

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

Published by:
McDonald Institute for Archaeological Research
University of Cambridge
Downing Street
Cambridge, UK
CB2 3ER
(0)(1223) 339327
eaj31@cam.ac.uk
www.mcdonald.cam.ac.uk



McDonald Institute for Archaeological Research, 2021

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ISBN: 978-1-913344-05-4

On the cover: Shepherd with sheep, palace ruins in background, photograph taken by Gertrude Bell at Mashetta, Jordan in March 1900; A_232 , The Gertrude Bell archive, Newcastle University.

Cover design by Dora Kemp and Ben Plumridge. Typesetting and layout by Ben Plumridge.

Edited for the Institute by Cyprian Broodbank (Acting Series Editor).

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CONTRIBUTORS

Francesca Alhaique

Servizio di Bioarcheologia, Museo delle Civiltà, Piazza G. Marconi 14, 00144 Rome, Italy Email: francesca.alhaique@beniculturali.it

Troels Pank Arbøll

Linacre College, University of Oxford, St Cross Road, Oxford OX1 3JA

Email: troels.arboell@gmail.com

Laura Battini

UMR 7192, CNRS-Collège de France, 52 rue du Cardinal Lemoine, 75005 Paris, France Email: laura.battini@college-de-france.fr

Malwina Brachmańska

Department of Archaeology, Adam Mickiewicz University, Poznań, 61-614, Poland Email: malwina.brachmanska@gmail.com

Franco D'Agostino

Istituto Italiano di Studi Orientali, 'Sapienza' Università di Roma, Circonvallazione Tiburtina, 4, 00185 Rome, Italy

Email: franco.dagostino@uniroma1.it

Anne Devillers

Royal Belgian Institute of Natural Sciences, Rue Vautier 29, 1000 Brussels, Belgium Email: as.devillers@gmail.com

HEKMAT DIRBAS

Ohio State University, 314 Hagerty Hall, 1775 College Rd, 43210 Columbus, OH, USA Email: dirbas.hek@hotmail.com

Neil Erskine

School of Humanities, University of Glasgow, 1 University Gardens, Glasgow G12 8QQ Email: Neil.Erskine@glasgow.ac.uk

Marina Fadum Independent researcher Email: fadum@gmx.at

JILL GOULDER

UCL Institute of Archaeology, 31–34 Gordon Square, Bloomsbury, London WC1H 0PY Email: j.goulder@alumni.ucl.ac.uk

HASKEL J. GREENFIELD

Near Eastern and Biblical Archaeology Laboratory, St. Paul's College, University of Manitoba, 144-70 Dysart Road, Winnipeg, MB R3T 2M6, Canada Email: haskel.greenfield@umanitoba.ca

TINA L. GREENFIELD

Department of Religion and Culture, St. Thomas More College, University of Saskatchewan, 1437 College Dr, Saskatoon SK S7N 0W6, Canada Email: tlgreenfield@gmail.com

BEN GREET

Department of Religious Studies, University of Zurich, Kantonsschulstrasse 1, 8001 Zürich, Switzerland

Email: benjamin.greet@gmail.com

CARINA GRUBER

Independent researcher Email: carina.gruber1991@gmail.com

Tuna Kalayci

Faculteit Archeologie, Leiden University, Einsteinweg 2, 2333 CC Leiden, The Netherlands Email: t.kalayci@arch.leidenuniv.nl

Michael Kozuh

Department of History, Auburn University, 331 Thach Hall, Auburn, AL 36849-4360, USA Email: mgk0001@auburn.edu

Aren M. Maeir

The Institute of Archaeology, The Martin (Szusz) Department of Land of Israel Studies and Archaeology, Bar-Ilan University, Ramat-Gan 5290002, Israel

Email: arenmaeir@gmail.com

TIMOTHY MATNEY

Department of Anthropology, University of Akron, Olin Hall 237, Akron, OH 44325-1910, USA Email: matney@uakron.edu

ALICE MOUTON

UMR 8167, CNRS Paris, 27 rue Paul Bert, 94204 Ivrysur-Seine Cedex, France Email: alice.mouton@cnrs.fr

Seraina Nett

Department of Linguistics and Philology, Uppsala University, Engelska parken, Thunbergsvägen 3H, Sweden

Email: seraina.nett@lingfil.uu.se

Olga V. Popova

Institute of Oriental Studies of the Russian Academy of Sciences, Rozhdestvenska st., 12, Moscow, Russian Federation

Email: olga.v.popova@gmail.com

Louise Quillien

CNRS (Centre National de la Recherche Scientifique), ArScAn laboratory (Archéologies et Sciences de l'Antiquité), Nanterre, 92000, France Email: louise.quillien@cnrs.fr

Laerke Recht

Department of Early Eastern Mediterranean Civilisation, Institut für Antike, University of Graz, Universitätsplatz 3/II, 8010 Graz, Austria Email: laerke.recht@uni-graz.at

Licia Romano

Istituto Italiano di Studi Orientali, 'Sapienza' Università di Roma, Circonvallazione Tiburtina, 4, 00185 Rome, Italy

Email: licia.romano@uniroma1.it

Jon M. Ross

Department of Anthropology, University of Manitoba, Winnipeg, MB R3T 2N2, Canada Email: rossj313@myumanitoba.ca Szilvia Sövegjártó

University of Hamburg, Hauptstrasse 67, 69214 Eppelheim, Germany

Email: ssoveg@gmail.com

CHRISTINA TSOUPAROPOULOU

Institute of Mediterranean and Oriental Cultures, Polish Academy of Sciences, 72 Nowy Świat St., 00-330 Warsaw, Poland & McDonald Institute for Archaeological Research, University of Cambridge, Downing Street, Cambridge CB2 3ER

Email: ct272@cam.ac.uk

Lorenzo Verderame

Istituto Italiano di Studi Orientali, 'Sapienza' Università di Roma, Circonvallazione Tiburtina, 4, 00185 Rome, Italy

Email: lorenzo.verderame@uniroma1.it

Andréa Vilela

Laboratoire Archéorient, Maison de l'Orient et de la Méditerranée, 7 rue Raulin, F-69365 Lyon cedex 07, France

Email: andrea.vilela@univ-lyon2.fr

JOHN WAINWRIGHT

Department of Geography, Durham University, Lower Mountjoy, South Road, Durham DH1 3LE, UK

Email: john.wainwright@durham.ac.uk

CHIKAKO E. WATANABE

Faculty of International Studies, Osaka Gakuin University, 2-36-1 Kishibe-Minami, Suita-shi, Osaka 564-8511 Japan

Email: chikako@ogu.ac.jp

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ABL	Harper, R.F., 1892–1914. Assyrian and Babylonian Letters Belonging to the Kouyunjik Collection of the British Museum, 14 volumes. Chicago: University	ARM 30	Durand, JM., 2009. La nomenclature des habits et des textiles dans les textes de Mari. (Archives royales de Mari 30.) Paris: Lib. Paul Geuthner.
AHw	of Chicago Press. von Soden, W., 1959-1981. Akkadisches Handwörterbuch. Wiesbaden.	AUCT 1	Sigrist, M., 1984. <i>Neo-Sumerian Account Texts in the Horn Archaeological Museum.</i> (Andrews University Cuneiform Texts 1.) Berrien Springs:
AKA I	Wallis Budge, E.A. & L.W. King, 1902. Annals	D 134 1	Andrews University Press.
	of the Kings of Assyria: The Cuneiform Texts with Translations and Transliterations from the Original Documents in the British Museum. Vol. I. London:	BabMed	Babylonian Medicine online [no year]: 'Corpora', https://www.geschkult.fu-berlin.de/e/babmed/Corpora/index.html
	The Trustees of the British Museum.	BAM	Köcher, F., 1963–1980. <i>Die babylonisch-assyrische</i>
AMT	Campbell Thompson, R., 1923. <i>Assyrian Medical Texts</i> . Milford, Oxford: Oxford University Press.		<i>Medizin in Texten und Untersuchungen,</i> 6 Vols. Berlin: De Gruyter.
AnOr 8	Pohl, A., 1933. Neubabylonische Rechtsurkunden	BCT 1	Watson, P.J., 1986. Neo-Sumerian Texts from
	aus den Berliner staatlichen Museen. (Analecta Orientalia 8.) Rome: Pontificium Institutum Biblicum.		Drehem. (Catalogue of Cuneiform Tablets in Birmingham City Museum I.) Warminster: Aris & Phillips.
AO	Siglum of objects in the Louvre Museum, Paris	BIN 1	Keiser, C.E., 1917. <i>Letters and Contracts from Erech</i>
	(Archéologie Orientale).		Written in the Neo-Babylonian Period. (Babylonian
ARM 2	Jean, ChF., 1950. <i>Lettres diverses</i> . (Archives royales de Mari 2.) Paris: Lib. Paul Geuthner.		Inscriptions in the Collection of James B. Nies, vol. 1.) New Haven: Yale University Press.
ARM 9	Birot, M., 1958. Textes administratifs de la Salle	BIN 3	Keiser, C.E., 1971. Neo-Sumerian Account Texts
	5 du Palais. (Archives royales de Mari 9.) Paris:		from Drehem. (Babylonian Inscriptions in the
A DD # 40	Lib. Paul Geuthner.		Collection of B.J. Nies, vol. 3.) New Haven: Yale
ARM 10	Dossin, G., 1978. Correspondance feminine. (Archives royales de Mari 10.) Paris: Lib. Paul	BM	University Press. Siglum for objects in the British Museum,
	Geuthner.	DIVI	London.
ARM 14	Birot, M., 1974. Lettres de Yaqqim-Addu, gouverneur	BPOA	Biblioteca del Proximo Oriente Antiguo (Madrid:
	de Sagarâtum. (Archives royales de Mari 14.) Paris: Lib. Paul Geuthner.		Consejo Superior de Investigaciones Científicas, 2006ff.)
ARM 15	Bottero, J. & A. Finet, 1954. Repertoire analytique	BPOA 6	Sigrist, M., & T. Ozaki, 2009a. Neo-Sumerian
	des tomes I à V. (Archives royales de Mari 15.) Paris: Lib. Paul Geuthner.		Administrative Tablets from the Yale Babylonian Collection. Part One (Biblioteca del Próximo
ARM 26	Durand, JM. et al., 1988. Archives épistolaires de		Oriente Antiguo 6.) Madrid: Consejo Superior
	Mari. (Archives royales de Mari 26.) Paris: Lib.		de Investigaciones Científicas.
	Paul Geuthner.	BPOA 7	Sigrist, M., & T. Ozaki, 2009b. Neo-Sumerian
ARM 27	Birot, M., 1993. Correspondance des gouverneurs de		Administrative Tablets from the Yale Babylonian
	<i>Qaṭṭunân</i> . (Archives royales de Mari 27.) Paris: Lib. Paul Geuthner.		Collection. Part Two (Biblioteca del Próximo Oriente Antiguo 7.) Madrid: Consejo Superior
ARM 28	Kupper, JR., 1998. <i>Lettres royales du temps de</i>		de Investigaciones Científicas.
	Zimri-Lim. (Archives royales de Mari 28.) Paris:	BRM 1	Clay, A.T., 1912. Babylonian Business Transactions
	Lib. Paul Geuthner.		of the First Millennium B.C. (Babylonian Records

	in the Library of J. Pierpont Morgan, Part 1.) New York: Privately printed.	HSS 14	Lacheman, E.R., 1950. Excavations at Nuzi V. Miscellaneous Texts from Nuzi, Part 2, The Palace
CAD	The Assyrian Dictionary of the Oriental Institute of the University of Chicago. Chicago: The Oriental	HW ²	and Temple Archives. (Harvard Semitic Studies14.) Cambridge (Mass.): Harvard Univ. Press.
CBS	Institute, 1956–2010. Siglum for objects in the University Museum in Philadelphia (Catalogue of the Babylonian	1144-	Friedrich, J. & A. Kammenhuber (eds.), 1975–. Hethitisches Wörterbuch. Zweite, völlig neubearbeitete Auflage auf der Grundlage der edierten
CDLI	Section). Cuneiform Digital Library Initiative, https://cdli. ucla.edu	IB IM	hethitischen Texte. Heidelberg: Winter. Siglum for finds from Isin (Isan Bahriyat). Siglum for objects in the Iraq Museum, Baghdad.
CHD	Goedegebuure, P.M., H.G. Güterbock, H.A. Hoffner & T.P.J. van den Hout (eds.), 1980–. <i>The Hittite Dictionary of the Oriental Institute of</i>	ITT 5	de Genouillac, H., 1921. Inventaire des Tablettes de Tello conservées au Musée Imperial Ottoman. Tome V. Époque présargonique, Époque d'Agadé, Epoque
	the University of Chicago. Chicago: The Oriental Institute.	KAH 2	d'Ur III. Paris: Édition Ernest Leroux. Schroeder, O. 1922. <i>Keilschrifttexte aus Assur</i>
CM 26	Sharlach, T.M., 2004. <i>Provincial Taxation and the Ur III State</i> . (Cuneiform Monographs 26.) Leiden: Brill.		historischen Inhalts, Heft II. (Wissenschaftliche Veroffentlichungen der Deutschen Orient- Gesellschaft 37.) Leipzig: J.C. Hinrichs'sche
CT 22	Campbell Thompson, R., 1906. Cuneiform Texts from Babylonian Tablets in British Museum, vol.	KBo	Buchhandlung. <i>Keilschrifttexte aus Boghazköi</i> (Bd. 1-22 in Wissen-
CT 32	22. London: British Museum. King, L.W., 1912. <i>Cuneiform Texts from Babylonian</i> <i>Tablets in British Museum</i> , vol. 32. London: British	KRI	schaftliche Veroffentlichungen der Deutschen Orient-Gesellschaft) Leipzig/Berlin, 1916 ff. Kitchen, K.A., 1969–1990. <i>Ramesside Inscrip-</i>
CT 55	Museum. Pinches, T.G. 1982. Cuneiform Texts from Baby-	Rid	tions. Historical and Biographical, 8 vols. Oxford: Blackwell.
C1 00	lonian Tablets in the British Museum Part 55. Neo-Babylonian and Achaemenid Economic Texts. London: British Museum Publications.	KUB LAPO 16	Keilschrifturkunden aus Boghazköi, Berlin 1921 ff. Durand, JM., 1997. Les Documents épistolaires du palais de Mari, tome I. (Littératures anciennes du
CTH	Laroche, E. 1971. Catalogue des Textes Hittites. Paris: Klincksieck.	LAPO 18	Proche-Orient 16.) Paris: Éditions du cerf. Durand, JM., 2000. Les Documents épistolaires du
DAS	Lafont, B., 1985. Documents Administratifs Sumériens, provenant du site de Tello et conservés au	L/11 O 10	palais de Mari, tome III. (Littératures anciennes du Proche-Orient 18.) Paris: Éditions du cerf.
	<i>Musée du Louvre</i> . Paris: Editions Recherche sur les Civilisations.	LD	Lepsius, C.R., 1849–59. <i>Denkmäler aus Aegypten und Aethiopen</i> (plates), 6 vols. Berlin: Nicolaische
DMMA	Siglum for objects in the Département des Mon- naies, médailles et antiques de la Bibliothèque	LKU	Buchhandlung. Falkenstein, A., 1931. Literarische Keilschrifttexte
DUL	nationale de France. Del Olmo Lete, G. & J. Sanmartín, 2015. <i>A Dic</i> -		aus Uruk. Berlin: Berlin Staatliche Museen zu Berlin Vorderasiatische Abteilung.
	tionary of the Ugaritic Language in the Alphabetic Tradition. Translated and edited by W.G.E. Wat-	M Moore, Mi	Siglum for texts from Mari. ch. Coll.
EA	son. Third revised edition. 2 vols. (Handbuch der Orientalistik 112.) Leiden: Brill. Siglum for the Tell El-Amarna Letters, follow-		Moore, E., 1939. <i>Neo-Babylonian Documents in the University of Michigan Collection</i> . Ann Arbor: University of Michigan Press.
El I	ing the edition of Knudtzon, J. A., 1915. <i>Die El-Amarna-Tafeln</i> . Leipzig: J.C. Hinrichs'sche	MSL VIII/I	Landsberger, B., 1960. The Fauna of Ancient Mesopotamia. First Part: Tablet XIII. (Materialien zum
ePSD	Buchhandlung. Electronic version of <i>The Pennsylvania Sumerian</i> Dictionary, http://psd.museum.upenn.edu		Sumerischen Lexikon VIII/1.) Rome: Pontificium Institutum Biblicum. [with the assistance of A. Draffkorn Kilmer & E.I. Gordon].
ETCSL	Black, J.A., G. Cunningham, J. Ebeling, E. Flückiger-Hawker, E. Robson, J. Taylor & G. Zólyomi (eds.), 1998–2006. <i>The Electronic Text Corpus of Sumerian Literature</i> . Oxford, http://etcsl.orinst.	MVN 8	Calvot, D., G. Pettinato, S.A. Picchioni & F. Reschid, 1979. Textes économiques du Selluš-Dagan du Musée du Louvre et du College de France (D. Calvot). Testi economici dell'Iraq Museum Baghdad.
EM 2	ox.ac.uk/		(Materiali per il Vocabolario Neosumerico 8.)
FM 2	Charpin, D. & JM. Durand (ed.), 1994. Recueil d'études à la mémoire de Maurice Birot. (Florilegium Marianum II.) Paris: Société pour l'étude du	MVN 11	Rome: Multigrafica Editrice. Owen, D.I., 1982. Selected Ur III Texts from the Harvard Semitic Museum. (Materiali per il Vocabolario
Hh	Proche-Orient ancien. The Series HAR-ra='hubullu', Materials for the Sumerian lexicon (MSL), 5, 6, 7, 9, 10 & 11. Rome: Pontificium Institutum Biblicum, 1957–.	MZ NBC	Neosumerico 11.) Rome: Multigrafica Editrice. Siglum for finds from Tell Mozan. 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.	SAA 11	Fales, F.M. & J.N. Postgate, 1995. <i>Imperial Administrative Records, Part II: Provincial and Military Administration</i> . (State Archives of Assyria 11.)
OIP 99			
OII 99	Biggs, R.D., 1974. Inscriptions from Tell Abu	C A A 10	Helsinki: Helsinki University Press.
	Salabikh. (Oriental Institute Publications 99.)	SAA 12	Kataja, K. & R. Whiting, 1995. Grants, Decrees and
	Chicago: The University of Chicago Press.		Gifts of the Neo-Assyrian Period. (State Archives of
OIP 115	Hilgert, M., 1998. Cuneiform Texts from the Ur		Assyria 12.) Helsinki: Helsinki University Press.
	III Period in the Oriental Institute, Vol. 1: Drehem	SAA 13	Cole, S.W. & P. Machinist, 1998. Letters from
	Administrative Documents from the Reign of Sulgi.		Assyrian and Babylonian Priests to Kings Esarhad-
	(Oriental Institute Publications 115.) Chicago:		don and Assurbanipal. (State Archives of Assyria
	The Oriental Institute.		13.) Helsinki: Helsinki University Press.
OIP 121	Hilgert, M., 1998. Cuneiform Texts from the Ur	SAA 17	Dietrich, M., 2003. The Neo-Babylonian Correspond-
	III Period in the Oriental Institute, Volume 2: Dre-		ence of Sargon and Sennacherib. (State Archives of
	hem Administrative Documents from the Reign of		Assyria 17.) Helsinki: Helsinki University Press.
	Amar-Suena. (Oriental Institute Publications 121.)	SAA 19	Luukko, M. 2012. The Correspondence of Tiglath-
	Chicago: The Oriental Institute.	011111	pileser III and Sargon II. (State Archives of Assyria
P	CDLI (Cuneiform Digital Library Initiative)		19.) Helsinki: The Neo-Assyrian Text Corpus
1			
DDT 1	number.	C A A 20	Project.
PDT 1	Çig, M., H. Kizilyay & A. Salonen, 1956. Die	SAA 20	Parpola, S. 2017. Assyrian Royal Rituals and Cultic
	Puzris-Dagan-Texte der Istanbuler Archäologis-		Texts. (State Archives of Assyria 20.) Helsinki:
	chen Museen Teil 1: Texts Nrr. 1-725. (Academia		The Neo-Assyrian Text Corpus Project.
	Scientiarum Fennica Annales, série B, tome	SAT 2	Sigrist, M., 2000. Sumerian Archival Texts. Texts
	92.) Helsinki: Academia Scientiarum Fennica.		from the Yale Babylonian Collection 2. Bethesda:
PKG 18	Orthmann, W., 1985. Der alte Orient. (Propyläen		CDL Press.
	Kunstgeschichte 18.) Berlin: Propyläen Verlag.	SF	Deimel, A., 1923. Schultexte aus Fara. (Wissen-
PTS	Siglum for unpublished texts in the Princeton		schaftliche Veröffentlichung der Deutschen
	Theological Seminary.		Orientgesellschaft 43.) Leipzig: J.C. Hinrichs'sche
RGTC	Répertoire géographique des textes cunéiformes.		Buchhandlung.
	(Beihefte zum Tübinger Atlas des Vorderen	SP	Alster, B., 1997. Proverbs of Ancient Sumer.
	Orients, Reihe B.) Wiesbaden: Reichert, 1974		Bethesda: CDL Press.
RIMA 2	Grayson, A.K., 1991. Assyrian Rulers of the Early	TCL 12	Conteneau, G., 1927. Contrats Néo-Babyloniens I,
	First Millennium BC I (1114-859 BC). (The Royal		de Téglath-Phalasar III à Nabonide. (Textes cunéi-
	Inscriptions of Mesopotamia, Assyrian Periods		formes, Musées du Louvre 12.) Paris: P. Geuthner.
	Vol. 2.) Toronto, Buffalo & London: University	TCL 13	Contenau, G., 1929. Contrats néo-babyloniens II.
	of Toronto Press.		Achéménides et Séleucides. (Textes cunéiformes,
RIME 1	Frayne, D., 2008. Presargonic Period (2700–2350 BC).		Musées du Louvre 13.) Paris: P. Geuthner.
	(The Royal Inscriptions of Mesopotamia, Early	TRU	Legrain, L., 1912. Le temps des rois d'Ur: recherches
	Periods Vol. 1.) Toronto: University of Toronto		sur la société antique d'après des textes nouveaux.
	Press.		(Bibliothèque de l'École des Hautes Études 199.)
RIME 4	Frayne, D., 1990. Old Babylonian Period (2003–		Paris: H. Champion.
1111112	1595 BC). (The Royal Inscriptions of Mesopotamia,	TU	Thureau-Dangin, F., 1922. Tablettes d'Uruk à
	Early Periods Vol. 4.) Toronto: University of	10	l'usage des prêtres du Temple d'Anu au temps des
	Toronto Press.		Séleucides. (Musée du Louvre. Département des
RINAP	The Royal Inscriptions of the Neo-Assyrian		antiquités orientales. Textes cunéiformes.) Paris:
TGI VI II	Period; Open Richly Annotated Cuneiform		P. Geuthner.
	Corpus, available at http://oracc.museum.upenn.	U.	Siglum for finds from Ur.
	edu/rinap/index.html	UCP 9/1,I	Lutz, H.F., 1927. Neo-Babylonian Administrative
RLA	Reallexikon der Assyriologie und vorderasiatischen	0 (1)/1/1	Documents from Erech: Part I. (University of Cali-
TCL2 Y	Archaologie.		fornia Publications in Semitic Philology Vol. 9
RS	Siglum for documents from Ras Shamra (Ugarit).		no. 1/I.) Berkeley (CA): University of California
SAA 2	Parpola, S. & K. Watanabe, 1988. Neo-Assyrian		Press.
JAA 2	Treaties and Loyalty Oaths. (State Archives of	UCP 9/1,II	
	Assyria 2.) Helsinki: Helsinki University Press.	OCI 7/1,11	Documents from Erech: Part II. (University of
SAA 7	Fales, F.M. & J.N. Postgate, 1992. <i>Imperial</i>		California Publications in Semitic Philology Vol.
01111	Administrative Records, Part I: Palace and Temple		9 no. 1/II.) Berkeley (CA): University of California
	Administration. (State Archives of Assyria 7.)		Press.
	Helsinki: Helsinki University Press.	UDT	Nies, J.B., 1920. <i>Ur Dynasty Tablets: Texts Chiefly</i>
SAA 10	Parpola, S. 1993. Letters from Assyrian and Baby-	01	from Tello and Drehem Written during the Reigns
<i>5</i> AA 10	lonian Scholars. (State Archives of Assyria 10.)		
			of Dungi, Bur-Sin, Gimil-Sin and Ibi-Sin. Leipzig:
	Helsinki: Helsinki University Press.		J.C. Hinrichs'sche Buchhandlung.

Abbreviations and sigla

VA	Siglum for objects in the Vorderasiatisches		et d'Histoire in Genf. Naples: Istituto orientale di
	Museum, Berlin (Vorderasiatische Abteilung).		Napoli.
VAT	Siglum for objects/tablets in the Vorderasiatisches	YBC	Siglum for tablets in the Yale Babylonian
	Museum, Berlin (Vorderasiatische Abteilung.		Collection.
	Tontafeln).	YOS 7	Tremayne, A., 1925. Records from Erech, Time of
VS 1	Ungnad, A. & L. Messerschmidt, 1907. Vordera-		Cyrus and Cambyses (538-521 B.C.). (Yale Oriental
	siatische Schriftdenkmäler der Königlichen Museen		Series, Babylonian Texts, vol. 7.) New Haven:
	zu Berlin. Vol. 1, Texts 1–115, Königliche		Yale University Press.
	Museen zu Berlin. Sammlung der Vorderasi-	YOS 8	Faust, D.E., 1941. Contracts from Larsa, dated in the
	atischen Altertümer. Leipzig: J.C. Hinrichs'sche	1000	Reign of Rim-Sin. (Yale Oriental Series, Babylo-
	Buchhandlung.		nian Texts, vol. 8.) New Haven: Yale University
VS 16	Schröder, O., 1917. Altbabylonische Briefe.		Press & London: H. Milford, Oxford University
V 5 10	(Vorderasiatische Schriftdenkmäler der		Press.
	königlichen Museen zu Berlin 16.) Leipzig: J.C.	YOS 11	van Dijk, J., A. Goetze & M.I. Hussey, 1985.
	Hinrichs'sche Buchhandlung.	10511	Early Mesopotamian Incantations and Rituals. (Yale
VS 17			
V 5 17	van Dijk, J. 1971. Nicht-kanonische Beschwörungen		Oriental Series, Babylonian Texts, vol. 11.) New
	und sonstige literarische Texte. (Vorderasiatische	VOC 17	Haven: Yale University Press.
	Schriftdenkmäler der Königlichen Museen zu	YOS 17	Weisberg, D.B., 1980. Texts from the Time of
	Berlin 17.) Berlin: Akademie Verlag.		Nebuchadnezzar. (Yale Oriental Series, Babylonian
WB	Erman, A. & H. Grapow (eds.), 1971. Wörterbuch		Texts, vol. 17.) New Haven: Yale University Press.
	der ägyptischen Sprache, 5 vols. Berlin: Akademie	YOS 19	Beaulieu, PA., 2000. Legal and Administrative
	Verlag.		Texts from the Reign of Nabonidus. (Yale Oriental
WMAH	Sauren, H., 1969. Wirtschaftsurkunden aus der Zeit		Series, Babylonian Texts, vol. 19.) New Haven:
	der III. Dynastie von Ur im Besitz des Musée d'Art		Yale University Press.

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 humananimal-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 animalhuman 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.

References

Kirksey, S.E. & S. Helmreich, 2010. The emergence of multispecies ethnography. *Cultural Anthropology* 25(4), 545–76.

Kopnina, H., 2017. Beyond multispecies ethnography: engaging with violence and animal rights in anthropology. *Critique of Anthropology* 37(3), 333–57.

Levi-Strauss, C., 1963. Totemism. Boston: Beacon Press.

Ogden, L., B. Hall & K. Tanita, 2013. Animals, plants, people and things, a review of multispecies ethnography. *Environment and Society* 4(1), 5–24.

Parathian, H., M. McLennan, C. Hill, A. Frazão-Moreira & K. Hockings, 2018. Breaking through interdisciplinary barriers: human-wildlife interactions and multispecies ethnography. *International Journal of Primatology* 39, 749–75.

Smart, A., 2014. Critical perspectives on multispecies ethnography. *Critique of Anthropology* 34(1), 3–7.

Chapter 20

Wild ostriches: a valuable animal in ancient Mesopotamia

Olga V. Popova & Louise Quillien

The role of ostriches in Mesopotamian society can be studied through a comparison of textual data and archaeological finds. Ostriches were often present at royal courts. They were considered rare and prestigious animals, and used as distraction for the elite in zoological gardens and as diplomatic gifts. On Assyrian seals, fast and dangerous ostriches were depicted as royal hunting trophies, along with lions. Their eggs and feathers were particularly valuable for the manufacture of luxurious objects such as vessels, fans and garments. We examine here the place of these animals in Mesopotamian culture and the way in which ostrich hunting contributed to the construction of royal ideology.

The ostrich is a wild animal that lives in semi-desert areas. It is the tallest and the fastest of birds, but it cannot fly. Due to its ability to run fast and the strength of its feet, the ostrich has no natural predators. It can travel long distances to feed itself and flee from danger. The Mesopotamian ostrich belonged to the subspecies *Struthio camelus syriacus*, the Arabian/Syrian ostrich. The animal reportedly found its way to the Middle East from Africa during the Pleistocene, 2.58 million years—11,700 BC (Herles 2007, 175; quoting Robinson & Matthee 1999, 165). This subspecies was driven to extinction in the middle of the twentieth century AD (on ostriches in Arabia, see Potts 2001). Nowadays, only two subspecies remain: African ostrich, *Struthio camelus Linnaeus* and Somalian ostrich, *Struthio molybdophanes*.

Humans have interacted with ostriches since prehistoric times. The oldest evidence from Mesopotamia illustrates confrontation in the form of a flint found stuck in the pelvic bone of an ostrich skeleton, dated to the Mousterian period, 350,000–35,000 BC, at Umm el Tlel, El Kowm, Central Syria (Bonilauri *et al.* 2007, 39–46). Signs of the presence of ostriches in Mesopotamia occur in faunal remains, iconography and texts. A synthesis of the archaeological discoveries with the corresponding scientific literature is presented by

Herles (2007). Rare remains of ostrich skeletons have been found at Levantine and Syrian sites from the fourth to the second millennium BC, suggesting that ostriches lived in this area. In contrast, many eggshells have been discovered in palaces, temples, buildings and in burials, not only in the regions where bones are attested (Syria and the Levant) but also in southern Mesopotamia, for instance at Kiš, Umma, Ur, and Abu Salabikh. We do not know if ostriches also lived in the south or if these eggs were imported. Only a few eggs date back to the first millennium BC; among them are the remarkable findings from Nimrud, ninth/eight century BC (Oates 2001, 46).

Iconographic depictions of ostriches exist throughout all periods of Mesopotamian history. An extensive overview of the iconographic data is presented in an article by Collon (2010). Ostriches appear on a mural painting at Tell Bugras, dated to the Neolithic period, and this is the earliest iconographic evidence we have (Nunn 1988, pl. 2; Herles 2007, 180). They were depicted on seals from the third to the first millennium BC, as well as in second millennium BC Babylonian terracotta plagues (Collon 2010) and on Kassite kudurrus (Herles 2009). Representations are especially numerous in Neo-Assyrian glyptic and on many objects found in the palaces of Nineveh and Kalhu: a vessel, ivory bands and statuettes.3 This unequal spatial and temporal distribution of the material and iconographic data might be due to the results of the excavations that were obviously not exhaustive. Nevertheless, one can observe general trends that we will try to explain, for instance, the increasing popularity of the animal as an iconographic motif during the Neo-Assyrian period.

The term for ostrich is spelled GA.NU₁₁ in Sumerian, *lurmu* in Akkadian (CAD L, 255; AHw 564; Stol 2011–2012, 211–12). At least six Ur III texts, *c*. 2100–2000 BC, mention ostriches: in the middle of a list of cattle (CT 32, 14; P108664) and in a boat (CM 26, 051; P292578).

An ostrich in silver, perhaps a statuette, appears in one text (SAT 2, 527; P143727) and ostrich eggs, given to the grand vizier (SUKKAL.MAH) are mentioned in two others (AO 02458; P108815 & ITT 5, 8221; P111720). One also finds ostriches in two lexical lists from Shuruppak and Abu-Salabikh, dating from the Early Dynastic III period, c. 2600–2500 вс (SF 058; P010649 & OIP 99, 34; P010094). During the second millennium BC, the core of written sources mentioning ostriches comes from Mari's palace archive. Apart from these, an ostrich egg occurs in a text from Nuzi (HSS 14 247=Lacheman 1939, 130-2) and in another from Ugarit (RS 25.421=Nougayrol 1968, 310-19). The animal is also attested in several Old Babylonian lexical lists from Nippur⁵ and in a bird names inventory from Sippar (IM 90646). A Middle Assyrian text from Tell Sabi Abyad (T 97–33) evokes the fattening of female ostriches. Ostriches also appear in the royal inscriptions of the Assyrian kings as hunting trophies, 6 and ostrich eggshells are frequently attested in Assyrian medical texts (for instance BAM 3, 237; 313; 318). As for Babylonia, in the first millennium BC, a letter sent from the land of Bīt-Yakīn to Nergal-nāṣir states that there are no ostrich eggs in the region of Nippur (SAA 17, 147). Two texts from Uruk dated to the Neo-Babylonian and Hellenistic periods mention ostrich eggs, but their provenance is not specified (TCL 12, 123 and TU 38). Ostrich is cited in the famous Mapa Mundi, together with other wild animals created by Marduk (CT 22, pl. 48).

In this chapter, we will first study how the hunt of this wild animal manifested the power of the kings and participated in the construction of royal ideology; then we will observe various uses of the animal and its by-products at royal courts in order to better understand the role of this animal in Mesopotamia.

Ostriches and royal ideology

A wild animal

Although today we are used to seeing ostriches in farms, in the ancient Near East, they were wild animals. They appear in different types of sources. Ostriches were associated with other wild fauna in figurative scenes engraved on seals. For instance, a seal from Tello, dated to the Early Dynastic period (c. 2900–2350 BC), shows a hunting scene where a lion, an ibex, a stag and a jackal or a fox are represented together with an ostrich (Fig. 20.1). On a Middle Assyrian seal, a hero hunting an ostrich is figured together with a lion and a stag (Fig. 20.2).

Some textual sources also evoke ostriches living in peripheral areas. The Sumerian literary text *Ur-Nanše and the Birds* describes the behaviour of different wild birds such as the pelican, the vulture, the raven and the peacock. According to this text, the ostrich 'produces eggs bigger than a mountain. One takes these eggs as carrying baskets. The bird is familiar with the watch at night' (Ur-Nanše C, Nanše and the birds: A 46–8, translation of Veldhuis 2004, 119). Indeed, male and female ostriches take turns to incubate the eggs and watch them so that they do not remain unattended, contrary to their bad reputation in the Bible, where



Figure 20.1. *Modern impression of a cylinder seal, Tello, Early Dynastic period, picture taken from von der Osten 1934, no. 680, see Collon 2010, no. 95 for bibliography.*

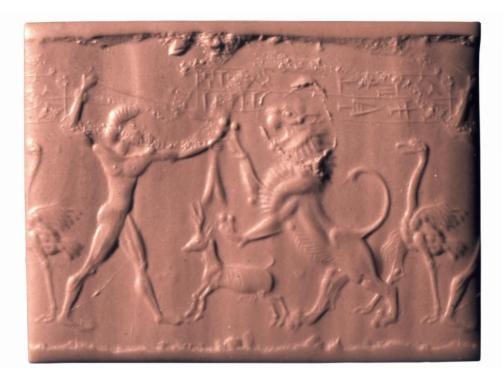


Figure 20.2. Modern impression of a cylinder seal, Mesopotamia, Middle Assyrian period, BM 89862 © The Trustees of the British Museum (CC BY-NC-SA 4.0), see Collon 2010, no. 72 for bibliography. https://www.britishmuseum.org/collection/object/W_1891-0113-1 (last accessed 26.09.2020).

in Job 39, 14, an ostrich leaves its eggs on the ground, and heats them on the dust.

Several letters from Mari (eighteenth century BC) mention that ostrich eggs are found 'in the steppe' or 'in the desert'. For instance, in a letter of Ilušu-nāsir, governor of Qattunan, to his lord Zimrî-Lîm, we read the following: 'One other thing. We collected four ostrich eggs from the steppe, and I have them taken to my lord' (ARM 27 9, 31-4). In FM 2 62, another governor of Qattunan, Hadni-Ilum-ma, is writing to Zimrî-Lîm that 'The rains have been continuous and desert mushrooms have just appeared in the district. I had some taken to my Lord's house with two ostrich eggs' (FM 2 62, 8-12). In the letter ARM 14 86 from Yaqqim-Addu, governor of Saggarâtum, to his lord Zimrî-Lîm, Yaqqim-Addu says that during patrols in the steppe belonging to the King of Mari, gendarmes found two ostrich eggs (ARM 14 86, 27–30).

In the royal inscriptions of the Assyrian kings, the hunting booty includes ostriches among other wild animals. An inscription of Aššur-bēl-kala (1075–1057 BC) lists the animals killed by the king: 'panthers, [...] tigers? (midinū), [...] bears, two wild bears of the marshes, (and) [...] ostriches' (RIMA 2, 103–4), and Ashurnaṣirpal II (883–859 BC) relates his hunting exploits in the following way: '[...] alive in my hands I captured, and herds of wild oxen, and elephants, and lions, and ostriches, and male and female monkeys, and wild asses, and gazelle, and stags, and bears, and panthers, and cheetah, all the beasts of the plain and of the mountains' (AKA I, col iv, 36–46). Tukultī-Ninurta II (891–884 BC) specifies

in one of his inscriptions that he killed ostriches in a desert area: 'I set up camp (and) spent the night here. Hindanu is on the other side of the Euphrates river. During the hunt in the desert, I killed ostriches. The little ostriches, the birds, I took them with my own hands' (Scheil 1909, 79–82).

Assyrian royal inscriptions indicate the regions the animal lived: Aššur-bēl-kala was hunting in the mountains near Assyria (RIMA 2, 103–4), Tukultī-Ninurta II captured ostriches in the desert at Ḥindanu in the Middle Euphrates (Scheil 1909, 79–82); Ashurnaṣirpal II also hunted them in the Middle Euphrates (RIMA 2, 215–16) and listed 200 ostriches killed (RIMA 2, 288ff). These attestations are not surprising as they correspond to the place where ostrich bones had been certified in the third and second millennia BC, in Syria and the Levant (see the reference in the introduction of the present chapter).

In the famous Babylonian tablet of the *Mapa Mundi* (BM 92687), dating back to the fifth century BC, the text accompanying the map of the world enumerates the animals that Marduk created on earth: 'Moun]tain goat, gazelle, zebu, panther, bull-m[an] [...l]ion, wolf, reddeer, hye[na ... monk]ey, female-monkey, ibex, ostrich, cat, chamelon [...] beasts, which Marduk created along with the restless sea' (CT 22 48, 6'–9', Horowitz 1988, 149). They are not common animals in Mesopotamia. According to Horowitz, the purpose of this tablet was to describe distant areas as well as to locate them with regard to more familiar places such as Babylon, Assyria, and the Euphrates river (Horowitz 1988, 160). The



Figure 20.3. Cylinder seal and its modern impression, Mesopotamia, Neo-Assyrian period, BM 102397, © The Trustees of the British Museum (CC BY-NC-SA 4.0), see Collon 2001, 171 for bibliography. https://www.britishmuseum.org/collection/object/W_1906-0512-318 (last accessed 26.09.2020).

ostrich was therefore perceived as an animal living far from areas inhabited by humans until the most recent periods of Mesopotamian history.

Ostrich hunting and royal zoological gardens

Texts and iconography document the hunt for ostriches in Mesopotamia. The ostrich can run very fast, up to 70 km/h, and is very difficult to capture. However, especially in the first millennium BC, there are many representations of a hero or a king hunting ostriches. While these images conform to the tradition of royal representation and convey royal ideology, they often belong to a mythical register. Nevertheless, it is interesting to observe the hunting techniques that Mesopotamians boast about in these depictions. Some seals demonstrate a hero holding ostriches in their hands (Fig. 20.3).

Seal representations also show the weapons used to hunt ostriches: a sword (Fig. 20.4),⁷ a stick, a sickle (Fig. 20.5),⁸ a spear (Fig. 20.2), and a bow. In some images, the man is holding an ostrich in one hand and has a weapon in the other. Sometimes the hunter is on foot, sometimes he rides a horse (Oates 2001, 65 and fig. 40) or a camel,⁹ and in rare cases he is in a chariot (see in particular the scenes of the wall panels of Nimrud,¹⁰ more 'realistic' than the glyptic). Some scenes show several people hunting an ostrich together.¹¹

The meat of ostriches is edible but very tough. Despite records especially of Assyrian kings killing ostriches, it seems that they were not hunted for their meat (Herles 2007, 200), and that ostrich meat was not eaten. Indeed, in a royal inscription RIMA 2 30, Ashurnasirpal prides himself on having killed 200 ostriches during a hunt, but no such animal is mentioned later in the same text, when the menu of the banquet offered by the king for the dedication of the palace at Kalhu is detailed. However, it does not explicitly say that ostrich meat was not eaten at all. There is one attestation in medical prescription that recommends it: 'He will eat ostrich meat and become (cultually) clean' (BAM 3, 318, iii 4). It is a special medicinal use of this meat, and it is for the moment the only attestation of consumption of ostrich meat in the textual data.

The texts indicate that ostriches were sometimes kept alive as a hunting trophy, and put into royal zoological gardens. In Mari's palace, rare animals, offered as diplomatic gifts or captured on the king's orders, were kept in zoological gardens (Durand 2004, 835). Like lions, ostriches were among the animals that the king of Mari wanted to capture alive (Guichard 1997, 323–5). The same practice is attested during the Neo-Assyrian period: in an inscription of Ashurnaṣirpal, the king claims to have captured 140 ostriches alive with other animals in order to breed them: 'I captured

alive 50 wild bulls, 140 ostriches, (and) 20 strong lions from the mountains and forests. I received five live elephants as tribute from the governor of the land Sūḥu and the governor of the land Ludbu (and) they went about with me on my campaign. I formed herds of wild bulls, lions, ostriches, (and) male (and) female monkeys. I bred herds of them' (RIMA 2 30, 90–100). In another inscription, the same king states that he brought wild animals back to Kalḥu to show them

to the population: '(...) alive in my hands I captured, and herds of wild oxen, and elephants, and lions, and ostriches, and male and female monkeys, and wild asses, and gazelle, and stags, and bears, and panthers, and cheetah, all the beasts of the plain and of the mountains in my city of Calaḥ I collected, and the people of all my land I cause to behold them' (AKA I, col iv, 36–50). It is therefore very likely that ostriches were integrated into the royal gardens.



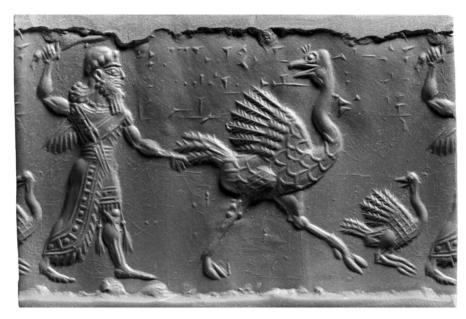


Figure 20.4. Cylinder seal and its modern impression, Mesopotamia, Middle Assyrian period, © Pierpont Morgan Library, no. 606, New York (Acquired by Pierpont Morgan between 1885 and 1908), Porada 1948, no. 606, Collon 2010, no. 57. https://www.themorgan.org/seals-and-tablets/84234 (last accessed 04.12.2019).





Figure 20.5. Cylinder seal and its modern impression, Mesopotamia, Neo-Babylonian period, 1000–539 BC, © Pierpont Morgan Library, no. 773, New York, Porada 1948, no. 773. https://www.themorgan.org/seals-and-tablets/84395 (last accessed 04.12.2019).

The interest in ostriches and their hunting, which appears in Assyrian and Babylonian iconography on seals and reliefs in the first millennium BC, shows a growing interest in distant spaces, concurrent with the military conquests of this time. The capture of wild animals such as lions and ostriches and their keep in the royal zoological gardens as well as the interest in geography manifest the power acquired by kings over these spaces.

A royal prerogative

At Mari, it seems that ostriches and their eggs found in the steppe were reserved for the king. One text from Mari demonstrates that it was forbidden to kill an ostrich, as was the case for the lion. These animals had to be captured alive and brought to the king: 'Tell my Lord, thus says Habdu-ma-Dagan, your servant. My lord wrote to me about 9 ostriches. I have tried to (take) 9 ostriches. A Bedouin (...). An ostrich [was taken]. When I come to my lord's house, he will give it. According to my lord's order (asakkum lit. 'taboo'), if more ostriches appear, they will be kept for my Lord!'

(M 10999, Guichard 1997, 323–5). This is an interesting parallelism between the lion and the ostrich. The ostrich eggs that could be found in the countryside were also sent directly to the king. This practice shows that the animals of the steppe were part of the royal domain, and that the rulers thus asserted their power over the peripheral territories.

Texts from other periods also attest prerogatives over the ostrich and its eggs. For example, two documents from Ur III (DAS 18 and ITT 5, 8221) record ostrich eggs that were 'for the grand vizier' (SUKKAL. MAH). Perhaps the eggs found were reserved for this administrator. Assyrian royal inscriptions concerning royal hunts show that this animal was worthy prey for the king. We can even draw a parallel between the lion and the ostrich in some iconographic representations (for example, Collon 2010, no. 84). Cylinder seals show a lion and ostriches fighting together at the same level (Fig. 20.6).

According to Collon (2010, 1), in the iconography, the ostrich is not associated with a specific god, i.e. no god has the ostrich as his animal symbol. Sometimes

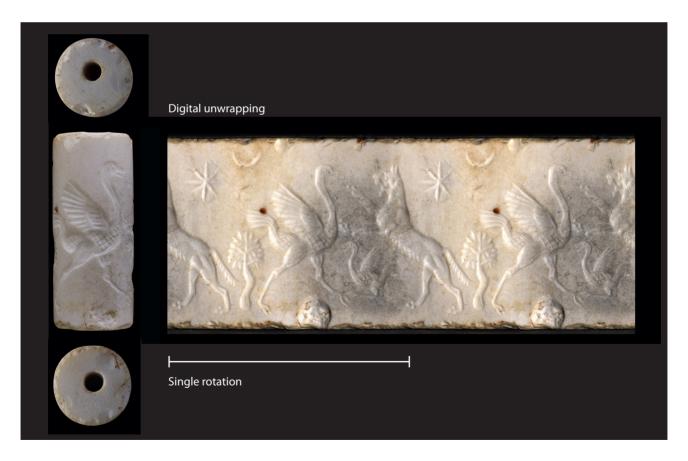


Figure 20.6. Cylinder seal, Northern Mesopotamia, c. 1600–1000 BC, © Cabinet des Médailles, Bibliothèque Nationale de France, DMMA 1980.292.49, P502740 provided by Sceaux et empreintes de sceau du Proche-Orient ancien http://sespoa.huma-num.fr/items/show/715 (last accessed 04.12.2019).

its meat and eggs were used in rituals; at Uruk, eggs were offered for the divine meals by the Babylonian king Nabonidus (TCL 12, 123). It is interesting to note that the king has these goods at his disposal in Babylon in the sixth century BC, in the absence of contemporary data concerning royal hunts.

The use of the animal and its by-products at royal courts

Diplomatic gifts and royal tribute

Ostriches were offered as diplomatic gifts. This phenomenon is documented in the Old Babylonian period, when the building of a whole diplomatic system began, leading to the formation of great powers in the ancient Near East (Lafont 2001). Diplomatic gifts were an instrument for the kings to show their wealth and to forge alliances. In their correspondence, they appear as sending or requesting prestige goods. The ostrich was one of these valuable and coveted possessions, as the correspondence of the king of Mari shows. Sibkuna-Addu, the king of Šuda, writes to Zimrî-Lîm (1775–1761 BC): 'You wrote to me in these terms: if you have a real desire, tell me what you want, so that I can give it to you. Now, if [...] clothes, shirts, shawls [...] horses [...] Now, I don't have an ostrich, send me a beautiful ostrich, as soon as possible' (ARM 28 33, 5–16). 12 Šuda is here one of the capitals of Zalmagum, located near Mount Hasam, in the north of Balib, in the Khabur triangle (Ziegler & Langlois 2017, 348). The sender seems to suppose that Zimrî-Lîm has ostriches at his disposal. But even for the king of Mari, ostriches are difficult to find. In a letter to Ligtum, the wife of Adal-šenni, the king of Burundum, Zimrî-Lîm writes: 'In the land where you are, there are many ostriches; why don't you send some to my house?' (ARM 10140, 30–3).¹³ Burundum was the capital of the kingdom in the actual Tur Abdin, a region situated in southwest Turkey, at the border of Syria (Ziegler & Langlois 2017, 69-70). This letter seems to indicate that ostriches lived in this area, but in another letter, the king of Burundum himself requests a garment made with ostrich feathers from Zimrî-Lîm.14 Ostriches thus seem difficult to obtain for the kings of the region, which surely made them even more valuable gifts.

Later, in the first millennium BC, during the age of empires, wars are better documented than diplomatic exchanges. Ostriches were sometimes part of the booty taken by force from the defeated enemy. Two iconographic depictions show bearers of tribute holding ostriches. The first is a fine ivory statuette from Nimrud (storeroom NE2, Fort Shalmaneser) representing a Nubian holding a goat around his shoulders and an ostrich by its neck (Oates 1962, 13, pl. VII; Herles

2007, 189; Collon 2010, no. 74). It is probably an African ostrich and if the statuette was brought to Assyria, the same may not be the case for the animal itself. Nevertheless, Nubians are widely represented in reliefs depicting Ashurbanipal's Egyptian campaign (Barnett 1976, pl. 36, slab 17). The second is a bowl discovered in the tomb of a member of the merchant aristocracy at Arjan (Elam), dated to the mid-seventh century BC (Majidzadeh 1992, fig. 1, 78; Herles 2007, 195; Collon 2010, no. 77). Two pairs of ostriches are driven by a man in the middle of a procession of tribute bearers, along with other animals like lions. The style merges elements of Elamite, Assyrian, Egyptian and Phoenician art. More than a representation of a historical scene, it shows the content of a very prestigious war tribute for the Elamite aristocracy, with ostriches being a part of it. Ostriches were therefore among the precious and rare goods exchanged between kings, offered as diplomatic gifts or taken in tribute after a military victory.

A source of luxury items: vessels and garments

The ostrich was also an animal coveted for its eggs and feathers. The ostrich egg is the largest egg with a shell of an extant animal and it can weigh more than one kilogram. Its shell is thick (2–3 mm) and hard. Once emptied, ostrich eggshells provide good material for vessels and they were used as such in ancient Mesopotamia. The eggshells used as vases have a neat opening on one side and are often decorated on the rim. Some of them have been found with a foot that allowed them to stand upright. Ostrich eggs were used in contexts that go beyond the palatial environment: they were also discovered in tombs, temples, and residential quarters. Syntheses of the discoveries of ostrich eggs in Mesopotamia have been presented in a number of studies (Laufer 1926; Finet 1982; Caubet 1983; Herles 2007; Matoïan 2008).

The oldest ostrich eggshells known to date have been found in the Levant and date back to the fifthfourth millennium BC. 15 In Mesopotamia, a fragmented painted eggshell dated to the Uruk IV period (3350-3200 BC) was discovered in the South temple of Tell Qannas / Habuba Kabira, Northern Syria (Finet 1982, 72; Herles 2007, 177). During the third millennium BC, ostrich eggs turned into precious vessels have been found in Mesopotamian tombs, temples and palaces. They are often decorated with inlays. For instance, an ostrich eggshell together with a pottery rim inlaid with pieces of shell and bitumen was discovered at Tell Jokha, ancient Umma, in a building dated to the Early Dynastic period, 2900–2350 BC (Rumaidh 2000, 27, fig. 84). Famous are the ostrich eggshell vessels of the Royal Cemetery of Ur, second half of the third millennium BC

(Woolley 1934, pl. 156, 170a). These were opened at the top to serve as cups or bowls. One is decorated with a band of mosaic round the rim, made with inlay of mother-of-pearl and red paste in bitumen (BM 123556, last accessed 04.12.2019). Another is an imitation made of gold, with its rim and foot adorned with mosaics of ostrich eggshell, limestone, lapis lazuli and sandstone inlaid in bitumen (Penn Museum B16692, last accessed 04.12.2019). Ostrich eggs were therefore appreciated as luxury containers at that time.

From the second millennium BC, the findings of ostrich eggshells are more numerous, but painted eggshells replaced inlaid eggshells. A painted eggshell was found in the throne room of the royal palace of Ugarit (Matoïan 2008). They are also attested in the Levant, in Cyprus and in the Mycenaean world (Caubet 1983; Matoïan 2008). Unpainted eggshells and fragments have also been discovered at many archaeological sites in the Levant and in Mesopotamia, especially in tombs. 16 This shows that they were less rare objects at the time. In southern Mesopotamia, during the Kassite period, ostrich eggs were still found in places of worship and power, for instance in the palace of Dur Kurigalzu/Aqar Quf, the headquarters of a Kassite dynasty during the thirteenth/twelfth century BC (Baqir 1945, 14; Moorey 1994, 128). Decorated ostrich eggshells were a part of the Bronze Age traded goods in the Mediterranean world and in the Near East. In the first millennium BC, finds of ostrich eggs became rarer in Mesopotamia, but remained numerous in the Mediterranean world (Caubet 1983, 182–3). Eggshells painted with red colours were uncovered in the Assyrian palace of Nimrud (ninth/eighth century вс).¹⁷

Sumerian and Akkadian texts evoke luxury vessels made of ostrich eggshell. An Ur III text refers to an eggshell set in gold, similar to the ones discovered in the Royal Cemetery (AO 3370, Thureau-Dangin 1903, no. 229). Some texts give clues to the use of these luxury recipients. Lú.dingir.ra, a Sumerian author from Nippur, evokes 'a phial of ostrich shell, overflowing with perfumed oil' in a poem he dedicated to his mother (Civil 1964, 1–11; Cooper 1971, 157–62). A tablet from the royal archive of Mari mentions an ostrich egg mounted in gold (ARM 26 I/1, 487, n. 19, text M.18010). At Ugarit, a text mentions a vessel of ostrich eggshell containing aromata (RS 25.421, Nougayrol 1968, 310–19). The UR5.RA=hubullu lexical lists record a recipient in the shape of an ostrich egg: 'bur. NUNUZ.GA.NU₁₁ MUŠEN = šape-el lu-ur-me' (Hh. X, 110; CAD L, 255). Ostrich eggshells could therefore be used to contain precious substances.

Unlike eggs, ostrich feathers are rarely mentioned in Mesopotamian texts. Garments made with these feathers are attested at Mari, in several texts: subât kap

lurmim or Túc kap lurmim (Durand 2009, 105–6). For instance, in a letter, Adal-šenni, the king of Burundum, asks Zimrî-Lîm, the king of Mari, to send him such a garment, because the king of Lullû, who is visiting him, wants one: 'Have brought to me 20 or 30 wild bull horns and (a garment) of ostrich feathers $/k[a]p^{(!)}$ lu-ur-mi-im(mušen)' (ARM 28, 43, 15–17, edition and bibliography on http://www.archibab.fr/ no. T6955). This item is also listed in administrative documents of the palace of Mari, and is mentioned in a dowry where it is worth 10 shekels of silver. It is not very frequent in the archive. According to Durand, apart from two women, the king is the only beneficiary of this precious item (Durand 2009, 106).

On the seals, heroes are most often depicted collecting the eggs of ostriches. However, on a Middle Assyrian seal (dated 1250–1150 BC), we clearly see the figure pulling the feathers out of the animal's tail (Fig. 20.4). According to Collon, one may find figures wearing ostrich feathers in headdresses on Nineveh wall panels representing Nubian prisoners captured by Ashurbanipal, archers and musicians (Calmeyer 1969, 184–95; Barnett 1976, pl. 36, slab 17; Collon 2010).

Ostrich eggs in ritual texts and offerings for the gods Ostrich eggs are used in medical prescriptions and for the gods' offerings. In medico-magical rituals, it is often the shell of the ostrich that is used to treat different diseases, for instance: 'barīrātu, myrrh, resin of baluḥḥu, shell of an ostrich egg, these ten medications you bray together, he drinks them in wine or beer on an empty stomach and he recovers' (AMT 59, 1, 34). The eggshell was especially prescribed to treat renal disease (Geller 2005, vii).

Ostrich eggs were eaten at the table of the kings, judging by the eggs found pierced or broken. A text from Mari does mention an ostrich egg served to the king as an omelette (ARM 26 I/1, 487, n. 18, text M.13158). In first-millennium BC Babylonia, ostrich eggs were part of the food and animals offered by kings to temples to supply the offering table of the gods. A ritual text from Uruk, dated to the Hellenistic period, requests that three ostrich eggs were given to the gods for the second meal of the day, together with other products like duck eggs (AO 6451 r. 17, edition Thureau-Dangin 1921, 38, 84; Linssen 2004, 136, 178; see also Beaulieu 1991, 52 and Beaulieu 2003, 28 n. 46). We do not know if this instruction was obeyed. Nevertheless, an earlier administrative text from Uruk, dated to the Neo-Babylonian period (550-549 BC), shows that king Nabonidus gave ostrich eggs to the temple on two occasions. It is a long text listing the cattle, sheep and birds of the royal offerings (nigê šarri), delivered to the Eanna temple from the first to the sixth year of Nabonidus' reign. Among the offerings of the first year one finds: '6 geese, 5 ducks, 20 turtle doves, 70 doves, 7 ostrich eggs, 18 duck eggs' and the third year: '12 geese, 5 ducks, 40 turtle doves, 23 doves, 8 ostrich eggs' (TCL 12, 123, edition Moore 1935, no. 23 & Kozuh 2014, 242–5). In the other years, the offerings did not contain any eggs. There is no other attestation, for the moment, of ostrich eggs in the administrative texts of the Babylonian temples of the first millennium Bc. It seems that these eggs were a rare dish that only kings had the capacity to offer to the gods, occasionally.

Conclusion

The ostrich was a valuable animal in Mesopotamia. Ostriches, their eggs and feathers are mentioned in Mesopotamian documentation during all the periods of cuneiform writing. Remains of ostrich bones found in Mesopotamia date from the fourth to the third millennium BC. These data testify to the presence of the animal near the Euphrates and the Khabur in Northern Syria and in the Levant. It can be assumed that ostriches lived in the semi-desert steppe pastures that surround the river valleys. However, the presence of ostrich eggs, iconographic representations, as well as textual data, testify that this animal was known far beyond this area, at least as far as Southern Mesopotamia. During the third millennium BC, ostriches were depicted as wild animals in the iconography. According to the texts and archaeological discoveries, their eggs were precious goods, adorned with inlays and transformed into prestigious vessels for the elite.

Finds of ostrich eggs dated to the second millennium BC are more numerous. They are present in very diverse archaeological contexts and their trade is attested in the Levantine area. The animal is depicted on terracotta plaques. Letters from Mari, in particular, present the ostrich as a wild animal, living in the steppe surrounding human living spaces, and whose hunt was reserved for the king. The animal was offered as diplomatic gifts, showing the kings' wealth and prodigality. Its eggs were used for luxury vessel and their feathers for the fabrication of garments and headdresses.

During the first millennium BC, the ostrich became very popular in Assyrian and Babylonian glyptic and iconography in general, whereas there are few finds of eggshells and no bones from this period. If this is not an effect of the uneven archaeological excavations in the region, the rarity of the animal in Assyria and Babylonia was perhaps one of the causes of its popularity. The Neo-Assyrian royal inscriptions describe the kings hunting ostriches among other wild animals like the lion. Cylinder seals and a vessel depict different hunting techniques. The ostrich was also perceived, at

this time, as a mythical animal: fighting a genie-hero on scenes engraved on cylinder seals, or mentioned among the wild animals of the Babylonian peripheries in the *Mapa Mundi*. Therefore, at the time of the building of the empires, ostriches became a motif highlighting the king's power and skill and, through its hunt, demonstrating his domination over the inhabited spaces and peripheral territories that they intended to conquer and master.

The ostrich also had a role in medicine and religion. We do not have evidence of the eating of ostrich meat in everyday life, except in medical prescriptions of the Assyrian corpus. But eggs were eaten at the table of the kings. Crushed eggshells were a medicine prescribed against renal disease. During the Neo-Babylonian and Hellenistic period, in Babylonia, ostrich eggs were a rare meal offered by the king for the table of the gods.

Notes

- 1 Habuba Kabira, Syria, end of the fourth millennium BC; Mispe Ramon, Neguev desert, third millennium BC; Halawa, Syria, 2700 2500 BC; Selenkahiye (Syria), 2400–1900 BC; Umm al-Mara, Syria, seventeenth-eighteenth century BC; palace of Mari, Syria, eighteenth century BC. On all these discoveries see the bibliographic references in Herles 2007.
- 2 On the discoveries of ostrich eggshells see the following articles and their bibliographies: Laufer 1926; Finet 1982; Reese 1985; 1991; Caubet 1983; Herles 2007; Matoïan 2008.
- 3 For instance, a golden jug depicts archers hunting ostriches (IM 115618, Collon 2008, fig. 14 and pl. 7; Collon 2010, no. 68); ivory bands with a procession of these animals (Barnett 1975, pl. 13; Collon 2010, no. 40), and the ivory statuette of a Nubian holding an ostrich by the neck (Oates 1962, 13 and pl. 7).
- 4 ARM 10, 140; ARM 27, 9; ARM 28, 33; ARM 28 43; Durand 1994, no. 62; FM 3, 60, ARM 14, 86; M.10999=Guichard 1997, 323–5.
- 5 References of these texts in the CDLI: P229306, P230090, P230310, P227951, P227972, P273620. Old Babylonian lexical texts of unknown provenance: P247855, P499076.
- 6 Inscriptions of Aššur-bēl-kala (1075—1057 вс), RIMA 2, 95—105; Tukultī-Ninurta II (891—884 вс), Scheil 1909, 1. 79—82; Ashurnaṣirpal II (883—859 вс), AKA 203 iv 40, AKA 360 iii 49, RIMA 2, 288ff.
- For instance, a Neo-Babylonian stamp seal, seventh-sixth centuries BC, from the Ullens de Schooten Collection, picture and drawing in Collon 1998, no. 7.
- 8 For instance, a Neo-Assyrian cylinder seal, 700 вс, Bibliothèque Nationale, Cabinet des Médailles, Paris, no. 330, drawing and bibliography in Collon 2010, no. 58.
- 9 Omphalos bowl, Aleppo Museum, Lattaquie, Falsone 1992, 85–9, pl. 2–4, esp. pl. 3b; Collon 1998, no. 12
- 10 Golden jug, Nimrud, 780–700, IM 115618, Collon 2008, fig. 14 and pl. 7.

- 11 IM 115618. Another curious ancient hunting technique, not documented in Mesopotamia, is the disguise of a hunter with ostrich skin and feathers to pretend to be an ostrich and approach them. This supposition is documented by Strabo (60 BC—AD 20) in Arabia (*Geography* XVI, 4, 11) and in ethnographic studies on hunting techniques in the Sahara (d'Hui 2011).
- 12 ARM 28 33=LAPO 16, 406–7 (no. 259); edition and bibliography on http://www.archibab.fr/ no. T6945.
- 13 ARM 10 140=LAPO 18, 372–3 (no. 1184); edition and bibliography on http://www.archibab.fr/ no. T8702.
- 14 ARM 28 43, edition and bibliography on http://www.archibab.fr/ no. T6955.
- 15 They were found at Tell Abu Matar (Israel), fifth millennium BC, Perrot 1955, 172, fig. 18, and at Byblos, fourth millennium BC, Dunand 1937, 1014, no. 18553, pl. 186.
- 16 In Mesopotamia, they were found in Syria (Tell Brak, Al-Rawada, Hadiha and at Mari in a thirteenth century BC cemetery) and at Nuzi. See Herles 2007.
- 17 In the room 14–15 of the Northwest palace, Max Mallowan recorded the discovery of 'numerous specimens of ostrich eggs', other fragments were discovered in room 13 (Oates 2001, 46). Other eggs dated to the first millennium BC were found in the rural site of Tell Knedig (northern Syria) and in Iran, Luristan.
- 18 Six texts are recorded by Durand 2009, 105 (T.263; T.480; XXII 120; IX 102; XXIV 221; M.12814; XXXI 239). The dowry is ARM 30, 239.

References

- Baqir, T., 1945. *Iraq Government Excavations at ^sAqar Qūf: Second Interim Report, 1943–1944.* (Iraq Supplement 1945.) Cambridge: Cambridge University Press.
- Barnett, R.D., 1976. Sculptures from the North Palace of Ashurbanipal at Nineveh (668–627 BC). London: British Museum Publications.
- Beaulieu, P.-A., 1991. Egg offerings to the gods of Babylon. *Nouvelles Assyriologiques Brèves et Utilitaires* 1991, note 79, 50–2.
- Beaulieu, P.-A., 2003. The Pantheon of Uruk during the Neo-Babylonian Period. Leiden & Boston: Brill-Styx.
- Bonilauri, S., E. Boëda, C. Griggo, H. Al-Sakhel & S. Muhesen, 2007. Un éclat de silex moustérien coincé dans un bassin d'autruche (*Struthio camelus*) à Umm el Tlel (Syrie centrale). *Paléorient* 33, 39–46.
- Calmeyer, P., 1969. Federkranze und Muzik, in *Actes de la XVIIe Rencontre Assyriologique Internationale, Université Libre de Bruxelles, 30 juin 4 juillet 1969*, ed. A. Finet. Ham-sur-Heure: Comité belge de recherches en Mésopotamie, 184–95.
- Caubet, A., 1983. Les œufs d'autruche au Proche-Orient Ancien. Report of the Department of Antiquities Cyprus, 193–8.
- Civil, M., 1964. The 'Message of Lú.DINGIR.RA to his mother' and a group of Akkado-Hittite 'proverbs'. *Journal of Near Eastern Studies* 23, 1–11.
- Collon, D., 1998. First catch your ostrich. *Iranica Antiqua* 33, 25–42.

- Collon, D., 2001. Catalogue of the Western Asiatic Seals in the British Museum. Cylinder Seals V. Neo-Assyrian and Neo-Babylonian Periods. London: The British Museum Press.
- Collon, D. (ed.), 2008. Nimrud treasures: panel discussion, in *New Light on Nimrud: Proceedings of the Nimrud Conference 11th –13th March* 2002, eds. J.E. Curtis, H. McCall, D. Collon & L. al-Gailani Werr. London: British Institute for the Study of Iraq, 105–18.
- Collon, D., 2010. Ostrich. *Iconography of Deities and Demons: Electronic Pre-Publication*. http://www.religionswissenschaft.uzh.ch/idd/index.php. Last accessed: 16-08-2019.
- Cooper, J.S., 1971. New cuneiform parallels to the Song of Songs. *Journal of Biblical Literature* 90, 157–62.
- d'Hui, J., 2011. Une ancienne technique de chasse au Sahara. Bulletin n° 60 (2011) de la Société d'études et de recherches préhistoriques des Eyzies, 15–23.
- Dunand, M., 1937. Fouilles de Byblos I, 1926–1932. Paris: Paul Geuthner.
- Durand, J.-M., 2004. Amorrite proche-orient XVIIIème siècle avant notre ère. Résumé annuel (année 2003–2004). Website of the Collège de France: https://www.college-de-france.fr/media/jean-marie-durand/UPL9822_res0304durand.pdf. Last accessed 04-12-2019.
- Durand, J.-M., 2009. *La nomenclature des habits et des textiles dans les textes de Mari*. (Archives Royales de Mari 30.) Paris: CNRS Éditions.
- Falsone, G., 1992. Nuove coppe metalliche di fattura orientale. *Vicino Oriente* 8, 83–112.
- Finet, A., 1982. L'oeuf d'autruche, in *Studia Paulo Naster Oblata II, Orientalia Antiqua*, ed. J. Quagebeur. (Orientalia Lovaniensia Analecta 13.) Leuven: Peeters, 69–77.
- Geller, M.J., 2005. *Renal and Rectal Disease Texts*. Berlin: De Gruyter.
- Guichard, M., 1997. Présages fortuits à Mari. Mari. Annales de Recherches Interdisciplinaires 8, 305–28.
- Herles, M., 2007. Der Vogel Strauβ in den Kulturen Altvorderasiens. Mitteilungen der Deutschen Orient-Gesellschaft zu Berlin 139, 173–212.
- Herles, M., 2009. Nachtrag zum Vogel Strauß unter besonderer Berücksichtigung des Kudurrus SB 25. Mitteilungen der Deutschen Orient-Gesellschaft zu Berlin 141, 97–115.
- Horowitz, W., 1988. The Babylonian Map of the World. *Iraq* 50, 147–65.
- Kozuh, M., 2014. The Sacrificial Economy. Assessors, Contractors, and Thieves in the Management of Sacrificial Sheep at the Eanna Temple of Uruk (ca. 625–520 B. C.). Winona Lake (IN): Eisenbrauns.
- Lacheman, E.R., 1939. Nuziana II. Revue d'Assyriologie 36(3/4), 113–219.
- Lafont, B., 2001. International relations in the ancient Near East: the birth of a complete diplomatic system. *Diplomacy & Statecraft* 12, 39–60.
- Laufer, B., 1926. Ostrich egg-shell cups of Mesopotamia and the ostrich in ancient and modern times. *Anthropology Leaflet* 23, 1–50.
- Linssen, M.J.H., 2004. The Cults of Uruk and Babylon: The Temple Ritual Texts as Evidence for Hellenistic Cult Practice. Leiden & Boston: Brill-Styx.
- Majidzadeh, Y., 1992. The Arjan Bowl. Iran 30, 131-44.

- Matoïan, V., 2008. Un œuf d'autruche peint découvert lors du dégagement de la 'salle du trône' du Palais royal d'Ougarit, in *Le mobilier du Palais royal d'Ougarit, XVII*, ed. V. Matoïan. Lyon: Maison de l'Orient et de la Méditerranée, 101–16.
- Moore, E.W., 1935. *Neo-Babylonian Business and Administrative Documents*. Ann Arbor: University of Michigan Press.
- Moorey, P.R.S., 1994. Ancient Mesopotamian Materials and Industries: The Archaeological Evidence. Oxford: Clarendon Press.
- Nougayrol, J., 1968. Signalement lyrique. *Ugaritica* V, 310–19. Nunn, A., 1988. *Die Wandmalerei und der glasierte Wandschmuck im alten Orient*. (Der alte Vordere Orient 2.) Leiden: Brill.
- Oates, D., 1962. The Excavations at Nimrud (Kalhu), 1961. *Iraq* 24(1), 1–25.
- Oates, J. & D. Oates, 2001. Nimrud, an Assyrian Imperial City Revealed. London: The British School of Archaeology in Irag.
- Perrot, J., 1955. The excavations at Tell Abu Matar, near Beersheba. *Israel Exploration Journal* 5(3), 167–89.
- Porada, E., 1948. Corpus of Ancient Near Eastern Seals in North American Collections I: The Collection of the Pierpont Morgan Library. (Bollingen Series 14.) New York: Pantheon Books.
- Potts, D.T., 2001. Ostrich distribution and exploitation in the Arabian Peninsula. *Antiquity* 75, 182–90.
- Reese, D.S., 1985. The Kition ostrich eggshells, in *Excavations at Kition V, The Pre-Phoenician Level II*, ed. V. Karageorghis. Nicosia: Department of Antiquities, 371–82.
- Reese, D.S., 1991. Marine and fresh-water shells and an ostrich eggshell from Tall Šêh Hamad, Syria, in *Die rezente Umwelt von Tall Sheikh Hamad und Daten*

- *zur Umweltrekonstruktion der assyrischen Stadt Dûr-Katlimmu,* ed. H. Kühne. (Berichte der Ausgrabung Tell Schech Hamad / Dur Katlimmu 1.) Berlin: Dietrich Reimer Verlag, 133–6.
- Robinson, T.J., & C.A. Matthee, 1999. Molecular genetic relationships of the extinct ostrich, *Struthio camelus syriacus*: consequences for ostrich introductions into Saudi Arabia. *Animal Conservation* 2, 165–71.
- Rumaidh, S.S., 2000. Excavations in Chokha. An Early Dynastic Settlement. London: Nabu Publications.
- Scheil, V., 1909. Annales de Tukulti Ninip II, roi d'Assyrie 889–884. Paris: Librairie Honoré Champion.
- Stol, M., 2011–2012. Strauss. Reallexikon der Assyriologie und Vorderasiatischen Archäologie 13, 211–12.
- Thureau-Dangin, F., 1903. Recueil de tablettes chaldéennes. Paris: Ernest Leroux.
- Thureau-Dangin, F., 1921. *Rituels accadiens*. Paris: Ernest Leroux.
- Veldhuis, N., 2004. Religion, Literature, and Scholarship: The Sumerian Composition Nanše and the Birds. Leiden: Brill.
- von der Osten, H.H., 1934. Ancient Oriental Seals in the Collection of Mr. Edward T. Newell. (Oriental Institute Publication 22.) Chicago: The University of Chicago Press.
- Woolley, L., 1934. *Ur Excavations II: The Royal Cemetery: A Report on the Predynastic and Sargonid Graves Excavated between 1926 and 1931: Plates.* (Publications of the Joint Expedition of the British Museum and the Museum of the University of Pennsylvania to Mesopotamia.) London & New York: The Trustees of the two Museums.
- Ziegler, N. & A.-I. Langlois, 2017. Les toponymes paléobabyloniens de la Haute-Mésopotamie. Paris: Collège de France, SEPOA.

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.

Editors:

Laerke Recht is Professor of Early Eastern Mediterranean Archaeology at the University of Graz, Austria, and a former Marie Skłodowska-Curie Fellow at the McDonald Institute of Archaeological Research, University of Cambridge. She is particularly interested in and has published on human–animal relations in the ancient Near East, Cyprus and Aegean.

Christina Tsouparopoulou is Assistant Professor in Near Eastern Archaeology at the Polish Academy of Sciences, Warsaw, Poland, Senior Research Associate and Marie Skłodowska-Curie Fellow at the McDonald Institute of Archaeological Research and Fellow of Wolfson College, Cambridge. She specializes in the material and textual culture of the Near East and Eastern Mediterranean in the third and second millennia BC.

Published by the McDonald Institute for Archaeological Research, University of Cambridge, Downing Street, Cambridge, CB2 3ER, UK.

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Cover design by Dora Kemp and Ben Plumridge.

ISBN: 978-1-913344-05-4



