McDONALD INSTITUTE CONVERSATIONS

Fierce lions, angry mice and fat-tailed sheep

Animal encounters in the ancient Near East

Edited by Laerke Recht & Christina Tsouparopoulou

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with contributions from
Francesca Alhaique, Troels Pank Arbøll, Laura Battini, Malwina Brachmańska, Franco D'Agostino, Anne Devillers, Hekmat Dirbas, Neil Erskine, Marina Fadum, Jill Goulder, Haskel J. Greenfield, Tina L. Greenfield, Ben Greet, Carina Gruber, Tuna Kalaycı, Michael Kozuh, Aren M. Maeir, Timothy Matney, Alice Mouton, Seraina Nett, Olga V. Popova, Louise Quillien, Laerke Recht, Licia Romano, Jon Ross, Szilvia Sövegjártó, Christina Tsouparopoulou, Lorenzo Verderame, Andréa Vilela, John Wainwright & Chikako E. Watanabe

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Abbreviations and sigla

ABL	Harper, R.F., 1892–1914. *Assyrian and Babylonian Letters Belonging to the Kouyunjik Collection of the British Museum*, 14 volumes. Chicago: University of Chicago Press.
AHw	von Soden, W., 1959-1981. *Akkadisches Handwörterbuch*. Wiesbaden.
AKA I	Wallis Budge, E.A. & L.W. King, 1902. *Annals of the Kings of Assyria: The Cuneiform Texts with Translations and Transliterations from the Original Documents in the British Museum*. Vol. I. London: The Trustees of the British Museum.
AMT	Campbell Thompson, R., 1923. *Assyrian Medical Texts.* Milford, Oxford: Oxford University Press.
AnOr 8	Pohl, A., 1933. *Neubabylonische Rechtsurkunden aus den Berliner staatlichen Museen.* (Analecta Orientalia 8.) Rome: Pontificium Institutum Biblicum.
AO	Siglum of objects in the Louvre Museum, Paris (Archéologie Orientale).
ARM 2	Jean, Ch.-F., 1950. *Lettres diverses.* (Archives royales de Mari 2.) Paris: Lib. Paul Geuthner.
ARM 9	Birot, M., 1958. *Textes administratifs de la Salle 5 du Palais*. (Archives royales de Mari 9.) Paris: Lib. Paul Geuthner.
ARM 10	Dossin, G., 1978. *Correspondance feminine*. (Archives royales de Mari 10.) Paris: Lib. Paul Geuthner.
ARM 14	Birot, M., 1974. *Lettres de Yaqqim-Addu, gouverneur de Sagarâtum*. (Archives royales de Mari 14.) Paris: Lib. Paul Geuthner.
ARM 15	Bottero, J. & A. Finet, 1954. *Repertoire analytique des tomes I à V.* (Archives royales de Mari 15.) Paris: Lib. Paul Geuthner.
ARM 26	Durand, J.-M. *et al*., 1988. *Archives épistolaires de Mari.* (Archives royales de Mari 26.) Paris: Lib. Paul Geuthner.
ARM 27	Birot, M., 1993. *Correspondance des gouverneurs de Qaṭṭunân*. (Archives royales de Mari 27.) Paris: Lib. Paul Geuthner.
ARM 28	Kupper, J.-R., 1998. *Lettres royales du temps de Zimri-Lim*. (Archives royales de Mari 28.) Paris: Lib. Paul Geuthner.
ARM 30	Durand, J.-M., 2009. *La nomenclature des habits et des textiles dans les textes de Mari*. (Archives royales de Mari 30.) Paris: Lib. Paul Geuthner.
AUCT 1	Sigrist, M., 1984. *Neo-Sumerian Account Texts in the Horn Archaeological Museum.* (Andrews University Cuneiform Texts 1.) Berrien Springs: Andrews University Press.
BabMed	Babylonian Medicine online [no year]: 'Corpora', https://www.geschkult.fu-berlin.de/e/babmed/Corpora/index.html
BAM	Köcher, F., 1963–1980. *Die babylonisch-assyrische Medizin in Texten und Untersuchungen*, 6 Vols. Berlin: De Gruyter.
BCT 1	Watson, P.J., 1986. *Neo-Sumerian Texts from Drehem*. (Catalogue of Cuneiform Tablets in Birmingham City Museum I.) Warminster: Aris & Phillips.
BIN 1	Keiser, C.E., 1917. *Letters and Contracts from Erech Written in the Neo-Babylonian Period*. (Babylonian Inscriptions in the Collection of James B. Nies, vol. 1.) New Haven: Yale University Press.
BIN 3	Keiser, C.E., 1971. *Neo-Sumerian Account Texts from Drehem.* (Babylonian Inscriptions in the Collection of B.J. Nies, vol. 3.) New Haven: Yale University Press.
BM	Siglum for objects in the British Museum, London.
BPOA	Biblioteca del Proximo Oriente Antiguo (Madrid: Consejo Superior de Investigaciones Científicas, 2006ff.)
BPOA 6	Sigrist, M., & T. Ozaki, 2009a. *Neo-Sumerian Administrative Tablets from the Yale Babylonian Collection. Part One* (Biblioteca del Próximo Oriente Antiguo 6.) Madrid: Consejo Superior de Investigaciones Científicas.
BPOA 7	Sigrist, M., & T. Ozaki, 2009b. *Neo-Sumerian Administrative Tablets from the Yale Babylonian Collection. Part Two* (Biblioteca del Próximo Oriente Antiguo 7.) Madrid: Consejo Superior de Investigaciones Científicas.
BRM 1	Clay, A.T., 1912. *Babylonian Business Transactions of the First Millennium B.C.* (Babylonian Records

in the Library of J. Pierpont Morgan, Part 1.) New York: Privately printed.

CAD *The Assyrian Dictionary of the Oriental Institute of the University of Chicago.* Chicago: The Oriental Institute, 1956–2010.

CBS Siglum for objects in the University Museum in Philadelphia (Catalogue of the Babylonian Section).

CDLI Cuneiform Digital Library Initiative, https://cdli.ucla.edu

CHD Goedegebuure, P.M., H.G. Güterbock, H.A. Hoffner & T.P.J. van den Hout (eds.), 1980–. *The Hittite Dictionary of the Oriental Institute of the University of Chicago*. Chicago: The Oriental Institute.

CM 26 Sharlach, T.M., 2004. *Provincial Taxation and the Ur III State.* (Cuneiform Monographs 26.) Leiden: Brill.

CT 22 Campbell Thompson, R., 1906. *Cuneiform Texts from Babylonian Tablets in British Museum*, vol. 22. London: British Museum.

CT 32 King, L.W., 1912. *Cuneiform Texts from Babylonian Tablets in British Museum*, vol. 32. London: British Museum.

CT 55 Pinches, T.G. 1982. *Cuneiform Texts from Babylonian Tablets in the British Museum Part 55. Neo-Babylonian and Achaemenid Economic Texts*. London: British Museum Publications.

CTH Laroche, E. 1971. *Catalogue des Textes Hittites*. Paris: Klincksieck.

DAS Lafont, B., 1985. *Documents Administratifs Sumériens, provenant du site de Tello et conservés au Musée du Louvre*. Paris: Editions Recherche sur les Civilisations.

DMMA Siglum for objects in the Département des Monnaies, médailles et antiques de la Bibliothèque nationale de France.

DUL Del Olmo Lete, G. & J. Sanmartín, 2015. *A Dictionary of the Ugaritic Language in the Alphabetic Tradition*. Translated and edited by W.G.E. Watson. Third revised edition. 2 vols. (Handbuch der Orientalistik 112.) Leiden: Brill.

EA Siglum for the Tell El-Amarna Letters, following the edition of Knudtzon, J. A., 1915. *Die El-Amarna-Tafeln.* Leipzig: J.C. Hinrichs'sche Buchhandlung.

ePSD Electronic version of *The Pennsylvania Sumerian Dictionary*, http://psd.museum.upenn.edu

ETCSL Black, J.A., G. Cunningham, J. Ebeling, E. Flückiger-Hawker, E. Robson, J. Taylor & G. Zólyomi (eds.), 1998–2006. *The Electronic Text Corpus of Sumerian Literature.* Oxford, http://etcsl.orinst.ox.ac.uk/

FM 2 Charpin, D. & J.-M. Durand (ed.), 1994. *Recueil d'études à la mémoire de Maurice Birot*. (Florilegium Marianum II.) Paris: Société pour l'étude du Proche-Orient ancien.

Hh *The Series HAR-ra='hubullu'*, Materials for the Sumerian lexicon (MSL), 5, 6, 7, 9, 10 & 11. Rome: Pontificium Institutum Biblicum, 1957–.

HSS 14 Lacheman, E.R., 1950. *Excavations at Nuzi V. Miscellaneous Texts from Nuzi, Part 2, The Palace and Temple Archives.* (Harvard Semitic Studies 14.) Cambridge (Mass.): Harvard Univ. Press.

HW² Friedrich, J. & A. Kammenhuber (eds.), 1975–. *Hethitisches Wörterbuch. Zweite, völlig neubearbeitete Auflage auf der Grundlage der edierten hethitischen Texte*. Heidelberg: Winter.

IB Siglum for finds from Isin (Isan Bahriyat).

IM Siglum for objects in the Iraq Museum, Baghdad.

ITT 5 de Genouillac, H., 1921. *Inventaire des Tablettes de Tello conservées au Musée Imperial Ottoman. Tome V. Époque présargonique, Époque d'Agadé, Epoque d'Ur III*. Paris: Édition Ernest Leroux.

KAH 2 Schroeder, O. 1922. *Keilschrifttexte aus Assur historischen Inhalts, Heft II*. (Wissenschaftliche Veroffentlichungen der Deutschen Orient-Gesellschaft 37.) Leipzig: J.C. Hinrichs'sche Buchhandlung.

KBo *Keilschrifttexte aus Boghazköi* (Bd. 1-22 in Wissenschaftliche Veroffentlichungen der Deutschen Orient-Gesellschaft) Leipzig/Berlin, 1916 ff.

KRI Kitchen, K.A., 1969–1990. *Ramesside Inscriptions. Historical and Biographical,* 8 vols. Oxford: Blackwell.

KUB *Keilschrifturkunden aus Boghazköi*, Berlin 1921 ff.

LAPO 16 Durand, J.-M., 1997. *Les Documents épistolaires du palais de Mari, tome I.* (Littératures anciennes du Proche-Orient 16.) Paris: Éditions du cerf.

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LD Lepsius, C.R., 1849–59. *Denkmäler aus Aegypten und Aethiopen* (plates), 6 vols. Berlin: Nicolaische Buchhandlung.

LKU Falkenstein, A., 1931. *Literarische Keilschrifttexte aus Uruk.* Berlin: Berlin Staatliche Museen zu Berlin Vorderasiatische Abteilung.

M Siglum for texts from Mari.

Moore, Mich. Coll.
Moore, E., 1939. *Neo-Babylonian Documents in the University of Michigan Collection*. Ann Arbor: University of Michigan Press.

MSL VIII/I Landsberger, B., 1960. *The Fauna of Ancient Mesopotamia. First Part: Tablet XIII.* (Materialien zum Sumerischen Lexikon VIII/1.) Rome: Pontificium Institutum Biblicum. [with the assistance of A. Draffkorn Kilmer & E.I. Gordon].

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MVN 11 Owen, D.I., 1982. *Selected Ur III Texts from the Harvard Semitic Museum*. (Materiali per il Vocabolario Neosumerico 11.) Rome: Multigrafica Editrice.

MZ Siglum for finds from Tell Mozan.

NBC Siglum for tablets in the Nies Babylonian Collection of the Yale Babylonian Collection.

NCBT Siglum for tablets in the Newell Collection of Babylonian Tablets, now Yale University, New Haven.

OIP 99 Biggs, R.D., 1974. *Inscriptions from Tell Abu Salabikh*. (Oriental Institute Publications 99.) Chicago: The University of Chicago Press.

OIP 115 Hilgert, M., 1998. *Cuneiform Texts from the Ur III Period in the Oriental Institute, Vol. 1: Drehem Administrative Documents from the Reign of Šulgi.* (Oriental Institute Publications 115.) Chicago: The Oriental Institute.

OIP 121 Hilgert, M., 1998. *Cuneiform Texts from the Ur III Period in the Oriental Institute, Volume 2: Drehem Administrative Documents from the Reign of Amar-Suena*. (Oriental Institute Publications 121.) Chicago: The Oriental Institute.

P CDLI (Cuneiform Digital Library Initiative) number.

PDT 1 Çig, M., H. Kizilyay & A. Salonen, 1956. *Die Puzris-Dagan-Texte der Istanbuler Archäologischen Museen Teil 1: Texts Nrr. 1-725.* (Academia Scientiarum Fennica Annales, série B, tome 92.) Helsinki: Academia Scientiarum Fennica.

PKG 18 Orthmann, W., 1985. *Der alte Orient*. (Propyläen Kunstgeschichte 18.) Berlin: Propyläen Verlag.

PTS Siglum for unpublished texts in the Princeton Theological Seminary.

RGTC *Répertoire géographique des textes cunéiformes*. (Beihefte zum Tübinger Atlas des Vorderen Orients, Reihe B.) Wiesbaden: Reichert, 1974–.

RIMA 2 Grayson, A.K., 1991. *Assyrian Rulers of the Early First Millennium BC I (1114–859 BC).* (The Royal Inscriptions of Mesopotamia, Assyrian Periods Vol. 2.) Toronto, Buffalo & London: University of Toronto Press.

RIME 1 Frayne, D., 2008. *Presargonic Period (2700–2350 BC).* (The Royal Inscriptions of Mesopotamia, Early Periods Vol. 1.) Toronto: University of Toronto Press.

RIME 4 Frayne, D., 1990. *Old Babylonian Period (2003–1595 BC)*. (The Royal Inscriptions of Mesopotamia, Early Periods Vol. 4.) Toronto: University of Toronto Press.

RINAP The Royal Inscriptions of the Neo-Assyrian Period; Open Richly Annotated Cuneiform Corpus, available at http://oracc.museum.upenn.edu/rinap/index.html

RLA *Reallexikon der Assyriologie und vorderasiatischen Archaologie.*

RS Siglum for documents from Ras Shamra (Ugarit).

SAA 2 Parpola, S. & K. Watanabe, 1988. *Neo-Assyrian Treaties and Loyalty Oaths.* (State Archives of Assyria 2.) Helsinki: Helsinki University Press.

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SAA 12 Kataja, K. & R. Whiting, 1995. *Grants, Decrees and Gifts of the Neo-Assyrian Period.* (State Archives of Assyria 12.) Helsinki: Helsinki University Press.

SAA 13 Cole, S.W. & P. Machinist, 1998. *Letters from Assyrian and Babylonian Priests to Kings Esarhaddon and Assurbanipal*. (State Archives of Assyria 13.) Helsinki: Helsinki University Press.

SAA 17 Dietrich, M., 2003. *The Neo-Babylonian Correspondence of Sargon and Sennacherib*. (State Archives of Assyria 17.) Helsinki: Helsinki University Press.

SAA 19 Luukko, M. 2012. *The Correspondence of Tiglath-pileser III and Sargon II*. (State Archives of Assyria 19.) Helsinki: The Neo-Assyrian Text Corpus Project.

SAA 20 Parpola, S. 2017. *Assyrian Royal Rituals and Cultic Texts*. (State Archives of Assyria 20.) Helsinki: The Neo-Assyrian Text Corpus Project.

SAT 2 Sigrist, M., 2000. *Sumerian Archival Texts. Texts from the Yale Babylonian Collection 2*. Bethesda: CDL Press.

SF Deimel, A., 1923. *Schultexte aus Fara*. (Wissenschaftliche Veröffentlichung der Deutschen Orientgesellschaft 43.) Leipzig: J.C. Hinrichs'sche Buchhandlung.

SP Alster, B., 1997. *Proverbs of Ancient Sumer*. Bethesda: CDL Press.

TCL 12 Conteneau, G., 1927. *Contrats Néo-Babyloniens I, de Téglath-Phalasar III à Nabonide*. (Textes cunéiformes, Musées du Louvre 12.) Paris: P. Geuthner.

TCL 13 Contenau, G., 1929. *Contrats néo-babyloniens II. Achéménides et Séleucides.* (Textes cunéiformes, Musées du Louvre 13.) Paris: P. Geuthner.

TRU Legrain, L., 1912. *Le temps des rois d'Ur: recherches sur la société antique d'après des textes nouveaux*. (Bibliothèque de l'École des Hautes Études 199.) Paris: H. Champion.

TU Thureau-Dangin, F., 1922. *Tablettes d'Uruk à l'usage des prêtres du Temple d'Anu au temps des Séleucides.* (Musée du Louvre. Département des antiquités orientales. Textes cunéiformes.) Paris: P. Geuthner.

U. Siglum for finds from Ur.

UCP 9/1,I Lutz, H.F., 1927. *Neo-Babylonian Administrative Documents from Erech: Part I.* (University of California Publications in Semitic Philology Vol. 9 no. 1/I.) Berkeley (CA): University of California Press.

UCP 9/1,II Lutz, H.F., 1927. *Neo-Babylonian Administrative Documents from Erech: Part II*. (University of California Publications in Semitic Philology Vol. 9 no. 1/II.) Berkeley (CA): University of California Press.

UDT Nies, J.B., 1920. *Ur Dynasty Tablets: Texts Chiefly from Tello and Drehem Written during the Reigns of Dungi, Bur-Sin, Gimil-Sin and Ibi-Sin*. Leipzig: J.C. Hinrichs'sche Buchhandlung.

VA Siglum for objects in the Vorderasiatisches Museum, Berlin (Vorderasiatische Abteilung).

VAT Siglum for objects/tablets in the Vorderasiatisches Museum, Berlin (Vorderasiatische Abteilung. Tontafeln).

VS 1 Ungnad, A. & L. Messerschmidt, 1907. *Vorderasiatische Schriftdenkmäler der Königlichen Museen zu Berlin*. Vol. 1, Texts 1–115, Königliche Museen zu Berlin. Sammlung der Vorderasiatischen Altertümer. Leipzig: J.C. Hinrichs'sche Buchhandlung.

VS 16 Schröder, O., 1917. *Altbabylonische Briefe*. (Vorderasiatische Schriftdenkmäler der königlichen Museen zu Berlin 16.) Leipzig: J.C. Hinrichs'sche Buchhandlung.

VS 17 van Dijk, J. 1971. *Nicht-kanonische Beschwörungen und sonstige literarische Texte*. (Vorderasiatische Schriftdenkmäler der Königlichen Museen zu Berlin 17.) Berlin: Akademie Verlag.

WB Erman, A. & H. Grapow (eds.), 1971. *Wörterbuch der ägyptischen Sprache,* 5 vols. Berlin: Akademie Verlag.

WMAH Sauren, H., 1969. *Wirtschaftsurkunden aus der Zeit der III. Dynastie von Ur im Besitz des Musée d'Art et d'Histoire in Genf*. Naples: Istituto orientale di Napoli.

YBC Siglum for tablets in the Yale Babylonian Collection.

YOS 7 Tremayne, A., 1925. *Records from Erech, Time of Cyrus and Cambyses (538-521 B.C.)*. (Yale Oriental Series, Babylonian Texts, vol. 7.) New Haven: Yale University Press.

YOS 8 Faust, D.E., 1941. *Contracts from Larsa, dated in the Reign of Rim-Sin*. (Yale Oriental Series, Babylonian Texts, vol. 8.) New Haven: Yale University Press & London: H. Milford, Oxford University Press.

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YOS 17 Weisberg, D.B., 1980. *Texts from the Time of Nebuchadnezzar*. (Yale Oriental Series, Babylonian Texts, vol. 17.) New Haven: Yale University Press.

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Preface

Augusta McMahon

The chapters in this volume invert traditional approaches to past human-animal relationships, placing animals at the forefront of these interactions and celebrating the many ways in which animals enriched or complicated the lives of the inhabitants of the ancient Near East. The authors embrace insights from text, archaeology, art and landscape studies. The volume offers rich evidence for the concept that 'animals are good to think' (Levi-Strauss 1963), enabling humans in categorizing the world around us, evaluating our own behaviours, and providing analogies for supernatural powers that are beyond humans' control. However, totemism has never fit the ancient Near East well, because most animals had varied and endlessly complicated relationships with their human associates, as these chapters vividly describe. Taboos on eating or handling animals ebbed and flowed, and the same animal could have both positive and negative associations in omen texts. Animals were good (or bad) to eat, good (or bad) to think, good (or bad) to live with (Kirksey & Helmreich 2010) and good (or bad) to be. Through detailed, theoretically informed and well-supported case studies, this volume moves the study of human-animal-environment interactions forward, presenting animals as embedded actors in culture rather than simply objectified as human resources or symbols.

The chapters in the first section emphasize the agency of animals via their abilities to resolve crises for humans and deities and to shift between animal and human worlds. Animals have paradoxical affects: as metaphors for wilderness and chaos, or as valued companions, helpers, or votive sacrifices. The variety of interactions and assumptions cautions us to treat animals, as we do humans, as individuals. Reconstruction of animals in past rituals has a long history, usually focused on animals associated with the gods and/or animals used in formal religious sacrifice. But the chapters in the second section also examine the impact of lesser-known animals and less formal encounters, e.g., in the landscape or in funeral contexts within the home. The value and meanings of animals could vary with context.

The fascination engendered by hybrid or composite figures is also well represented. The persistence of composite figures in the Near East, from fourth millennium BC human-ibex 'shamans' on northern Mesopotamian Late Chalcolithic seals to *lamassu* and *mušhuššu* of the first millennium BC, suggests that the division and recombination of animal body elements fulfilled a human need to categorize powerful forces and create a cosmological structure. The anthropomorphizing of animals is another facet of the flexibility of animal identifications in the past. The authors here also grapple with the question of whether composite images represent ideas or costumed ritual participants.

The chapters also cover the most basic of animal–human relations, that of herd management, use in labour, and consumption, digging deeply into details of mobility, breeding and emic classifications. Economic aspects of the human-animal relationship are currently being rejuvenated through archaeological science techniques (e.g., isotopes, ZooMS), which give us unparalleled levels of detail on diet, mobility, herd management, and species. Matching these insights from science, the issues raised here include the value of individual animals versus that assigned to species, the challenges of pests, the status ascribed to and reflected by different meat cuts, animals as status and religious symbols, and animals' tertiary products or uses (e.g., transport versus traction, bile). These studies allow a more detailed reconstruction of Near Eastern economy and society, as well as emphasizing the flexibility of the relationships between animals, as well as between human and animal.

The authors implicitly advocate for a posthumanist multispecies ethnography, which incorporates

nonhumans and argues for equal care to be given to nonhumans in the realms of shared landscapes, violence, labour and especially ecology (Kirksey & Helmreich 2010; Kopnina 2017; Parathian *et al*. 2018). This approach advocates for nonhumans' agency in creating shared worlds, in contrast to the traditional approach to animals as symbols or resources in the service of humans. Going forward, the challenge will be to convert the acknowledgement of equal cultural contribution into support for nonhuman species to speak for themselves; this shift from passive subject of research inquiry to genuine active agency in academic writing does not have an easy or obvious path, and many nonhuman animals may be overlooked. Indeed, multispecies ethnography ideally seeks to incorporate plants, microbes, stones and more (Ogden *et al*. 2013; Smart 2014), many of which are ephemeral in the archaeological record and all but omitted in ancient texts. However, ancient texts do support a new approach which questions our modern boundaries between species. Our perpetual struggle to translate terms for different species of equids, to distinguish whether a word refers to rats or mice, or to link zooarchaeological remains to lexical lists, reinforces the complexity and flexibility of these concepts, and the futility of attempts at absolute categorization.

The chapters in this volume should inspire colleagues to grapple with animals, nonhumans and contexts that could not be included here. For instance, the snake has as lengthy a history of human engagement in the Near East as does the lion and had similarly unusual powers. While the lion was an icon of strength, the perfect symbol for the proximity of the emotions of awe and fear, the snake has the sneaky ability to slither between worlds, to avoid capture, and to deliver an almost imperceptible lethal injury. Fear of the snake conquers awe. Like the fox, the presence or actions of the snake, as listed in *Šumma ālu*, may be positive or negative omens. The snake was present at key moments in both Mesopotamian and Biblical literature; its actions (stealing the plant of immortality, offering the fruit of the tree of knowledge) changed the fate of humans forever. Whether represented coiled and copulating on Late Chalcolithic seals, grasped by Late Uruk 'Masters of Animals' or first millennium BC *lamaštu*, snakes and their paradoxical nature deserve deep scrutiny. There are many other nonhuman animals deserving of similar problematization and integration, and the eclectic and exciting research stream represented by this volume shows us the way.

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Chapter 16

A new look at eels and their use in Mesopotamian medicine

Troels Pank Arbøll

He who has been bitten by a snake
is afraid of an eel – Danish proverb

The medical prescriptions, magical rituals and pharmacological treatises found in ancient Mesopotamian cuneiform texts contain a wealth of information about ingredients used in healing (Scurlock 2014). The vast majority of prescriptions rely on plant-based materials, which are often difficult to identify today, although substances of animal origin, such as animal fats, are regularly employed (Böck 2009). A few texts even use more obscure animal ingredients (Böck 2011, 696–7). And although some of these odd materials are known to have been coded names for plants (Köcher 1995; see Rumor 2017; Chalendar 2016, 100; Böck 2011, 694; Kinnier Wilson 2005, 48–9), a few nevertheless seem to derive from actual animals. One such is the fish called *kuppû* in Akkadian. As noticed in previous studies, this fish was likely an eel and its bile could be used to treat eye afflictions (von Soden 1966; Böck 2011, 697; Attia 2018, 54–5). Though previous studies have highlighted the medical use of the *kuppû*, the reasoning behind the application of *kuppû*-bile has yet to be explored. Especially in light of recent scholarship, examining the physiological conceptualization of bile (Böck 2014, 122–8), a new evaluation of the function of the *kuppû* in Mesopotamian medicine is merited.

This article analyses the sources for studying the *kuppû* in order to discuss its uses in ancient Mesopotamian medicine. The first section reviews the lexical and magical sources for identifying the *kuppû* as an eel. On the basis of prescriptions utilizing the *kuppû*'s gall(bladder), edited in the Appendix at the end of the chapter, the second section examines the use of the *kuppû*, and particularly its bile, in cuneiform medical prescriptions, especially against eye illnesses. In the third section, it is proposed that the *kuppû* can be identified as the so-called Mesopotamian spiny eel, and that the *kuppû* was illustrated on a number of Neo-Assyrian reliefs. By examining how the ancient Mesopotamians described and classified the fish called *kuppû*, this article identifies conceptual overlaps, which illustrate why ingredients from this eel were considered effective in Mesopotamian magico-medical practices.

Kuppû in cuneiform sources

The designation *kuppû* is mainly known from lexical lists, incantations, and medical prescriptions,[1] although there are few references to this animal in the overall cuneiform records. In the dictionaries, the *kuppû* is described as 'an eel-like fish, a bird' and 'a snake' written either syllabically or with the Sumerogram GÚ.BÍ$^{(ku6)}$ (CAD K, 551–2; *AHw*, 509; Landsberger 1931, 296; Landsberger 1962, 87f; von Soden 1966). Although Landsberger (1962, 87f) also suggested the fish might be identified as a 'gudgeon', the identification of the *kuppû* as an 'eel' remains largely unchallenged for sound reasons explored below (Landsberger 1934, 46, 63; von Soden 1966, 81–2; cf. Böck 2011, 697).

Although the *kuppû* could designate various animals, it was predominantly listed as a fish in different texts, such as the lexical lists Ur$_5$-ra tablet 18 (GÚ.BÍ^{ku6} = *kup-pu-*[*ú*], Landsberger 1962, 96 line 2) and *Nabnītu* (GÚ.BÍ^{ku6} = *ku-up-pu-u* KU$_6$, Finkel 1982, 195 line 134). At Mari during the Old Babylonian period, nine *kuppû*s were caught alongside other fish and mentioned in a brief administrative text (ARM 9, no. 250 obv. 4). In an early second-millennium BC Sumerian literary text, the *kuppû* is described explicitly as an eel: 'A black punting-pole, engendered in the fields' (Civil 1961, 160–1, line 77; ETCSL 2003–2006, lines 78–80: ^{ĝiš}gi-muš gíg a-šag$_4$-ga ri-a). Civil (1961, 170–1) interpreted these statements as referring to the eel-like nature of the *kuppû*, as well as its ability to

move across ground outside of water or a belief that eels were born of dirt in fields. In the Old Babylonian incantation tradition, the so-called 'worm' (*tūltu*), regularly invoked in medicine especially in relation to tooth aches, was connected to 'swamp, marsh' or 'mud' (Veldhuis 1993, 45; CAD R, 432f; Scurlock & Andersen 2005, 420–1 nos. 18.15 and 18.16; Scurlock 2014, 401–2). Furthermore, an Old Babylonian incantation to catch a snake possibly mentions the snake's origin in a 'furrow' (*šerʾu*, YOS 11, no. 19b rev. 20; Wasserman 2010b).

In order to emphasize the eel-like physical aspects of the fish, the *kuppû* was also listed alongside snakes in different incantations (see van Dijk 1957, pl. 13 obv. 6 and pl. 14 obv. 4; Finkel 1999, 226–229 line 4; George 2016, 47 no. 27, 109–111 no. 27a obv. 15, pls. 74–5). For example, one Old Babylonian spell against a snake states: '[I] seized a *kuppû*-eel' (George 2016, 47 no. 27, 109–11 no. 27a obv. 15, pls. 74–5, [*a*] *ṣ-ba-at ku-up-pi-ʾa-am*]). Due to the worm-like nature of the eel, it is natural for it to appear in lists of such creatures. The lexical list Ur_5-ra tablet 14 lists the *kuppû* as a snake (^{muš}GÚ.BÍ, Landsberger 1934, 2–3, 46, 61; Landsberger 1962, 7 line 14; for a possible overlap between snakes and the worm *tūltu*, see Landsberger 1934, 129 n. 1). Note that two types of legless and wormlike lizards exist in various areas of the Middle East, namely the Turkish worm lizard (*Blanus strauchi*) and the slow worm (*Anguis fragilis*). The observation of such animals in semi-wet areas, where eels could also appear, may have confused ancient observers in terms of classification, e.g. fish (KU_6) or snake (MUŠ). Note two similes employed in a Neo-Assyrian incantation for internal ailments: 'He is always flopping around like fish, he is always swollen like a snake' (BAM 574 col. ii 24: *i-ta-na-pa-aṣ ki-ma* KU_6.MEŠ *it-ta-nak-bir ki-ma* MUŠ, Collins 1999, 166–7). However, there is no indication that the *kuppû* should have been venomous. The *kuppû* is also mentioned in a badly damaged line in a cultic commentary with explanations of various animals as taboos for a number of deities (LKU, no. 45 obv. 18'; see Civil 1977, 66–7; Weidner 1959–1960, 108).

Finally, there is slight evidence for the *kuppû* as a bird, although the references are tenuous. A broken Akkadian name for a bird likely called GÚ.BÍ^{mušen} in Sumerian is mentioned in the lexical list Ur_5-ra (Landsberger 1962, 122 line 147, [GÚ].BÍ^{mušen} = […]). Furthermore, this Sumerian bird is mentioned in other texts, although it is likely not identifiable with the Akkadian *kuppû*, but rather *kupītu* (Veldhuis 2004, 138, 247). It is also possible that the word *kuppû* is attested as a name for horses in a few Kassite texts, although the evidence remains unclear (Balkan 1954, 30).

Medical uses of the *kuppû*-eel

Parts of the *kuppû*-eel were used in a number of medical prescriptions primarily from the first millennium BC, as edited in the Appendix. All these treatments prescribe the use of the bile (*martu*, ZÉ) or gallbladder (*martu*/*šīr marti*, (UZU) ZÉ) of the eel; apart from these products, the *kuppû* does not seem to have been used in healing. Bile from various animals is occasionally listed in medical treatments, although the reality of these as ingredients is often questionable.[2] Still, the *kuppû*'s bile appears to be a genuine ingredient (Böck 2011, 697). I have been able to identify ten prescriptions utilizing *kuppû*-eel gall(bladder) as a component, and all but three deal with the patient's eyes.[3] Usage of the *kuppû*'s bile for treating eye illness has been noted previously by, e.g. Wolfram von Soden (1966) and Barbara Böck (2011, 697).

Of the ten relevant treatments, seven administer the *kuppû*'s bile as part of salves applied externally to the eyes. The two terms used for eye salves are *itqūru* and *tēqītu* (see the discussion in the commentary to Prescription 3 obv. 4 and Prescription 5 ms B obv. 6). Only Prescriptions 1 and 7, which may also have targeted different afflictions, prescribe drinking the bile and applying it as a bandage. Prescription 8 is directed against 'Anus-illness', but it also employs a salve, similar to several of the prescriptions against eye ailments. The bile could be administered individually in oil (e.g. Prescription 2) or in combination with plants and other ingredients (e.g. Prescription 5; see von Soden 1966, 81). Especially salt, often specified as *Emesal*-salt, was a key component in several treatments (Prescriptions 2–6; see von Soden 1966, 81). One text states: 'you make the flesh of the *martu* lie in salt' (Prescription 2), whereas two additional treatments prescribe: '*martu* laid in salt' (Prescriptions 4 and 6). The term *martu* (ZÉ) is problematic in this connection, as it can designate both the gallbladder and bile depending on the context (CAD M/1, 297ff; AHw, 614). Thus, it is possible that examples prescribing *martu* of the *kuppû* could refer to its bile or the entire gallbladder. The use of particular verbs for placing the gall(bladder) in salt (*itūlu*, *nâlu*) may indicate that the gallbladder was pickled (see the commentary to Prescription 2 obv. 13').

When a gallbladder was placed in salt, the bile was likely drawn out into the salt through the process of diffusion, similar to drawing venom from a bee sting by placing a sugar cube on it. This approach meant that the green-yellow bile would colour the salt in these colours. Perhaps this was also intended in the other remedies employing *martu* and salt. Alternatively, the bile could simply have been poured into the substance. The remedies were generally used to treat eye illness,

for example watery eyes (Prescriptions 3 and 4). Thus, drawing out the bile from the gallbladder into the dry salt may analogically express how the cure was meant to work, namely to draw out the fluid from the eyes and thereby stop them from watering. Alternatively, one treatment appears to imitate the regulation of water by using parched ingredients (Prescription 3). But why was *kuppû*-eel bile considered an effective component especially in the treatment eye problems?

Bile is a yellow-green fluid derived from the gallbladder with a significant colour and unpleasant smell. In addition to *martu*-bile, medical texts occasionally refer to *pašittu*-bile ('the destroyer'), which was another type of bile related to illness of the epigastrium and abdomen, and it was associated with vomiting (Köcher 1978, 36; see CAD P, 249; Scurlock & Andersen 2005, 137, 522; Böck 2014, 123–4). Due to the human body's symptoms in relation to ailments associated with bile, the fluid was analogically related to illnesses such as jaundice.[4] For example, the eyes were pivotal in diagnosing this illness, since the most visible symptom is typically a discolouration of the eyes with yellow. Thus, the jaundice and bile shared the colour yellow in their physical manifestations. Most important for the understanding of bile, Böck has argued very convincingly that bile was believed to 'cause, regulate or distribute abundant water in the body' (2014, 127). In order to understand the function of the *kuppû*'s bile in Mesopotamian medicine, it is therefore necessary to consider the relationship between the eyes, water and bile.

The eyes were conceived as water sources in Mesopotamian mythological thought, as discussed recently by Panayotov (2017, 211–12). In the Babylonian Creation Myth *Enūma Eliš*, Marduk lets the Euphrates and Tigris flow from each of Tiamat's eyes when shaping the world:

> He (i.e. Marduk) opened the deep and it was sated with water. [55] From her (i.e. Tiāmat's) two eyes, he let the Euphrates and Tigris flow (Lambert 2013, 101–2; see Foster 1996, 379).
> *Enūma Eliš* tablet 5 lines 54–55: *naq-bu up-te-et-ta-a* ⌜A⌝*-ú it-téš-bi* [55] *ip-te-ma i-na* IGI^{II}*-šá pu-r*[*a-at-ta*] ⌜*i*⌝*-di-ig-lat* (for the word *naqbu*, see George 2003, 444–5).

The eyes were therefore conceived as the primary water sources in a Mesopotamian macrocosmic perspective. In the human body, tears were believed to flow from the iris or pupil of the eye, thereby making them analogous water sources (Stol 1993, 107 n. 69 with references; Fincke 2000, 22 n. 144, 223; see also Panayotov 2017, 236). For the current purpose, it is therefore noteworthy that the *kuppû*-eel, and occasionally snakes, were connected to rivers. For example, the *bašmu*-serpent is associated with the river in an incantation published by Cavigneaux (2003, 61–2), and a connection between fish and snake is also underlined in a snake incantation published by George (2016, 47 no. 27, 109–11 no. 27a obv. 7–8, pls. 74–75: 'whose scutes were fish-spawn', *pa-ap-pa-al-li-ib-bi-šu* [8] *a-ga-ar-ga-ru-um*). If we return to *Enūma Eliš*, the conceptualization of Tiāmat's anatomy and physiology also informs us about the role of bile, although in an indirect manner:

> The raging of the winds, violent rainstorms, [51] the billowing of mist – the accumulation of her venom (*imtu*) – [52] he appointed for himself and took them in his hand (see Foster 1996, 379; Lambert 2013, 101–2).
> *Enūma Eliš* tablet 5 lines 50–52: *te-bi šá-a-ri* [*š*]*u-uz-nu-nu ka-ṣa-ṣa* [51] *šu-uq-tur* IM.DUGUD *ka-mar im-ti-šá* [52] *ú-ad-di-ma ra-ma-nu-uš ú-šá-ḫi-iz qat-su*.

In Lambert's interpretation, the fluid *imtu* is described in these lines as responsible for various meteorological phenomena involving water (Lambert 2013, 478; cf. Foster 1996, 379; Westenholz & Westenholz 1997, 219). The term *imtu* can be translated as, e.g. 'venom, poison, poisonous foam' and 'spittle' (Black *et al*. 2000, 129; CAD I–J, 139–41; AHw, 379; see Lambert 2013, 101–2). While obviously related to venomous animals, such as the snake, the awe-inspiring fluid *imtu* shared an explicit conceptual overlap with 'bile' (*martu*).[5] Thus, bile was considered a powerful substance inherent in humans and animals (Arbøll 2020, 73, 79–83). The connection between the *kuppû*'s bile and the associated (snake) venom must therefore have been invoked when employing the eel as an ingredient.

Returning to the prescriptions utilizing *kuppû*-eel gall(bladder), its bile was therefore meant to function as a regulator of water, possibly drawing out excess water. Its relationship to snakes, venom and eyes illustrated above, underlines its use as a cure for watery eyes. Among the other eye problems treated by the *kuppû*'s bile were a shadow of the eye (Prescription 5) and possibly eyes covered by a membrane (Prescription 6).[6] Several snake incantations, which also reference the *kuppû*-eel, emphasize that the snake has eyes of 'awful brightness', which clearly contrast darkness (Finkel 1999, 226–7 line 12: *na-mu-ra-ta i-na-šu*.). A connection between snake venom and eye illness is perhaps also indicated in an Ur III incantation edited by van Dijk & Geller (2003, 26 no. 5; also 48 no. 12). Further, as discussed in the following section, the *kuppû*-eel may

have had visible pupils and the ability to navigate in muddy waters. Thus, the animal's physical properties provided it with analogical abilities, which could be transferred onto the patient. At least one treatment, Prescription 2, also prescribed shaving the patient's head and bandaging it before applying the salve with *kuppû* bile to his eyes. The *kuppû*-eel may have been linked specifically to the head, accompanying the venomous scorpion and various associated worms, in an Old Babylonian incantation designed for a child (YOS 11, no. 5 obv. 9–14; Wasserman 2008, 12–13 line 11).

The treatments involving the *kuppû*-eel's bile must undoubtedly have been an uncomfortable experience for the patient when administered (see Böck 2011, 697). Since the *kuppû* is not identified with certainty, it is troublesome to estimate what the modern therapeutic value of such cures, if any, may have been. Comparatively, bile from different species of carps is used for a variety of afflictions, including eye illnesses and night blindness (nyctalopia), in traditional Chinese medicine (Wang & Carey 2014, 9960–1, 9963). Generally, it has been argued that treatments employing bile in traditional Chinese medicine may provide beneficial medical effects due to the presence of fat-soluble vitamins, bilirubin, metals and melatonin in the bile of many animal species (Wang & Carey 2014, 9969–70). Still, I hesitate to adopt these indications of pharmacological efficacy as proof of eel bile's medical validity, especially because the properties of bile from eels do not seem to have been properly investigated. Any modern medical effects of the ancient Mesopotamian cures utilizing *kuppû*-eel bile therefore remain uncertain (see Attia 2018, 60 and n. 97 with further reference).

Identifying the *kuppû*-eel

Correlating an ancient animal name with a modern species can be a perilous quest. Nonetheless, it is possible to suggest an identification of the *kuppû*-eel on the basis of the available sources discussed above. Considering the various eel species living in the modern areas of Iraq, Syria and Turkey, a native identification of the *kuppû* could be the so-called Mesopotamian spiny eel (*Mastacembelus mastacembelus*), which is shown in Figure 16.1.

The Mesopotamian spiny eel is principally found in freshwater and the species occurs today in both the Euphrates and Tigris rivers, as well as in Turkey, Syria, Iraq and Iran (Ararat *et al*. 2008, 105; Çakmak & Alp 2010, 87f), where it is considered native (Coad 2015, 1). The eel itself is generally around 85 cm long and weighs just over a kilo; it has 30–35 short and sharp spines on its back, longer and soft fins on its sides and near its lower back and front, as well as a flexible snout (Coad 2015, 4). The fish appears eel-like due to a wriggling behaviour, and its sharp spines can be used for injuring enemies (Coad 2015, 2). Due to its snake-like appearance and sharp spines, the Mesopotamian spiny eel is a fearsome creature. Furthermore, it has visible pupils and a yellowish mosaic retina (Coad 2015, 4). Its body is mainly yellow, dotted with shades of similar and darker colours, and a zigzag pattern of spots in primarily brown or black colours often appears (Coad 2015, 4). The eel may occasionally burrow in mud, and it can survive for some time outside of water (Coad 2015, 2). Comparatively, snake-like qualities are referenced in Iranian names for the Mesopotamian spiny eel (Coad 2015, 2).

Figure 16.1. *A Mesopotamian spiny eel (photo by Hana Raza), taken from https://www.inaturalist.org/photos/725457.*

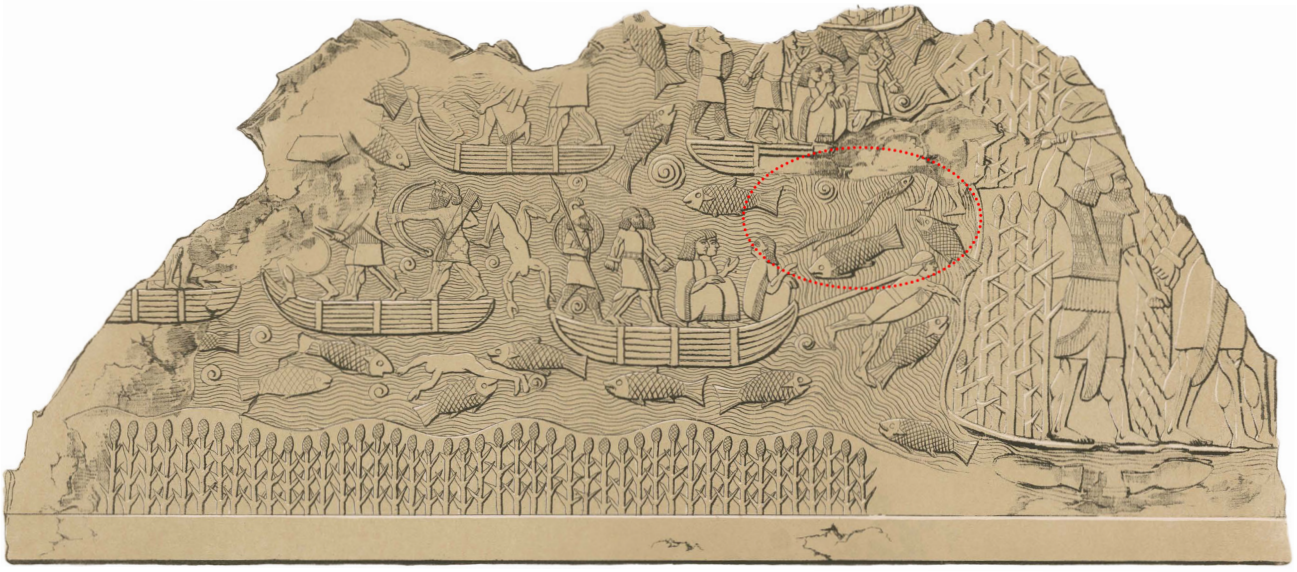

Figure 16.2. *Neo-Assyrian relief displaying an eel (after Layard 1853, pl. 28).*

The physical characteristics of the Mesopotamian spiny eel largely make it a suitable identification for the *kuppû*-eel. Its yellow colours underline the metaphoric relationship to the bile utilized in medicine. Perhaps its pattern of colours reminded observers of the human iris in relation to its medical use against eye illness. Furthermore, it has a visible and often yellow retina, which again emphasizes this relationship. It lives primarily in rivers, which is the cosmic manifestation of Tiāmat's eyes. Yet, it may reside in muddy waters and even survive in a dry environment for a brief period. It is therefore a fitting analogy for the effect of bile as a regulator of too much (or little?) water in the human body. Additionally, among the abilities of such a fish beneficient to a person with eye problems is the eel's ability to orient itself in muddy water. The occasional fierce nature of the fish combined with its metaphoric properties recalls the relationship to venom, which must have been inherent in the snake-like aspect of the eel. I therefore suggest that the *kuppû*-eel used in medical prescriptions can be identified with the Mesopotamian spiny eel. Note that the *kuppû* was described as 'black' in the Old Babylonian text quoted on p.179. This description does not fit the physical characteristics of the Mesopotamian spiny eel. Still, it is possible that the text does not reflect later conceptions of the *kuppû*. Ellison (1978, 173) identified the *kuppû* as the related *Mastacembelus halepensis*, or alternatively as *Muraenesox cinereus*. However, little evidence supports these specific identifications. Furthermore, both species appear to be less common than the Mesopotamian spiny eel in Iraq, and they were not registered in a recent biodiversity survey of northern Iraq (Ararat *et al*. 2008).

Returning to ancient Mesopotamia, we are forced to consider why there are currently no identifiable depictions of the *kuppû*-eel, if the *kuppû* was truly a native species found in the rivers of Assyria and Babylonia. However, it is possible that depictions of the eel exist, which have not been recognized previously. An eel is illustrated in a somewhat standardized manner on a number of Neo-Assyrian reliefs from Nineveh depicting river and marsh scenes, as exemplified in Figure 16.2 (see e.g. Layard 1853, pls. 28 and 42; van Buren 1939, 107 and n. 6). Note that a number of actual snakes are also illustrated in river environments on various reliefs from Khorsabad (e.g. Linder 1986, 279).

The eels are not uniform in appearance, and it is possible they are standardized according to the view of the individual artist.[7] The reliefs display the eels with heads and mouths roughly similar to other fish, and their scales are marked in a similar manner. Some are supplied with a tail identical to various fish, others appear with bodies as snakes. All examples include a number of fins, generally five, spread out evenly onto their fronts and backs. The examples on the Neo-Assyrian reliefs are never explicitly stated to illustrate the *kuppû*, and their physical features are not identical to the Mesopotamian spiny eel. Yet, it is possible that the artists depended on standardization of the underwater animals depicted, and likely the native observer of such a relief would know what animals the picture was meant to induce. As such, I consider it likely that at least some eels illustrated on the Neo-Assyrian reliefs

were intended to depict the *kuppû*. If this proposal is correct, it must be assumed that the *kuppû* could usually be found in Mesopotamian rivers.

Conclusion

The analysis of the evidence related to the fish called *kuppû* underlines previous conclusions that this creature must be considered an eel. The overlap with other snake-like beings reinforces this conclusion. The bile or gallbladder of the *kuppû*-eel was utilized in at least ten medical prescriptions, of which the majority were directed against watery eyes or a shadow covering the eye. Through a discussion of the conceptualization of bile and its relationship to venom, I proposed that the *kuppû*'s bile was utilized primarily due to a belief that the fluid regulated water, and in general because the eel was connected to rivers, which were metaphorically related to the eyes. Furthermore, I suggested that the *kuppû* could be identified with the native Mesopotamian spiny eel, seeing as it shares several physical characteristics useful for underlining the metaphoric relationship to bile and eye problems. Additionally, I suggested that the *kuppû*-eel could be depicted as a previously unidentified eel on a number of Neo-Assyrian reliefs.

Appendix: Editions of prescriptions utilizing the *kuppû*-eel

Transliterations of the following texts can also be found on CDLI and BabMed online.

Prescription 1. AMT 66,7 obv.? 14 (NA; read from CDLI photograph, P425326)

Previous edition: Geller 2005, 84–5 no. 8 ms H

14 [(DIŠ KI.MIN) ^{ú}NU.LUḪ].ḪA ^{ú}ḪAR.ḪAR ILLU LI.DUR KI DIDA GU_7 ZÉ GÚ.BÍ^{ku6} NAG
'[If 'ditto'(?), he eats *nuḫur*]*tu*-plant, *ḫašû*-plant (and) *abukkatu*-resin with *billatu*-substance, (and) he drinks eel bile.'

Select commentary:

14: All the initial signs are broken, and it is therefore unclear what the prescription was directed against. Seeing as a duplicate of AMT 66,7 obv.? 4–5 is directed against 'discharge' (Geller 2005, 84 ms B, unclear which line(s): NA BI *mu-ṣa* GI[G]), it is possible that the prescription in AMT 66,7 obv.? 14 also concerned this problem (see von Soden 1966, 81; concerning *mūṣu*, see Geller 2005, 1, 10; Scurlock & Andersen 2005, 103).

Concerning the *billatu*-substance and its relationship to beer brewing, see Abusch & Schwemer 2011, 469.

Prescription 2. BAM 12 obv. 11'–13' (MA; read from CDLI photograph, P281804)

Previous edition: --

11' DIŠ KI.MIN 1/3 SÌLA PA ^{giš}PÈŠ *ša i-na*$^{(ligature)}$ ^{iti}BÁRA.ZAG.GAR KU_5 PA ⌜x⌝[(x x x)]
12' SAG-*su tu-gal-lab* LÁ-[*su*?-*ma*?]
13' UZU ZÉ ^{ku6}GÚ.BÍ *ina* MUN *tuš-ta-al ina* Ì.GIŠ ḪE.ḪE [IGI^{II}-*šú* MAR]
'If 'ditto', 1/3 litre of fig tree (*tittu*) foliage, which is cut in the month of *nisannu* (March–April), foliage of […]. 12' You shave his head, (and) you bandage [him, and] 13' you *pickle* the flesh of a *kuppû*-eel's gallbladder in salt, you mix it in plant oil, [(and) you daub his eyes (with it)].'

Select commentary:

11': According to Köcher (1980a, XXIV), BAM 480 col. i 30–31 duplicates the prescription in BAM 12 obv. 11'–12'. However, only the opening seems to duplicate ingredients and instructions directly attested in BAM 12 obv. 11', and no further correlation can be identified at present (see also Worthington 2005, 8 ms A col. i 30–31; CDLI photograph, P365742). As it cannot be verified whether or not *kuppû*-eel bile was utilized in the prescription, I have chosen to leave it out of the edition here.

The prescription in BAM 12 obv. 11'–13' does not state which malady it could be utilized against, and several of the preserved prescriptions state 'If "ditto"' (DIŠ KI.MIN). However, BAM 12 ends in a broken section (rev. 47'–49') indicating it preserves bandages (rev. 47': 22 LÁ.MEŠ-*te*) likely intended to counteract eye problems (rev. 49': *ša* ŠÀ IGI^{II}-⌜*šú*⌝ […]). Attia (2018, 54) interprets this prescription as one against 'cephalic fever'.

For the *tittu*-fig tree, see CAD T, 435ff; Abusch & Schwemer 2011, 473. One has to wonder what effect the cure hoped to achieve, seeing as the sap of fig tree leaves can cause skin burns when exposed to sunlight (e.g. Bollero *et al*. 2001; Imen *et al*. 2019). Perhaps leaves collected around March–April would have been less potent.

The last visible signs of the line have been interpreted as KU_5 PA ⌜x⌝. The final wedges may be part of a ⌜giš?⌝. However, it is possible to interpret these signs in other ways. Perhaps one might read *qutu-pa* for a D-stem of *qatāpu* meaning 'to pick a fruit, to cut off an excrescence' (CAD Q, 165). Alternatively, the signs could represent the verbal form *tara-ḫás-*⌜*su*?⌝ (see BabMed online). However, the writing *tara-ḫás-su* is not well attested (cf. CAD R, 73).

13′: The reading 'pickle' in the context of the verbs *itūlu* and *nâlu* when combined with salt is suggested in CAD K, 552, and I follow this interpretation here. The verb used to express this action is *itūlu* 'to lie down, sleep' in a Š-stem (CAD U–W, 344–6), and the sentence literally reads: 'you make the flesh of a *kuppû*-eel's gallbladder lie in salt'. By placing a gallbladder in salt the bile would be drawn out of the gallbladder, and in effect the gallbladder would become pickled. Prescriptions 4 and 6 describe the pickled gallbladder via the writing NÁ-*al* (CAD K, 552). Whether this should be interpreted as the verbal form *tuš-ta-al* or a stative of the related verb *nâlu* 'to lie down' (perhaps read *ná-al*?) is uncertain (CAD N/1, 204ff; see discussion of these verbs in CAD U–W, 345). Since the Sumerogram is not written NÁ.NÁ or NÁ.MEŠ, I find it difficult to interpret NÁ-*al* as a Š-stem. I have tried to accommodate the doubt of how to interpret the writing NÁ-*al* by translating the lines in Prescriptions 4 and 6 as the stative 'pickled'.

The final reconstruction is based on other entries in BAM 12 specifying the patient's eyes as the focus of the application (obv. 16′, 23′, rev. 31′). Presumably, the final remedy was daubed (*eqû*) into the patient's eyes, which appears in the other prescriptions edited here (see also Fincke 2009, 81).

Prescription 3. BAM 14 obv. 1–4 (NA; read from CDLI photograph, P285117)

Previous edition: --

1 DIŠ NA ⌜IGI^{II}-*šú a-ga-a*⌝-*ma* ÉR [DIRI]
2 ZÉ *ša* GÚ.BÍ^{ku6} ZÉ [x x (x)]
3 ^{giš}ŠINIG *tur-ár ina* Ì [SAḪAR.URUDU]
4 DÍLIM.A.BÁR *ta-sàk te*-[*eq-qí*]
'If a man's eyes (are) *flooded*, and [full of] tears, [2] the gallbladder of a *kuppû*-eel, the gallbladder of […], [3] (and) *bīnu*-tamarisk you parch, in oil [(and) verdigris(?)] [4] you pound (it into) a salve (*itqūru*), (and) you [daub (his eyes (with it))]'.

Select commentary:

1: *Agû* can refer to a 'flow of water, current, wave, destructive flooding' (CAD A/1, 157f; *AHw*, 17). However, the term seems to be uncommon in the medical corpus. The word also appears in an Old Babylonian incantation designed for treating internal illness (Collins 1999, 164–5 line 36).

For the symptom description of eyes full of tears, also observed in Prescription 4, see Fincke 2000, 223–4.

3: I read *tur-ár* as a verbal form of *erēru* in the D-stem used in connection to drug preparation as 'to parch', see *urruru* 'to desiccate, dry out' (CAD U–W, 247f; Köcher 1965; see also Black *et al*. 2000, 77; *AHw*, 238). For similar examples, see Fincke 2000, 287 n. 2241, 291 n. 2305.

The final reconstruction is based on similar examples of eye salves utilizing 'verdigris' *šuḫṭu*, see CAD Š/3, 209; see also CAD I–J: 301. This ingredient is suitable as it also contains a greenish colour, possibly complementing the bile.

4: The reconstruction is based on many similar examples, see CAD E, 252f; CAD I–J, 301.

See CAD I–J, 301–2 for the salve(-bowl/spoon) called *itqūru*, used here and in Prescriptions 4 and 5 (see the commentary to Prescription 4 mss A7 and B15; Attia 2015, 8 n. 23; Stol 1989, 166). The word itself could designate both the salve and the container from which it was administered. There is, however, no need to render the container in the translation if the focus in the prescription is on the salve.

Prescription 4. Ms A = BAM 14 obv. 5–7 (NA; read from CDLI photograph, P285117); ms B = BAM 18 rev. 14–15 (NA; read from CDLI photograph, P285120)

Previous edition: --

A5 [DIŠ N]A IGI^{II}-*šú* ÉR DIRI ZÉ [GÚ.BÍ^{ku6}]
B14a [DIŠ] NA$^{!}$ IGI^{II}-[*šú*] ⌜ÉR DIRI⌝$^{?}$ ZÉ$^{?}$⌝ [G]Ú. ⌜BÍ^{ku6}⌝ –
'If a man's eyes are full of tears, the gallbladder of a [*k*]*uppû*-eel

A6 [*ina* MU]N NÁ!-*al* giš̌I[NI]G [*ta-sàk*]
B14b– [x x x x] 15 giš̌INIG [*t*]*a-*⌜*sàk*⌝ –
15a *pickled* [in sal]t (and) *bīnu*-tamarisk you pound.

A7 [*ina* Ì].⌜NUN?⌝ [*ina* gi]š?⌜DÍLIM?⌝.A.⌜BÁR!?⌝ [*te-*(*eq*)*-qí*]
B15b *ina* Ì.NUN *ina* gišDÍLIM.A.BÁR [*te-*(*eq*)*-qí*] [You daub (his eyes with it)] in ghee in a wooden salve *bowl*(?).'

Select commentary:

A5 and B14: For this diagnostic statement, see Fincke 2000, 129; also Scurlock & Andersen 2005, 192–3.

A6: For the reading 'pickled', see the commentary to Prescription 2 obv. 13'.

A7 and B15: The determinative giš before DÍLIM.A.BÁR could imply the container with the salve, from which it was administered, was made of wood. Seeing as the line emphasizes the container via the determinative and the preposition *ina*, I have attempted to render this in the translation. As shown in the translation by, e.g. Attia (2018, 55) '"spoonful of lead" ointment' and Heeßel (2018, 336) 'salve' or 'lead bowl', the object or the salve(?) seems ordinarily to be made of lead (see Attia 2015, 8 n. 23; Stol 1989, 166). The Sumerogram includes the words DÍLIM, which in itself can render *itqūru* and may designate a 'spoon, shallow bowl, salve', as well as the word A.BÁR, *abāru* 'lead'. See the commentary to Prescription 3 obv. 4.

The method of application is broken in both instances, but other prescriptions in ms B prescribe a similar method as the suggested reconstruction (obv. 6, 7, 8, 10).

Prescription 5. Ms A = BAM 22 rev. 20'–21' (NA; read from CDLI photograph, P285124); ms B = BAM 382 obv. 5–6 (NB; read from CDLI photograph, P285453)

Previous edition: --

A20' [DIŠ NA x x x x x x x MUN E]ME.SAL-*lim* ZÉ GÚ.BÍ^{ku6}
B5a [MU]N E[ME.SAL-*lim*] ⌜ZÉ⌝ GÚ.BÍ^{ku6} –

A21' *kur-k*[*a-nam* x x DÍLIM.A.BÁR SÚ]D IGI^{II}-šú MAR
B5b–6 ^{ú}*kur-ka-nam* 6 Ú.BABAR *ina* Ì.⌜NUN⌝.NA ḪE.ḪE *te-qit šá* GISSU ZI-*ḫa*
Ms. A: '[If a man … *e*]*mesal*-[salt(?)], *kuppû*-eel bile, $^{21'}$ *kurk*[*anû*-plant … you pou]nd (it into) [a salve(?)], (and) you smear his eyes (with it).'
Ms. B: '*E*[*mesal*-sal]t, *kuppû*-eel bile, *kurkanû*-plant, 6 (and) 'white plant' you mix in ghee; a salve (*tēqītu*) for tearing out a shadow (of the eye).'

Select commentary:

A20': Although the opening diagnostic statement is broken, the prescription before rev. 20'–21' on BAM 22 concerns a shadow of the eye with additional symptoms (obv. 16: DIŠ NA ŠÀ IGI^{II}-*šú* GISSU …, see the commentary to Prescription 5 ms B obv. 6) and the following treatment is directed against eyes with water (rev. 22': DIŠ NA IGI^{II}-⌜*šú* ÉR?⌝ [(DIRI?/ŠUB.MEŠ?) …]).

For *emesal*-salt, see, e.g. Abusch & Schwemer 2011, 473. It is possible that the ZÉ in this prescription designates the entire gallbladder as in other examples presented here, see Prescriptions 2 and 6.

For the tablet BAM 22, see also Fincke 2009, 85.

B5–6: It is plausible that the ingredients were largely similar to ms A. For the tablet BAM 382, see Fincke 2009, 82, 98.

A21': The reconstruction is based on similar examples, see CAD I–J, 301.

B6: The 'white plant' (*šammu peṣû*, see Abusch & Schwemer 2011, 472) was likely employed due to its opposite physical properties in relation to a 'shadow' of an eye.

The word *tēqītu* 'salve' is derived from the verb *eqû* 'to smear, daub', which is used in many prescriptions related to the eyes, including several treated above (see CAD T, 347f; Stol 1989, 166).

For the diagnostic statement, see Fincke 2000, 278 and n. 2115.

For the term 'shadow' (GISSU, *ṣillu*) in relation to eye problems, see discussions and further references in Fincke 2000, 130–1, 166, 202–8, 225–6, 284, 288; Scurlock & Andersen 2005, 196; Attia 2015, 65–7, 69–70, 87ff; Panayotov 2017, 218, 223 and ns. 60–61.

Prescription 6. BAM 23 obv. 9–10 (NA; read from CDLI photograph, P285125)

Previous edition: --

9 ⌜ZÉ⌝ GÚ.BÍ^{ku6} *ina* MUN NÁ-*al* PA giš̌NU.ÚR.MA giš⌜GIG!?⌝ *tur-á*[*r*]
10 [x x] PA ⌜x⌝[x x n]a? TAG Ú.ḪI.A *an-*⌜*nu*⌝*-tim* [*ta-sàk*] ⌜x⌝ *te-*⌜*qí*⌝

'You parch *Kuppû*-eel gallbladder *pickled* in salt, foliage of a pomegranate tree, (and) *kanaktu*-tree, [10] you take […] (and) foilage of […], [you pound] these plants (and) you smear (his eyes with it).'

Select commentary:

9: For the translation 'pickled', see the commentary to Prescription 2 obv. 13' and Prescription 4 ms A obv. 6.

See CAD (N/2, 345) for the translation 'foliage' in relation to the pomegranate tree (*nurmû*).

The reading of ^{giš}GIG as *kanaktu* is uncertain, and this writing appears to be rare (see CAD K, 135). It is possible that the text specified another ingredient, which cannot be properly reconstructed.

10: An alternative reading of [… n]a$^{?}$ TAG could be [… *tu-n*]*a*$^{?}$*-tak* 'you drip (something into something else)'.

It is unclear against what problem(s) the prescription was directed, but other entries on BAM 23 concern, e.g. the eyes covered by a *šišītu*-membrane (BAM 23 obv. 4 and 5: DIŠ NA IGI^{II}-*šú ši-ši-tú* DIRI, see CAD Š/3, 125; Fincke 2000, 120, 131, 209–210, 226; Scurlock & Andersen 2005, 196; Attia 2015, 46 and n. 164, 47 and n. 195, 66; Attia 2018, 48–50). It is unclear if this membrane was believed to hold back water, like Tiāmat's skin stretched out across heaven in *Enūma Eliš* to keep water from escaping (Foster 1996, 376; Horowitz 1998, 262–3; Rochberg 2005, 324; Lambert 2013, 94–5 tablet 4 lines 138–140).

Prescription 7. BAM 580 col. i 7'–10' (NA; read from CDLI photograph, P397304)

Previous edition: --

7' [DIŠ KI.MIN] *la i-ḫa-maṭ la i-*⌜*ṣar-rap*$^{?}$ *la*$^{?}$ *i*⌝*-re-eš-š*[*i*$^{!?}$*-šú*$^{?}$ x] ⌜x⌝ GIG *ana* ZI-*šú*

8' [ZÉ$^{?}$ G]Ú.BÍ^{ku6} AN.BAR eš ku ri ḫa/KU$_6$ ⌜AN⌝. BAR ^{giš}Š[INIG$^{?}$] ⌜x x⌝ MUŠ GE$_6$

9' [NAGA].SI ^{šim}ŠEŠ *ša* KUR-*e* 6 Ú.ḪI.A [T]ÉŠ. BI *tuš-te-mid* KI LÀL

10' [x x *ina* ^{uru}]^{du}ŠEN.TUR *tara-bak ina* KUŠ.EDIN SUR-*ri* : *ina* TÚG.GADA LÁ-*su-ma* TI

'[If 'ditto'], (but) there is no burning pain, it does not burn, (and) it does not *it*[*ch*$^{?}$], (then) [he is i]ll (with) […]. For tearing (it) out of him: [bile$^{?}$ of a *k*]*uppû*-eel, '*bead*' of …, '*bead*' of a *b*[*īnu*-tamarisk$^{?}$, …] of a black snake, ['horned] salt'-plant, (and) mountain *murru*-myrrh. You mix (these) six ingredients together, with honey [(and) … in] a small *tangussu*-vessel you boil it down. You rub (the substance) into a 'hide of the steppe' *alternatively:* in a linen garment, you bandage him, and he will recover.'

Select commentary:

7': For *ḫamāṭu* 'to burn, to be inflamed', see Stol 2007, 19–21. For the translation 'burning pain', see Scurlock 2014, 186, 189.

The verb *ṣarāpu* 'to burn' is not well-attested in symptom descriptions, and the few examples are mainly in the D-stem (e.g. Scurlock 2014, 493, 495; Scurlock & Andersen 2005, 288).

The verbal form, reconstructed here as ⌜*i*⌝*-re-eš-š*[*i*$^{!?}$*-šú*], is uncertain. The partly reconstructed sign ši is unclear, and the sign looks more like the beginning of pi, ud or similar signs. A form ⌜*i*⌝*-re-eš-š*[*i*$^{!?}$*-šú*] from the verbal root *rašû*/*rešû* 'to itch' is attested, although the two examples listed in the CAD (R, 207) are in an unclear context and written as either *i-re-šá-šú* or *i-re-ši-šú*.

Although it is unclear against what problem(s) the prescription was intended, the tablet BAM 580 largely contains remedies for treating rashes (Köcher 1980b, XXXI).

8': The reading of the signs AN and BAR is difficult. At face value the signs could be read, e.g. 'iron' (*parzillu*, AN.BAR) or as Ninurta (^{d}MAŠ) (see BabMed Online). A similar reading occurs in a line of the so-called 'AŠ-section' of Uruanna, in which Rumor (2017, 20 note 50) proposes the translation 'bead' of *parzillu* (see CAD P, 212ff). The writing could perhaps refer to the seeds of a plant. Alternatively, the writing may be related to BAR ('skin, rind' *quliptu*, *qilpu*), although this does not account for the AN. I follow Rumor's tentative translation 'bead', although the issue should be addressed elsewhere.

Other treatments prescribe the 'fat (*lipû*, Ì.UDU) of a black snake' (see CAD Ṣ, 77). However, the remaining wedges do not seem to support this reading.

9': For the translation of *uḫūlu qarnānû* as 'horned salt'-plant, see Abusch & Schwemer 2011, 473.

On the picture, it is very difficult to see if the sign SI has the final required vertical

wedge and whether or not the following ŠIM begins with two horizontal wedges. These signs require further collation.

BabMed online suggests the reading *tuš-ṭe$_4$-nu* as an alternative to *tuš-te-mid*.

For *dišpu* as either 'honey' or 'syrup', see Abusch & Schwemer 2011, 36 with further references.

10′: The initial broken signs could have read, e.g. Ì.GIŠ, Ì.NUN or *u* KAŠ (see examples in CAD D, 161f; CAD R, 8).

The Akkadian reading of KUŠ EDIN is considered uncertain (Farber 2008, 255; see AHw: 1389), although it may have been read *nādu* (see Scurlock 2014, 480–3, 494–5; Heeßel 2018, 318; CAD N/1, 100f; AHw, 704–5). Literally, the Sumerogram can be translated as: 'a skin of the steppe (i.e. a steppe animal)'.

I have translated the verb *ṭerû* (SUR) as 'to rub into' (Black *et al*. 2000, 414; AHw, 1388–9), but note that CAD (Ṭ, 103) argues for the translation 'to extract, squeeze or press out liquid (via a piece of leather, cloth)'. I would assume the patient was bandaged with the piece of leather specified in the text, and I therefore retain the translation 'to rub into (a piece of leather)'.

Prescription 8. BM 103386 rev. 22–24 (NA; read from the photograph and copy in the publication)

Previous edition: Heeßel 2018

22 DIŠ KI.MIN ZÉ GÚ.[B]Í^{ku6} TI-ʳ*qé* KIˡ ILLU ^{šim}BULUḪ NUMUN ^{ú}SI.SÁ

23 ^{ú}LAG-A.ŠÀ.GA ʳGÌRˡ.PAD.ʳDUˡ šá UDU.NÍTA *tur-ár* SÚD

24 DÍLIM.A.BÁR ḪE.ḪE ʳ*ku*$^{?}$-*ul*$^{?}$ˡ D[ÚR-*š*]*ú te-te-né-*ʳ*qí*ˡ*-ma* TI

'If 'ditto', you take *kuppû*-eel bile, with *baluḫḫu*-resin, seeds of *šurdunû*-plant, 'field-clod'-plant (and) a sheep bone you parch (and) pound (it). You mix (it into) a salve (*itqūru*). You continually daub the *whole* of his anus (with it), (and) he will recover.'

Select commentary:

22–24: For commentary on these lines, see Heeßel 2018, 336.

Although the problem treated is not specified, the previous prescriptions on the reverse of BM 103386 seem to be directed against 'Anus-illness' (*dur*(*u*)*giqqû*, DÚR.GIG.(GA)), and one of the following prescriptions specify it is for an ill anus with a *lamṣatu*-haemorrhoid, which may be itching and the edge is full of blood (rev. 32: DIŠ NA DÚR ʳGIGˡ *lam-ṣa-*ʳ*at* DÚRˡ-*šú* [*im-r*]*uṭ lak*/*q-s*/*šat kib-ru* MÚD SA$_5$). For the illness written DÚR.GIG, see Geller 2005, 2–3; Scurlock & Andersen 2005, 150–3; Böck 2008, 319; Heeßel 2018, 334. For the term *lamṣatu*, see the recent discussion by Heeßel 2018, 314.

23: For the plant translated as 'field-clod' (*kirbān eqli*), see Abusch & Schwemer 2011, 471.

For the verbal form *tur-ár*, see the commentary to Prescription 3.

24: For *itqūru*, see the commentary to Prescriptions 3 and 4. For another translation of this line, see Heeßel 2018, 336.

The reconstructed reading ʳ*ku*$^{?}$-*ul*$^{?}$ˡ follows Heeßel 2018. Note that the traces may not support the reading *ul*, although it is difficult to find a better-suited interpretation of the remaining wedges.

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Notes

1 I have recently published a case study drawing on medical incantations for reconstructing ancient illness conceptions (Arbøll 2018).

2 Böck 2011, 696–7. See the references to frog, geese, snake, ox, ram, scorpion and mouse bile in medical prescriptions listed in, e.g. CAD M/1, 299; see also Attia 2018, 45, 56–7 with additional examples of eye prescriptions utilizing the bile of various animals; Scurlock 2014, 217, 221, 374, 383–4; Básckay 2018, 9ff.

3 AMT 66,7 obv.$^{?}$ 14 =Prescription 1; BAM 12 obv. 11′–13′ = Prescription 2; BAM 14 obv. 1–4 = Prescription 3; BAM 14 obv. 5–7 and BAM 18 rev. 14–15 = Prescription 4; BAM 22 rev. 20′–21′ and BAM 382 obv. 5–6 = Prescription 5; BAM 23 obv. 9–10 = Prescription 6; BAM 580

col. i 7′–10′ = Prescription 7; BM 103386 rev. 22–24 = Prescription 8. Only the treatments in Prescriptions 1, 7, and 8 appear in contexts where it is reasonable to assume they was used for treating *mūṣu*-discharge, a rash, and 'Anus-illness' with an itching(?) haemorrhoid (see the commentary to Prescriptions 1, 7, and 8 in the Appendix). For a discussion of the relationship between the medical uses of the *kuppû* and the fish used for healing in the Book of Tobit, see Attia 2018; von Soden 1966, 82. Note an additional reference to 'fish bile' (ZÉ *ša* KU_6) in BAM 579 col. iv 28 concerned with internal illness (see Cadelli 2000, 279, 287).

4 This overlap is primarily based on the shared yellow-green colour, which in Akkadian is the same word ((*w*)*arqu*, SIG_7). The two common terms for jaundice in Mesopotamia are *aḫḫāzu* 'catcher-(demon)' from *aḫāzu* 'to seize, hold a person' and *amurriqānu* from *warāqu* 'to be yellow-green'. Jaundice can cause yellow discolouration of the eyes, the base of the tongue, and the patient's skin. Three causes of jaundice are classified in modern medicine, namely pre-hepatic, hepatocellular, and post-hepatic. Hepatocellular and post-hepatic jaundice concern problems related to the liver and pancreas/gallbladder/bile duct respectively. For these illnesses and the relationship to bile, see Scurlock & Andersen 2005, 32–4, 136–8; Böck 2014, 74, 122–8, 138–9; Scurlock 2014, 522–3. Barbara Böck (personal communication) informs me that jaundice could also be a symptom of, e.g. 'wind' (*šāru*). This is important in the context of the quote from *Enūma Eliš* cited on p.181, where Tiāmat's 'venom' (*imtu*), connected directly to the conceptualization of bile, could cause raging winds (*tebi šāri*).

5 *Imtu* and *martu* were equated in, e.g. Uruanna (Köcher 1978, 35–6 n. 59) and Malku tablet 8 (Hrůša 2010, 144; see also Scurlock 2014, 93 n. 55). Some snake species' venom is clearly yellow, which would reinforce this overlap. For an early example possibly linking bile and a snake, see van Dijk & Geller 2003, 21–2 no. 4 rev. 22. Venom also conceptually overlapped with words for 'spittle, saliva, phlegm' (e.g. *rupuštu*) via the Sumerogram ÚḪ, which designated such fluids, but it could also be read *imtu* (see Civil 2004, 108–9; Abusch & Schwemer 2011, 195). See also the snake incantation in Finkel 1999, 226–7 line 13, *e-li-ta-šu i-pa-ṣí-id ab-na-am*, 'His very spittle can split stone!'. Further association between the yellow colour and snakes can be found in an Old Babylonian incantation stating: '(the snake is) green like Tišpak' (VS 17 no. 4 obv. 2: [*w*]*a-ru-uq ki-ma* ^{d}*Tišpak*, see van Dijk 1969, 540–1; Foster 1996, 129; Wasserman 2010a).

6 For recent discussions of the sections for treating the eyes in the therapeutic series *šumma amēlu muḫḫašu umma ukāl*, see Attia 2015; Panayotov 2016a; 2016b; see also Geller & Panayotov 2020.

7 In a discussion of the Khorsabad reliefs, Linder (1986, 279) stated: 'The fauna in its aquatic environment, is schematically represented. It is therefore, a priori, difficult to ascertain which species the artist wishes to portray.' Trees were illustrated as few, standardized species according to region in the reigns of various Neo-Assyrian kings, thereby attempting to illustrate diversity in landscapes (Thomason 2001, 69–72). See also van Buren (1939, 104) for general considerations on the schematic nature of Mesopotamian representations. Note, however, that Chikako Watanabe (personal communication) has recently discovered three types of lions in Assurbanipal's lion hunt reliefs, which seem to relate to three different subspecies of lions. As emphasized by Watanabe elsewhere, the iconography utilized in the Neo-Assyrian reliefs 'was created with contemporary common knowledge of an ancient society' (Watanabe 2014, 346). Thus, it is plausible that the observers knew what animal was intended, although it could in some cases appear standardized.

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Fierce lions, angry mice and fat-tailed sheep

Animals have always been an integral part of human existence. In the ancient Near East, this is evident in the record of excavated assemblages of faunal remains, iconography and – for the later historical periods – texts. Animals have predominantly been examined as part of consumption and economy, and while these are important aspects of society in the ancient Near East, the relationships between humans and animals were extremely varied and complex.

Domesticated animals had great impact on social, political and economic structures – for example cattle in agriculture and diet, or donkeys and horses in transport, trade and war. Fantastic mythological beasts such as lion-headed eagles or Anzu-birds in Mesopotamia or Egyptian deities such as the falcon-headed god Horus were part of religious beliefs and myths, while exotic creatures such as lions were part of elite symbolling from the fourth millennium BC onward. In some cases, animals also intruded on human lives in unwanted ways by scavenging or entering the household; this especially applies to small or wild animals. But animals were also attributed agency with the ability to solve problems; the distinction between humans and other animals often blurs in ritual, personal and place names, fables and royal ideology. They were helpers, pets and companions in life and death, peace and war. An association with cult and mortuary practices involves sacrifice and feasting, while some animals held special symbolic significance.

This volume is a tribute to the animals of the ancient Near East (including Mesopotamia, Anatolia, the Levant and Egypt), from the fourth through first millennia BC, and their complex relationship with the environment and other human and nonhuman animals. Offering faunal, textual and iconographic studies, the contributions present a fascinating array of the many ways in which animals influence human life and death, and explore new perspectives in the exciting field of human-animal studies as applied to this part of the world.

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