



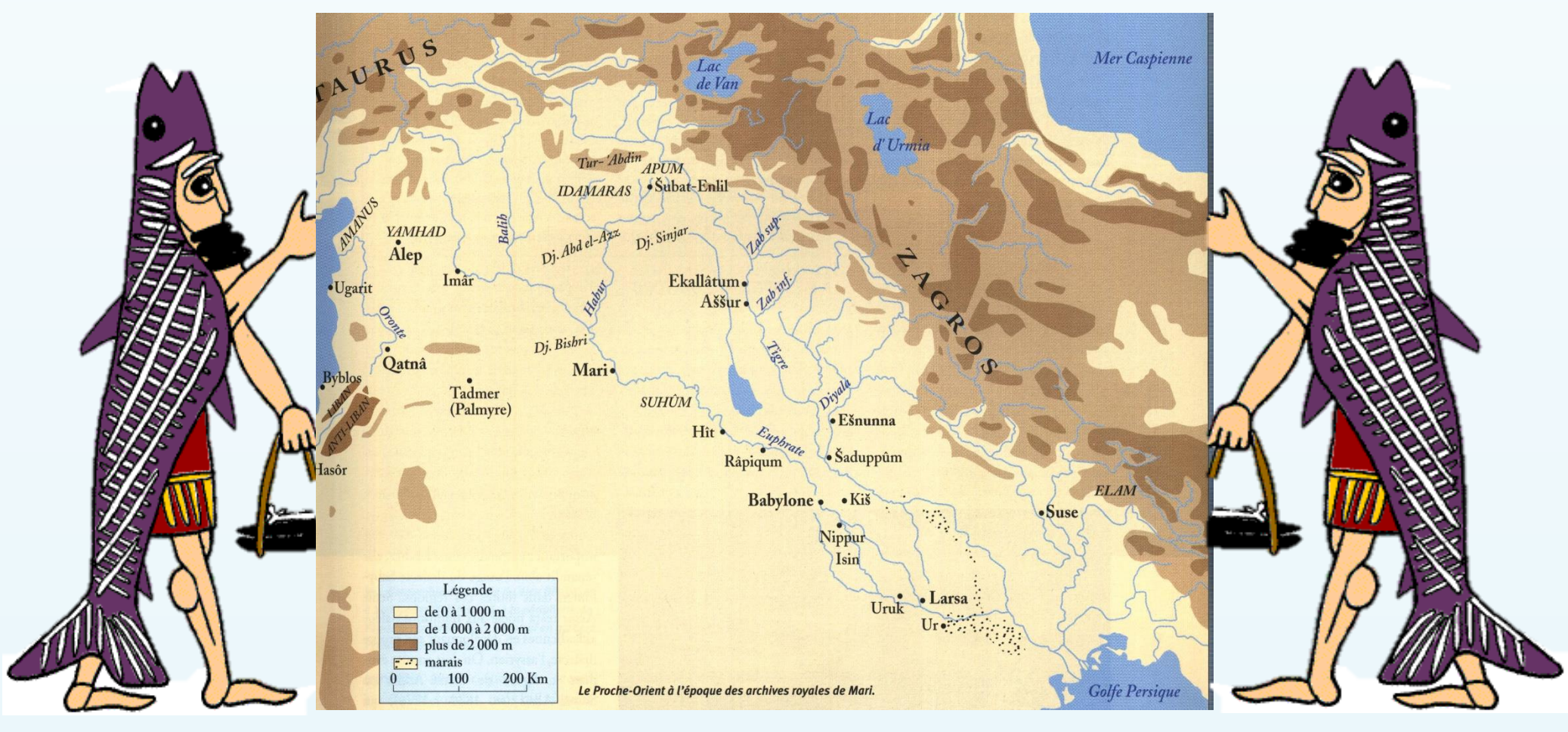
Healing in ancient Mesopotamia - the reliance on aquatic elements in magical-medical practices



Ana Satiro*, Isabel Gomes de Almeida & Cristina Brito
CHAM, NOVA FCSH *aclsatiro@fcsch.unl.pt

Introduction

The ancient Mesopotamian written traditions on healing practices show how animals, plants, and other natural elements were abundantly used as *materia magica* and *materia medica* to cure diverse ailments that affected humans. Given the richness of its aquatic environments, the analysis of the Mesopotamian magical-medical repertoire can thus add to a better understanding on the interrelation between humans and aquatic elements, for this ancient Asian context.



West Asia map, centered on the Mesopotamian territory. Louvre Museum.

By combining our specific backgrounds - on Ancient History, History of Religions and Environmental Humanities – we have been surveying the Mesopotamian healing texts, namely the ones dated from the mid-2nd to the early 1st millennia BC, to discern the possible connections between the symbolic values attributed to aquatic animals and their biological characteristics (Satiro, Almeida & Brito 2024)

One of our main goals is to change the analytical focus from the patients/healing specialists' axis, to another one where it is highlighted the protagonism of the natural elements used in the necessary therapeutics.



Detail of the *Conjuration Plaque*, c. 9th-7th centuries BCE, Louvre Museum (22205). The *apkallu* are depicted with a fish cloak. These divine figures were sages who helped humanity in different matters, including the health sphere.

Aquatic Animals as *materia magica*

Ancient societies often used animals to absorb and repel harmful elements in addition to sacrificial rituals. This practice involved the idea that a surrogate could assume a human's identity, acting as a repository for various ailments and ominous messages.

Namburbi is a complex Mesopotamian ritual related to this practice and where the clear use of amphibians in this role is attested. As shown below, a frog should be removed from the vicinity of human houses as it was understood as menacing. Hence, on the riverbank, offerings, libations, and fumigation were carried out to cancel out the negative omen the frog conveyed:

"[Namburb]i incantation **that the evil frog** [...] **no[ft approach t]o the man and his house** [Its ritual:] you [...] **in the bank of the river, [you set up] the ritual** arrangement in front of [Shamas and Assalluhi...] you make an offering, [bring near] shoulder flesh, fatty tissue [...]" (LKA 118, obv. 1–13; Bácskay 2018a: 2)

Aquatic Animals as *materia medica*

1. Amphibians



On the left, a marsh frog, and on the right an eastern green toad. Probably the Akkadian terms *muša irānu* and *dalīlu*, respectively, which refer to these amphibians on the data surveyed (Dittrich and Götting-Martin 2021: 108–9)

In Mesopotamian pharmacology, frogs were used whole or in parts (bile or fat) to treat a wide range of health issues, from dental to respiratory problems, from hair loss to sexual potency.

Though it is impossible to affirm that ancient Mesopotamian healing specialists clearly identified or even established a link between the substances produced by frogs and their benefits for human health, something clearly attested by present-day scientific experiences (Xu and Lai 2015), one can argue that the extensive use of these amphibians surpassed the symbolic liminal meanings they conveyed throughout time.



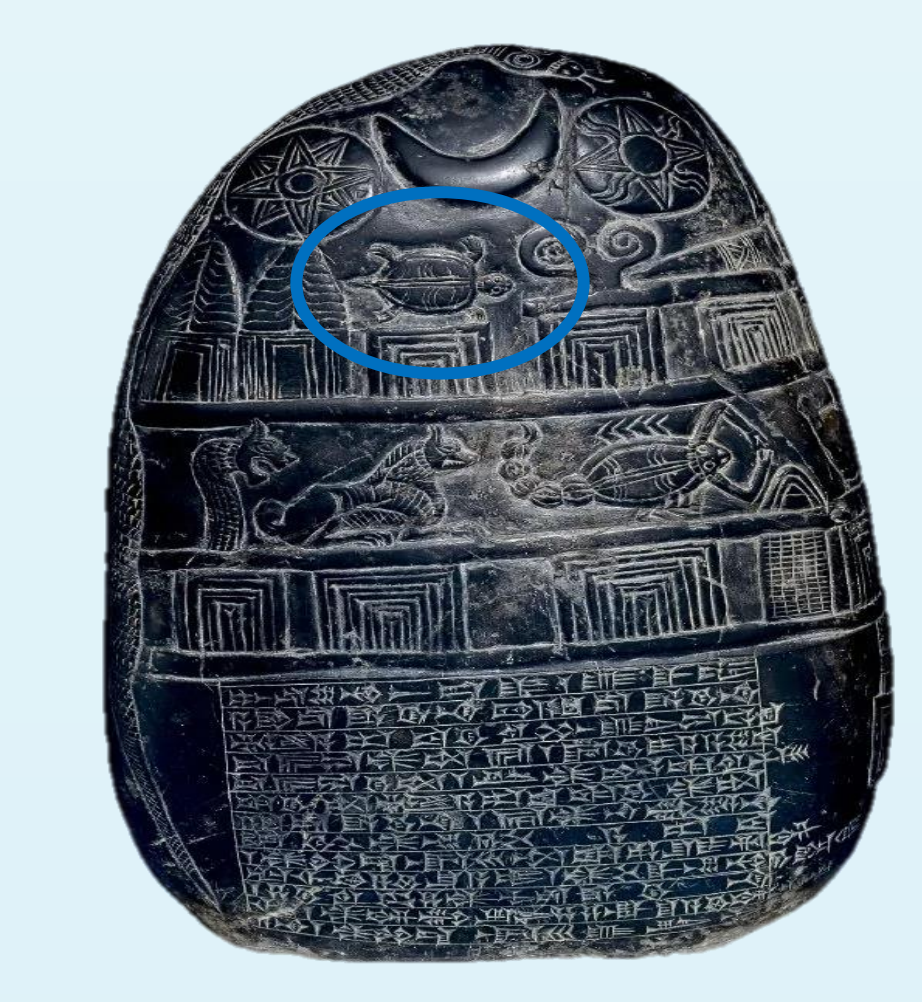
Modern impression of cylinder seal depicting a healing scene, c. 9th-7th centuries BCE, Metropolitan Museum of Art.

2. Fishes

Despite it is almost impossible to identify the specific species, fishes seem to have been abundantly used by Mesopotamian as *materia medica*. For instance, its meat should be included in the special diet for patients complaining of **DŪR.GIG**, a chronic digestive condition possibly corresponding to ulcerative colitis (Scurlock and Andersen 2005: 150–53).

Another common example was the use of fish oil for bandages to treat several conditions, including the dreadful *saḥaršubbû*, a highly infectious skin disease very much like leprosy. In this case, and as the therapeutical data shows:

"(...) (If there is) red and black (*saḥaršubbû*) on his body, **for seven days you repeatedly bind on snake oil, fish oil**, hot "human (fat)" from a grave (and) fat of a large snake (hunting) gecko". (Tsukimoto 1999: 199–200)



Detail of a turtle on a Babylonian limestone *kudurrû*, c. 1125-1100 BCE, British Museum (BM 102485). The references on Mesopotamian data probably refer to *Rafetus euphraticus*, *Mauremys caspica* or *Testudo graeca Ibera*, three freshwater species (Berthon et al. 2016).

Again, it is impossible to discern if ancient Mesopotamians fully grasped the benefits of fish that modern scientific studies have long showed, like its high levels of protein and essential nutrients as well as the multilayered consequences of their Omega-3 fatty acids (Reis and Hibbeln 2006). Yet, the basilar importance fish held in magical-medical *compendia* clearly indicated that some level of knowledge about its properties was identified, verified and, ultimately, amply used on a daily basis.

3. Chelonians

Archaeological data points to accidental catches of these animals probably due to their rather small size and, as such, their minor role in the human diet. However, by symbolically gathering the meanings of eternity, strength, endurance and intelligence, they are well attested in several material, iconographic a textual data. In fact, the Akkadian terms *raqqu* or *šeleppû* appear in healing texts, attesting the use of their shell and meat:

"(...) If he **eats the head of a turtle, he will have no gray hair**". (BAM 318, col. iii, ls. 19–29, Ermidoro 2014: 84)

Conclusions

Within the Mesopotamian healing practices, animals served as both ingredients and symbolic substitutes for human patients, believed to absorb and nullify their illnesses. Simultaneously, their biological traits and behaviors often linked them to specific diseases and treatments, such as scaly fish for skin issues, turtles' meat for age-related conditions, and frogs for enhancing sexual performance. Although the present-day scientific understanding of these practices is still open to debate, it is likely that Mesopotamian healers recognized some of these animals' biological properties, enhancing their therapeutic value. As such, this line of research applied to ancient contexts, like the Mesopotamian one, affirms itself as highly stimulating and as a source of new and exciting results on the interrelations between human and the natural elements of their shared environment, over time.

References

Bácskay, A. 2018. Seize a Frog! The Use of the Frog in Medical and Magical Texts. *Le Journal des Médecines Cuneiformes* 32: 1–23.
Berthon et al. 2016. Buried with Turtles: The Symbolic Role of the Euphrates Soft-Shell Turtle (*Rafetus euphraticus*) in Mesopotamia. *Antiquity* 90: 111–25.
Dittrich, C.; E. Götting-Martin. 2021. 'Green Frog in the Water'. A Herpetological Approach to the Magico-Medical Use of Frogs and Frog-Amulets in Mesopotamia. In *Bridging the Gap: Disciplines, Times, and Spaces in Dialogue ...* C. W. Hess; F. Manuelli (eds.), 97–113. Oxford: Archaeopress Publishing Limited.
Ermidoro, S. 2014. Food Prohibition and Dietary Regulations in Ancient Mesopotamia. *Aula Orientalis* 32: 79–91
Reis, L. C.; J. Hibbeln. 2006. Cultural Symbolism of Fish and the Psychotropic Properties of Omega-3 Fatty Acids. *Prostaglandins, Leukotrienes and Essential Fatty Acids* 75: 227–36.
Satiro, A.; I.G. Almeida; C. Brito. 2024. The Importance of Aquatic Fauna on Ancient Mesopotamian Healing Practices – An Environmental Humanities Approach to Homan depend on Non-Human World. *Humanities* 13, 25.
Scurlock, J.; B. Andersen. 2005. *Diagnoses in Assyrian and Babylonian Medicine: Ancient Sources, Translations, and Modern Medical Analyses*. Chicago: University of Illinois Press.
Tsukimoto, A. 1999. By the Hand of Madi-Dagan, the Scribe and Apkallu-priest—A Medical Text from the Middle Euphrates Region. In *Priests and officials in the ancient Near East...* K. Watanabe (ed.), 187–200. Heidelberg: Winter.
Xu, X.; R. Lai. 2015. The Chemistry and Biological Activities of Peptides from Amphibian Skin Secretions. *Chemical Reviews* 115: 1760–846.