins of Interpretation*. Münster.
- Heeßel, N. P. 2000. *Babylonisch-assyrische Diagnostik*. Münster.
- Stadhouders, H. 2011. "The Pharmacopoeial Handbook *Šammu šikinšu*". In: *Le Journal des Médecines Cunéiformes* 18. 3–51.
- Stadhouders, H. 2012. "The Pharmacopoeial Handbook *Šammu šikinšu*: A Translation". In: *Le Journal des Médecines Cunéiformes* 19. 1–21.