



McDONALD INSTITUTE CONVERSATIONS

Fierce lions, angry mice and fat-tailed sheep

Animal encounters
in the ancient Near East

Edited by Laerke Recht & Christina Tsouparopoulou



Fierce lions, angry mice
and fat-tailed sheep



McDONALD INSTITUTE CONVERSATIONS

Fierce lions,
angry mice and
fat-tailed sheep
Animal encounters
in the ancient Near East

Edited by Laerke Recht
& Christina Tsouparopoulou

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

© 2021 McDonald Institute for Archaeological Research.
Fierce lions, angry mice and fat-tailed sheep is made available
under a Creative Commons Attribution-NonCommercial-
NoDerivatives 4.0 (International) Licence:
<https://creativecommons.org/licenses/by-nc-nd/4.0/>

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*).

CONTENTS

Contributors	vii
Figures	ix
Tables	xi
Abbreviations and sigla	xiii
Preface by Augusta McMahon	xvii
<i>Chapter 1</i> Introduction: encountering animals in the ancient Near East	1
LAERKE RECHT & CHRISTINA TSOUPAROPOULOU	
Animal agency and human-animal interactions	2
Animals in ritual and cult	3
Blurred lines: humans as animal, animals as humans	4
Managing animals	5
Animals in society and as a resource	5
Symbols of power: birds	7
Companions and working animals: equids and dogs	8
Avenues for future research	9
Part I Animal agency and human–animal interactions	
<i>Chapter 2</i> Animal agents in Sumerian literature	15
LORENZO VERDERAME	
The Fox in <i>Enki and Ninhursag</i>	15
Dumuzi and the Fly	16
Lugalbanda and Anzu	17
Ninurta and the Anzu’s chick	18
Inanna, Šukaletuda, and the Raven	18
Conclusions: magical helpers and the metamorphosis human-animal	19
<i>Chapter 3</i> Canines from inside and outside the city: of dogs, foxes and wolves in conceptual spaces in Sumero-Akkadian texts	23
ANDRÉA VILELA	
Canines from the ‘inside’: dogs	23
Canines from the ‘in-between’: stray dogs	25
Canines from the outside: wolves and foxes	26
Conclusion	28
<i>Chapter 4</i> A human–animal studies approach to cats and dogs in ancient Egypt: evidence from mummies, iconography and epigraphy	31
MARINA FADUM & CARINA GRUBER	
Human–cat relationships in ancient Egypt: the cat as an animal mummy	31
Human–canine relationships in ancient Egypt: the dog as companion animal	33
Conclusion	34
Part II Animals in ritual and cult	
<i>Chapter 5</i> Encountered animals and embedded meaning: the ritual and roadside fauna of second millennium Anatolia	39
NEIL ERSKINE	
Deleuze, Guattari, and reconstructing ancient understanding	39
Landscape, religion, and putting meaning in place	40
Creatures, cult, and creating meaning	41
Folding animals in ritual	41
Bulls, boars, birds	42
Folding animals on the road	44
Human–animal interactions	46
Conclusion	49

<i>Chapter 6</i>	The dogs of the healing goddess Gula in the archaeological and textual record of ancient Mesopotamia	55
	SERAINA NETT	
	The dogs of Gula in Mesopotamian art	55
	The Isin dog cemetery	56
	The dogs of Gula in Ur III documentary sources	59
	Conclusion	60
<i>Chapter 7</i>	Between sacred and profane: human–animal relationships at Abu Tbeirah (southern Iraq) in the third millennium BC	63
	FRANCESCA ALHAIQUE, LICIA ROMANO & FRANCO D’AGOSTINO	
	Materials and methods	63
	Faunal assemblage from Area 1	63
	The faunal assemblage from Grave 100 Area 2	66
	Discussion on dog findings	68
	Discussion on equid findings	69
	Discussion on aquatic taxa	70
	General conclusions	72
Part III	Blurred lines: humans as animals, animals as humans	
<i>Chapter 8</i>	Dog-men, bear-men, and the others: men acting as animals in Hittite festival texts	79
	ALICE MOUTON	
	What did the animal-men look like?	79
	The social status of the animal-men	81
	The animal-men’s actions	83
	Men impersonating animals in rituals	87
	Conclusions	87
<i>Chapter 9</i>	The fox in ancient Mesopotamia: from physical characteristics to anthropomorphized literary figure	95
	SZILVIA SÖVEGJÁRTÓ	
	Descriptions of physical and behavioural characteristics of the fox	95
	The fox as anthropomorphized literary figure	97
	The fox in the animal world	97
	The fox and the divine sphere	99
	The character of the fox as a reflection of human nature	100
<i>Chapter 10</i>	Animal names in Semitic toponyms	103
	HEKMAT DIRBAS	
	Cuneiform sources	103
	Ugaritic	105
	Biblical Hebrew	105
	Arabic	106
	Concluding remarks	109
<i>Chapter 11</i>	The king as a fierce lion and a lion hunter: the ambivalent relationship between the king and the lion in Mesopotamia	113
	CHIKAKO E. WATANABE	
	The association between the king and the lion	113
	Royal lion hunt	115
	Symbolic mechanism	118

Part IV Managing animals

Chapter 12	An abstract Agent-Based Model (ABM) for herd movement in the Khabur Basin, the Jazira	125
	TUNA KALAYCI & JOHN WAINWRIGHT	
	Herd animals as geo-agents of landscape transformation	128
	Methodology	130
	Results	134
	Conclusions	135
Chapter 13	An ox by any other name: castration, control, and male cattle terminology in the Neo-Babylonian period	139
	MICHAEL KOZUH	
	Anthropology and terminology	139
	Cattle castration and Babylonian terminology	140
	An ox by any other name	141
	Terminology and ritual purity	142
Chapter 14	What was eating the harvest? Ancient Egyptian crop pests and their control	147
	MALWINA BRACHMAŃSKA	
	Ancient Egyptian crop pests	147
	Ancient Egyptian pest control	151

Part V Animals in society and as a resource

Chapter 15	Stews, ewes, and social cues: commoner diets at Neo-Assyrian Tušhan	161
	TINA L. GREENFIELD & TIMOTHY MATNEY	
	Background	161
	Textual sources of evidence for peasant household economy and diet	163
	Zooarchaeological data on commoner households from Tušhan	164
	Model building: assumptions about the status of food sources	166
	Datasets: faunal consumption and disposal patterns	167
	Body portions of domesticated sheep/goat (<i>Ovis/Capra</i>) and status	171
	The distribution of wild resources	172
	Discussion: elite and commoner diets	174
Chapter 16	A new look at eels and their use in Mesopotamian medicine	179
	TROELS PANK ARBØLL	
	<i>Kuppû</i> in cuneiform sources	179
	Medical uses of the <i>kuppû</i> -eel	180
	Identifying the <i>kuppû</i> -eel	182
	Conclusion	184
	Appendix 1: Editions of prescriptions utilizing the <i>kuppû</i> -eel	184
Chapter 17	Wild fauna in Upper Mesopotamia in the fourth and third millennia BC	193
	ANNE DEVILLERS	
	Introduction	193
	The iconographic corpus	193
	The archaeozoological record	199
	A hypothetical potential fauna constructed through predictive niche evaluation	200
	Conclusions	201

Part VI Symbols of power: birds

Chapter 18	Waterfowl imagery in the material culture of the late second millennium BC Southern Levant	207
	BEN GREET	
	The material	207
	Religious symbols	214
	Elite markers	216
	Conclusion	217

<i>Chapter 19</i>	Ducks, geese and swans: <i>Anatidae</i> in Mesopotamian iconography and texts	221
	LAURA BATTINI	
	Difficulties of the research	221
	<i>Anatidae</i> in the natural world	224
	<i>Anatidae</i> in the human world	226
	<i>Anatidae</i> in the divine world	228
	Conclusions	229
<i>Chapter 20</i>	Wild ostriches: a valuable animal in ancient Mesopotamia	235
	OLGA V. POPOVA & LOUISE QUILLIEN	
	Ostriches and royal ideology	236
	The use of the animal and its by-products at royal courts	241
	Conclusion	243
Part VII	Companions and working animals: equids and dogs	
<i>Chapter 21</i>	Face to face with working donkeys in Mesopotamia: insights from modern development studies	249
	JILL GOULDER	
	Donkey-mindedness	249
	Modern studies	250
	Breeding and supply	252
	Hiring and lending	253
	The role of person-to-person dissemination	254
	Short-distance transportation	254
	Transforming women's lives?	257
	And finally, ploughing	258
	Summing up	259
<i>Chapter 22</i>	Sacred and the profane: donkey burial and consumption at Early Bronze Tell eṣ-Şâfi/Gath	263
	HASKEL J. GREENFIELD, JON ROSS, TINA L. GREENFIELD & AREN M. MAEIR	
	Tell eṣ-Şâfi/Gath	263
	The Early Bronze occupation at Area E	264
	The sacred asses of Tell eṣ-Şâfi/Gath	267
	The profane asses of Tell eṣ-Şâfi/Gath	269
	Conclusions	274
<i>Chapter 23</i>	Dogs and equids in war in third millennium BC Mesopotamia	279
	CHRISTINA TSOUPAROPOULOU & LAERKE RECHT	
	Symmetrical relation: companionship	279
	Asymmetrical relation: dog eat equid	284
	Conclusion	287

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 Ivry-
sur-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

Figures

1.1	<i>Fat-tailed sheep at the site of Niğde-Kınık Höyük, Niğde Province, Turkey.</i>	2
1.2	<i>Carved ivory lion (probably furniture element) from Nimrud, 9th–8th centuries BC.</i>	5
1.3	<i>Two faience jerboa figurines, Egypt, possibly from the Memphite Region (c. 1850–1640 BC).</i>	6
1.4	<i>Ivory blinker carved with a sphinx. From Nimrud, 8th century BC.</i>	7
1.5	<i>Ostrich eggshell converted to vessel. From Ur, Mesopotamia, Early Dynastic III (c. 2550–2400 BC).</i>	8
5.1	<i>Animal-shaped vessels from Kültepe.</i>	42
5.2	<i>Bull- and boar-vessels from Kültepe.</i>	43
5.3	<i>Eagle-shaped vessel from Kültepe.</i>	43
5.4	<i>Animal vessels rhizome.</i>	44
5.5	<i>Hypothesized early second millennium Assyrian trade networks.</i>	45
5.6	<i>Hypothesized early second millennium routes between Kültepe and the Lower Euphrates.</i>	45
5.7	<i>Likely animal presence within the corridor of hypothesized routes.</i>	47
5.8	<i>Landscape rhizome.</i>	48
6.1	<i>Middle Babylonian kudurru showing the dog as a symbol for the goddess Gula.</i>	56
6.2	<i>Neo-Assyrian cylinder seal: Gula seated on a throne with a dog at her feet.</i>	57
6.3	<i>Impression of a Late Babylonian stamp seal: Gula seated on her throne with a dog at her feet.</i>	57
6.4	<i>The overall height distribution of the dog skeletons from the Isin dog cemetery.</i>	58
6.5	<i>The mastiffs of Ashurbanipal. Relief from the North Palace in Nineveh.</i>	59
7.1	<i>Plan of the site with excavation areas and canals.</i>	64
7.2	<i>Plan of Area 1 Cemetery and latest activities.</i>	65
7.3	<i>Plan of Area 1 Building A with location of sub-pavement graves.</i>	66
7.4	<i>Plan of Area 2 with location of Grave 100, the equid burial, the dog burial, and other graves.</i>	67
7.5	<i>Dog burial in Room 22 – Building A (Area 1).</i>	68
7.6	<i>Equid burial in Area 2.</i>	70
7.7	<i>Fish specimens.</i>	71
11.1	<i>Metaphor explained by the ‘primary’ and ‘secondary’ subjects.</i>	114
11.2	<i>Lion with flashing eyes.</i>	114
11.3	<i>Lion-hunt stele from Uruk, Eanna III.</i>	115
11.4	<i>Lion-hunt relief of Ashurnasirpal II, from Room B, Northwest Palace, Nimrud, c. 865 BC.</i>	115
11.5	<i>Narrative scheme of the lion-hunt reliefs of Ashurbanipal in Room C, North Palace at Nineveh.</i>	116
11.6	<i>Drawing of relief representing the god Ninurta pursuing Anzû, entrance to the Ninurta Temple, Nimrud.</i>	117
11.7	<i>Clay sealing bearing the stamp of the Assyrian royal seal, Nineveh, 715 BC.</i>	118
11.8	<i>Assyrian royal seal.</i>	119
12.1	<i>Upper Mesopotamia and the Khabur Basin.</i>	126
12.2	<i>The Khabur Basin with a dense network of hollow ways, location of Tell Brak marked.</i>	128
12.3	<i>A CORONA historical satellite image preserves details of the radial route system around Tell Brak.</i>	129
12.4	<i>Variable herd movement strategies differentially alter landscapes.</i>	129
12.5	<i>Hollow ways visible on the TanDEM-X Digital Elevation Model.</i>	132
12.6	<i>Variations in profiles may indicate differential traffic, hydrological systems, and/or preservation conditions.</i>	132
12.7	<i>TanDEM-X DEM around Tell Brak; the DEM after Gaussian Filtering and Sink Filling.</i>	133
12.8	<i>The ABM gives herd animals an equal chance of picking any given hollow way.</i>	133
12.9	<i>The results of the ABM from four main scenarios.</i>	135
12.10	<i>Close-up views of one of the hollow ways around Tell Brak.</i>	136
14.1	<i>Capturing common quails, Tomb of Mereruka, Saqqara, VI dynasty.</i>	151
14.2	<i>Ostrakon from Deir el-Medina, Ramesside period.</i>	153
14.3	<i>Mouse trap, el-Lahun, XII dynasty.</i>	154
15.1	<i>Location of Ziyaret Tepe.</i>	162
15.2	<i>Topographic plan of Ziyaret Tepe.</i>	162
15.3	<i>Photograph of the obverse of cuneiform text ZTT14, docket for receipt of grain by bakers.</i>	163
15.4	<i>Plan of the Late Assyrian architectural remains from Operation K, later level of occupation.</i>	165
15.5	<i>Histograms of relative percentage frequencies of wild taxa.</i>	168
15.6	<i>Relative frequencies of domestic and wild taxa from individual buildings.</i>	169

15.7	<i>Stacked histogram of the combined domestic taxonomic frequencies for each Operation.</i>	170
15.8	<i>Stacked bar graph of portions for Ovis/Capra by building.</i>	171
15.9	<i>Relative percentage frequencies of wild taxa within corrected wild populations of each building.</i>	173
15.10	<i>Stacked histogram of percentage frequencies of good, bad, and ugly wild species within each Operation.</i>	174
16.1	<i>A Mesopotamian spiny eel.</i>	182
16.2	<i>Neo-Assyrian relief displaying an eel.</i>	183
17.1	<i>Sites of provenance of the iconographic material and regional clusters.</i>	194
17.2	<i>Localization of the sites in relation to potential vegetation zones.</i>	195
17.3	<i>Wild ungulates appearing most frequently in early Near Eastern glyptic.</i>	196
17.4	<i>Relative frequency of wild ungulates representations by region.</i>	197
17.5	<i>Number of lion representations in each region.</i>	198
17.6	<i>Absolute number of representations of carnivores other than the lion.</i>	199
17.7	<i>Historic range of the cheetah.</i>	201
18.1	<i>Scarab/Plaque No. 8. Enstatite scarab seal from Hebron.</i>	210
18.2	<i>Waterfowl-shaped scaraboid No. 7. Found at Gezer.</i>	210
18.3	<i>Painted ceramic duck head found at Beth Shean.</i>	211
18.4	<i>Three waterfowl-shaped ceramic bowls atop perforated cylindrical stands found at Tell Qasile.</i>	212
18.5	<i>Ivory cosmetic box in the form of a waterfowl found at Megiddo.</i>	213
18.6	<i>Drawings of two of the ivory panels found at Megiddo.</i>	214
18.7	<i>Ivory panels found at Tell el-Far'a (South).</i>	215
19.1	<i>Modern birds.</i>	222
19.2	<i>Different breeds of birds represented on different media.</i>	223
19.3	<i>A miniature chair representing geese in natural 'milieu'. Old Babylonian period, from Diqdiqqah.</i>	225
19.4	<i>Cylinder seals with geese.</i>	226
19.5	<i>Toys in the shape of a goose.</i>	227
19.6	<i>Personal ornaments from Ur.</i>	227
19.7	<i>Culinary text.</i>	228
19.8	<i>The Goose Goddess.</i>	229
19.9	<i>Incised and painted vase from Larsa.</i>	230
20.1	<i>Modern impression of a cylinder seal, Tello, Early Dynastic period.</i>	236
20.2	<i>Modern impression of a cylinder seal, Mesopotamia, Middle Assyrian period.</i>	237
20.3	<i>Cylinder seal and its modern impression, Mesopotamia, Neo-Assyrian period.</i>	238
20.4	<i>Cylinder seal and its modern impression, Mesopotamia, Middle Assyrian period.</i>	239
20.5	<i>Cylinder seal and its modern impression, Mesopotamia, Neo-Babylonian period, 1000–539 BC.</i>	239
20.6	<i>Cylinder seal, Northern Mesopotamia, c. 1600–1000 BC.</i>	240
21.1	<i>Interviewing farmers in western Ethiopia.</i>	251
21.2	<i>Thrice-weekly donkey market in western Ethiopia.</i>	253
21.3	<i>Carrying bricks in India.</i>	255
21.4	<i>Donkeys with 100 kg grain-sacks at Yehil Berenda market, Addis Ababa.</i>	256
21.5	<i>Kenyan woman with seven children carrying food home from market.</i>	257
21.6	<i>Woman ploughing with a donkey in central Burkina Faso.</i>	258
22.1	<i>Map showing location of Tell eṣ-Şâfi/Gath.</i>	264
22.2	<i>Map of Tell eṣ-Şâfi/Gath archaeological site with the location of the various excavation areas.</i>	265
22.3	<i>Plan of the E5c Stratum, Area E, Tell eṣ-Şâfi/Gath, with location of donkey burial pits.</i>	266
22.4	<i>Photograph of sacrificial donkey.</i>	267
22.5	<i>Photographs of the three donkey burials beneath Building 17E82D09.</i>	268
22.6	<i>Histogram of Equus asinus osteological element frequency.</i>	272
22.7	<i>Plantar face of Equus asinus third phalange bone with butchery slicing marks.</i>	272
22.8	<i>SEM photograph of butchery slicing marks on the donkey (Equus asinus) first phalange.</i>	273
23.1	<i>Detail of the War side of the Standard of Ur.</i>	280
23.2	<i>Clay door peg sealing.</i>	280
23.3	<i>Digital reproduction of cylinder seal VA 2952.</i>	281
23.4	<i>Seal impression from Tell Mozan.</i>	282
23.5	<i>Sites with equid, dog and equid-dog depositions in the third millennium BC.</i>	282

23.6	<i>Tell Madhhur Tomb 5G plan.</i>	283
23.7	<i>Tell Brak Area FS 'Caravanserai', Akkadian period, Level 5.</i>	284
23.8	<i>Sargon stele.</i>	285

Tables

5.1	<i>Anatolian Middle Bronze Age chronology.</i>	41
7.1	<i>Faunal remains from relevant contexts in Abu Tbeirah.</i>	67
8.1	<i>Chart summarizing the textual data about these characters interacting with animal-men.</i>	83
8.2	<i>Chart summarizing the textual data presented in the chapter.</i>	88
15.1	<i>Model of expectations for typical patterns of faunal distributions within elite and commoner residences.</i>	166
15.2	<i>Utility index of combined body portions and associated element categories.</i>	167
15.3	<i>Relative percentage frequencies of wild taxa.</i>	168
15.4	<i>Relative percentage frequency of domestic versus wild taxa, buildings A/N, G, K, M and U.</i>	169
15.5	<i>Relative frequency distributions for domestic taxa.</i>	170
15.6	<i>Percentage frequencies of body portion categories of good, bad, and ugly for Ovis/Capra.</i>	171
15.7	<i>Relative frequency distributions for wild taxa in commoner buildings and elite buildings.</i>	173
17.1	<i>Predicted presence of large mammals in the different vegetation belts.</i>	200
18.1	<i>Scarabs and plaques with waterfowl iconography.</i>	208
18.2	<i>Waterfowl-shaped scaraboids.</i>	211
18.3	<i>Fragmentary ceramic waterfowl heads.</i>	212
18.4	<i>Waterfowl-shaped ivory cosmetic boxes.</i>	213
22.1	<i>Frequency distribution of non-articulated Equus asinus bone elements.</i>	270
22.2	<i>Frequency distribution of non-articulated Equus asinus bone elements by age groups.</i>	271
22.3	<i>Frequency (NISP) of Stratum E5c Equus asinus osteological elements by depositional context.</i>	271
23.1	<i>Calculation of meat weight.</i>	287

Abbreviations and sigla

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

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

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

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 6

The dogs of the healing goddess Gula in the archaeological and textual record of ancient Mesopotamia

Seraina Nett

This chapter discusses the role of the dogs in the cult of the Mesopotamian healing goddess Gula in a diachronic perspective, drawing upon both archaeological and textual evidence. The cult of the goddess Gula is attested at least from the late third millennium (Ur III period) up to the first millennium BC (Böck 2014, 9–10) and her connection with dogs is well established in the textual and archaeological record from ancient Mesopotamia (see e.g. Seidl 1971, Fuhr 1977, Ornan 2004, Collon 2009, Bonatz 2010, Tsouparopoulou 2020). Iconographically, she is often depicted with dogs reclining at her feet or symbolically represented as a dog. Inscribed and uninscribed dog figurines and dog burials have been discovered in and around her temple in Isin and there is ample evidence that her temple complex at that site (and possibly also elsewhere) housed a kennel of dogs. In what follows, I will discuss the evidence from Mesopotamian art and archaeology in a diachronic perspective, and contextualize the results in light of a group of Ur III-period administrative documents that suggest that packs of dogs were present in or around the healing goddess' temple as early as the third millennium BC.

In the earliest textual record, the Mesopotamian healing goddess that is the subject of this chapter is known by many names and it is only at the very end of the third millennium that these regionally distinct deities (such as Gula and Ninisina, but also Nintinugga, Baba and Ninkarrak) begin to merge into one overarching healing goddess under the names Gula and Ninisina, the lady of Isin. However, already in the third millennium, these names were on occasion used interchangeably, indicating a certain degree of syncretism, although these separate deities were still provided with their individual local cult. For example, the cultic travel of Nintinugga to Isin and of Ninisina to Nippur and the relationship between these goddesses is discussed by Sallaberger (1993, 152–4; see also the

discussion of the degree of syncretism in the Ur III period in Tsouparopoulou 2020, 14–17).

The main cult locations for the many incarnations of the healing goddess differ according to the time period in question. While during the rule of the Third Dynasty of Ur (2112–2004 BC), her most important cult location was Umma (under the name Gula), we also have evidence for her cult in several other places, such as Isin for Ninisina (with the Egalmah as her main sanctuary), Lagaš for Baba, and Nippur for Nintinugga. Ninkarrak seems to have originated in Northern Mesopotamia (for an overview of the names and the cult of the healing goddesses, see Böck 2014, 9–14).

Unsurprisingly, the cult of the healing goddess as Ninisina, the lady of Isin, and related deities witnessed a marked increase in importance during the reign of the first dynasty of Isin at the beginning of the second millennium. The healing goddess remained an important deity from the middle of the second millennium onwards: she is from that period onwards most often referred to by the name Gula, except for inscriptions from Isin where the name Ninisina continues to be used at least during the Middle Babylonian period, either independently (e.g. in Walker 1978, 102 IB 940) or as an epithet of Gula (e.g. in Walker 1978, 103 IB 942–4).

The dogs of Gula in Mesopotamian art

The close association of Gula with dogs has been well documented in Mesopotamian art for a long time and ample evidence is available throughout Mesopotamian history. The earliest clear examples that are backed up by epigraphic evidence stem from the Old Babylonian period, with a variety of cylinder seals and inscribed dog statues (Bonatz 2010), such as an early Old Babylonian dedicatory inscription to Ninisina for the life of king Sumu-El on a dog-shaped figurine, excavated at



Figure 6.1. Middle Babylonian kudurru showing the dog as a symbol for the goddess Gula. BM 102485. © The Trustees of the British Museum. Licensed under CC BY-NC-SA 4.0.

Telloh (RIME 4.2.7.2001). Furthermore, the connection of Gula with dogs is also well attested in later periods, ranging from the depiction of Gula symbolized by a dog on a number of *kudurrus*, sometimes accompanied by an explanatory inscription (Fig. 6.1), to the ample representations of Gula seated on a throne with a dog at her feet depicted on a range of cylinder and stamp seals from the Neo-Assyrian and Neo-Babylonian periods (Figs. 6.2–6.3; see Collon 2009 for an overview of the Middle Babylonian and Neo-Assyrian evidence).

The association of Gula with dogs in art may even date back to the third millennium, but the examples are far from frequent and unclear in their identification and interpretation. Dogs are not uncommon in the art of the third millennium, but do occur predominantly on cylinder seals, especially during the Akkadian period, in a group of seals often associated with the Etana-myth or in scenes depicting ploughing or hunting (e.g. Collon 1982, Nos. 80, 151, 152, 155). Thus, as of now, no examples of a clear association of Gula with dogs are known from Mesopotamian art prior to the Old Babylonian period.

Dogs in Mesopotamian art after the Old Babylonian period mostly belong to two types: tall, slim greyhound-type dogs or heavy mastiff-types. The dogs associated with Gula in Mesopotamian art generally belong to the second type, and, from the second millennium onwards, the dogs of Gula are depicted relatively uniformly with pointed ears and snout and a curled tail (such as the dogs on the seals in Figs. 6.2–6.3), reminiscent of breeds such as the so-called ‘Canaan Dog’.

It is unclear to what extent we should consider the dogs of Gula divine beings in their own right, but at least in some examples in the textual evidence, the dogs of Gula are written with the divine determinative.¹

Beyond the representations in art, Gula is also associated with dogs in various rituals and incantations. The relevant evidence and, in particular, the evidence for the duality between Gula and Lamaštu in the context of the use and symbolism of dogs has been comprehensively discussed by Böck (2014, 40–4) who suggests that the suckling puppies held at the temple of Gula could have been used to help save babies from the destructive power of Lamaštu.

The Isin dog cemetery

The evidence for the association of Gula with dogs in Mesopotamian art is further supported by the finds from archaeological excavations at a variety of sites associated with the cult of the healing goddess.

We know a few of the locations where Gula was worshipped: around 40 names of temples and sanctuaries for Gula, Ninisina, Ninkarrak and other healing goddesses have been listed by George (1993). However, only her sanctuaries at Isin (Hrouda 1977a; 1981; 1987; 1992) and Nippur (Gibson 1993) have been excavated, alongside the temple of Ninkarrak at Terqa (Liggett 1982). Both the Isin and Nippur temples have yielded a number of terracotta dog figurines, some of which also bear votive inscriptions, and the Terqa temple was identified as a temple of the goddess Ninkarrak based on fragments of inscriptions and a bronze votive statue of a dog.

The small Kassite-period temple complex at Nippur was identified by the excavators as a temple of Gula based on a dedicatory inscription, as well as a number of dog figurines and small statues of human ‘sufferers’ holding on to various body parts (Gibson 1993, 14, figs. 11–12). The Nippur Gula temple yielded, as far as is known to me, no evidence for the presence of packs of dogs at the site.

Gula’s (or rather Ninisina’s) main sanctuary at Isin, the Egalmah, has also been at least partially excavated. The original structure seems to date back to at



Figure 6.2. Neo-Assyrian cylinder seal. Gula seated on a throne with a dog at her feet (left). BM 129538. © The Trustees of the British Museum. Licensed under CC BY-NC-SA 4.0.

least the Middle Babylonian period, as evidenced by inscribed bricks bearing the name of king Kurigalzu I (died c. 1373 BC), but is possibly based on an Old Babylonian predecessor. A platform or ramp with a length of 32 m, renovated during the reign of Adad-apla-iddina

of the second dynasty of Isin (1067–1046 BC), was excavated in area N1, with the temple of Ninisina located at its southern end. The ramp itself is thought to have formed part of the temple precinct, based on the find of a number of dog figurines. In addition to these terracotta figurines, including a female dog suckling a puppy, the excavators also recovered several small bronze plaques with images of dogs, and pierced with holes with which they could have been attached to the walls of the temple or to cultic objects or temple furnishings (Hrouda 1977b). The dogs that are depicted conform to the type that is common in Mesopotamian art from the Kassite period onwards, with pointed ears and snouts and curled tails, similar to the examples given in Figures 6.2–6.3.

Most importantly, the excavators also uncovered the skeletons of at least 33 dogs who were buried in the general area of the ramp. The excavators date the cemetery on stratigraphic grounds to the period between 1050 and 900 BC (Hrouda 1977a, 18–19). These dog burials are interesting and pertinent to the present discussion for a number of reasons, most importantly because they constitute tangible evidence that flocks of dogs were indeed housed at Gula's temple. A building inscription by Enlil-bani (RIME 4.1.10.4), mentioning his construction of the é-ur-gi-ra, the 'Dog House', likely located in Isin, also supports the interpretation of this building as a sacred dog kennel, associated with the main sanctuary. However, we cannot determine to what degree this building fulfilled a religious or more secular function or whether – if at all – this was the location of dogs involved in healing rituals.



Figure 6.3. Impression of a Late Babylonian stamp seal, Gula seated on her throne with a dog at her feet. BM 89880. © The Trustees of the British Museum. Licensed under CC BY-NC-SA 4.0.

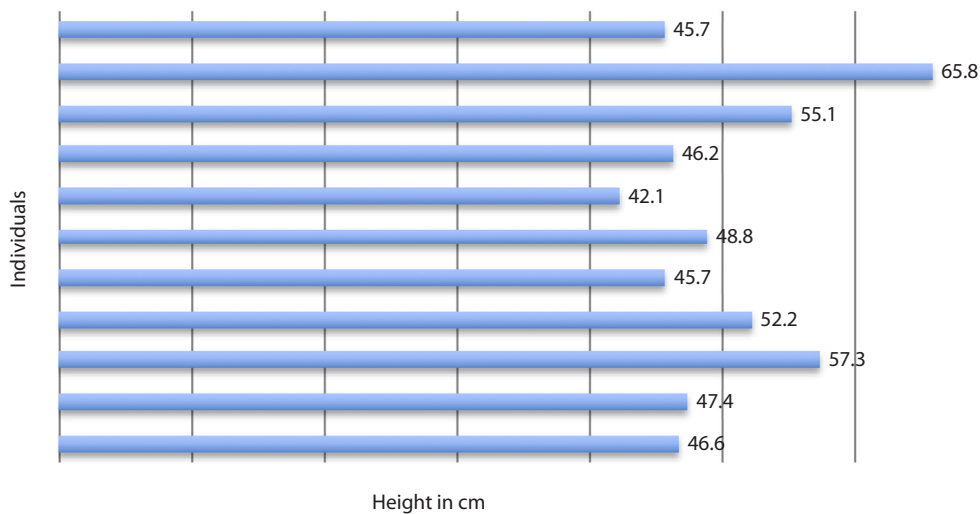


Figure 6.4. The overall height distribution of the dog skeletons from the Isin dog cemetery. Graphic by the author based on data from Boessneck 1977, 108.

The 33 dog skeletons have been subjected to a zooarchaeological study (Boessneck 1977). It is worth noting that the majority of the skeletons comprises puppies and younger individuals (15 individuals in total) and only nine of the skeletons are those of fully grown adults. The height at the withers of the adult dogs shows a large degree of variability, ranging from 45–65 cm, thus indicating mid-size to large dogs. The degree of variation in height in the dogs from the cemetery is illustrated in Figure 6.4 and while we can observe general variation in height, one outlier is noticeable, a large dog, individual No. 25, roughly the size of a German Shepherd, albeit with a sturdier build (Boessneck 1977, 101 compares this individual to the mastiffs known from Ashurbanipal's lion hunt reliefs, cf. also the illustration in Fig. 6.5).

In general, the zooarchaeologist records the size of the Isin dog skeletons as similar or slightly larger than the so-called turf or marshland dog (*canis familiaris palustris*), with a slightly sturdier build (Boessneck 1977, 101).

If we compare the dogs that were buried in the Isin dog cemetery with the depiction of dogs in Mesopotamian art during the same period and particularly to the dogs associated with Gula in Mesopotamian art, usually represented with pointy ears and snout, and a curly tail (see Figs. 6.2–6.3), the dogs from the cemetery seem to be rather stockier and more sturdily built. To what extent this difference indicates an actual difference in dog breed or just a case of artistic preference or stylization, remains to be seen.

Boessneck has also pointed out that many of the dog skeletons presented severe fractures, especially of their limbs, some of which show evidence of having healed before death. He was unable to identify a cause of death for the dogs in question, but could discover

no direct evidence that they were killed or maimed in the context of ritual and sacrifice (Boessneck 1977, 102). The prevalence of fractures has led Avalos to propose that the sacred kennel of Gula may have functioned as some kind of sanctuary for sick, injured and abused dogs (Avalos 1995, 211–12).

It is worth noting that the Isin dog cemetery remains the only animal cemetery of its kind from Mesopotamia proper. However, dog burials, possibly in a cultic context, are reasonably well-attested in other parts of the ancient Near East (for a general overview, see Wygnanska 2017). The prime example, the Ashkelon dog cemetery, much larger than the cemetery found at Isin, consists of about 1400 dogs buried there over a period of an estimated 80 years, dating to the late fifth to the early fourth century BC, about half a millennium later than the Isin dog cemetery. Again, as with the Isin cemetery, the majority of the dog skeletons are those of puppies and young dogs and no evidence for the cause of death or potential injury in the context of ritual or sacrifice has been observed. Edrey (2008) provides an overview of the explanations that have been put forward for the existence of the dog cemetery: The excavator interpreted these dogs as temple dogs, involved in healing rituals (Stager 1991). This interpretation has been accepted by other scholars such as Halpern who even postulated that the Mesopotamian Gula cult, along with the practice of dog burials, had spread to the Levant from Mesopotamia itself (Halpern 2000). However, Wapnish & Hesse (1993) maintain that there is no direct evidence for any kind of cultic function associated with the dog burials, that the age distribution aligns well with death by natural causes, and that the practice of burying the dogs had developed independently in the Levant.



Figure 6.5. *The mastiffs of Ashurbanipal. Relief from the North Palace in Nineveh. BM 124893. © The Trustees of the British Museum. Licensed under CC BY-NC-SA 4.0.*

In this context, it is also worth mentioning that at Tell Mozan, ancient Urkesh, a ‘cultic pit’ dating to the second half of the third millennium was discovered that contained bones from at least 20 puppies and a number of other animals, mostly pigs, bovines, caprids and equids. No butchering marks could be identified on the puppy skeletons, but they were present on some of the bones from other species (Di Martino 2005, 76). Kelly-Buccellati has interpreted this pit as a Hurrian necromantic structure, the *abi*, known from the textual record, and surmises that this was the location of ritual slaughter in order to communicate with the gods of the Underworld or with deceased ancestors, known from later Hurrian texts (Kelly-Buccellati 2016, 99–102). However, the exact function of this pit remains unclear, and it is important to stress that it differs significantly in its layout and content from the individual graves of the Isin and Ashkelon dog cemeteries, and little

evidence for a connection with healing or healing goddesses can be found in the context of the Urkesh finds (see Recht 2014 for the use of perfumes in the Urkesh *abi* and beyond and a possible link to healing practices), and that the Urkesh pit is therefore very likely unconnected to the Mesopotamian dog cemeteries or the cult of Gula.

The dogs of Gula in Ur III documentary sources

Let us now turn to the earliest clear evidence for the association of Gula with dogs, namely, a number of Ur III period documentary texts dealing with the delivery of sheep and goats for the regular offerings (sa₂-du₁₁) of Gula as well as for her dogs (see Tsouparopoulou 2020 for an in-depth analysis of this group of texts).²

A small group of Ur III documentary texts from the Drehem archives exhibit an almost identical

structure:³ A number of sheep (usually 30) is listed as a regular offering for Gula, followed by usually the same number of sheep, ewes and goats with the note *ba-ug₇* (killed) *mu-ur-gi-še* (for the dogs). This delivery was received by an official with the title *sipa ur-(gi₇)-ra*, ‘dog handler’, the same title used by some of the dog handlers of the Ur III military ‘K-9 Corps’ discussed by Tsouparopoulou (2012). The combination of the receipt of dead animals together with the regular offerings as the sustenance of the goddess Gula only allows for one possible explanation: next to the live sheep as sustenance for the goddess, we see the receipt of dead sheep as sustenance for her dogs. If this interpretation is indeed correct, this is the earliest evidence for the association of Gula with dogs, as well as evidence supporting the idea that packs of dogs were indeed kept in or around the temple of Gula. It is worth noting, in this context, that at least some of the documents at hand provide the total number of sheep disbursed (e.g. BIN 3, 68; BPOA 6, 82; PDT 1, 438), making it clear that the dead sheep and goats delivered for the dogs have to be considered separate from the 30 sheep that constitute the offering to Gula herself.

This group of texts in this easily recognizable form spans a period of about 15 years, stretching from the years Šulgi 44 to Ibbi-Sîn 2. Most of the documents in question are receipts in this given formulaic structure, but we also find similar transactions that probably form part of this corpus in abbreviated form listed in summary account tablets. Apart from the uniformity of these documents, what is equally striking is the fact that in most of the texts, the transactions are listed as having taken place in Ur. As outlined above, the most important location for the cult of Gula during the reign of the Ur III dynasty was Umma, but we do have evidence for other temples of Gula, including in Ur itself where Ur-Nammu claims to have built her temple, possibly the same temple that was later rebuilt by Warad-Sin (RIME 4.2.13.2).

However, it is worth pointing out that no comparable texts have been identified in the corpus for the association with dogs or evidence for dogs being provided with rations together with Ninisina or the other healing goddesses that still should be considered distinct from Gula in the third millennium. The only available evidence, for the time being, relates to Gula.

Conclusion

Summing up, we can certainly conclude that there seems to be a very close connection between the various healing goddesses (that in the second millennium merge into the deity Gula / Ninsina) and her dogs. Already during the reign of the third dynasty of Ur,

we find evidence for packs of dogs associated with the temple of Gula, in this particular case probably the temple of Gula in Ur. Our only evidence for the following millennium stems from the increasing association of Gula with dogs in art from the Old Babylonian period onwards, until we find further evidence for dogs in connection with a religious precinct, this time in the form of the dog burials associated with the temple of Gula-Ninisina at Isin, dating about a thousand years later than the Ur III evidence. No further first-hand evidence for these packs of dogs has of yet been unearthed at the other sites where the healing goddess was venerated, such as the temple of Gula in Nippur, but considering the apparent longevity of this tradition, this would not be entirely unexpected. Whether the association with dogs was an inherent feature of the cult of all healing goddesses or whether this feature originally only belonged to one of her incarnations (in this case, based on the Ur III evidence, very likely Gula) that was taken over by the other healing goddesses that were syncretized with her in the early second millennium, cannot be answered with any certainty based on the limited evidence available. However, in the light of the Ur III evidence, we are led to wonder just how unusual the Isin dog cemetery really was or whether there would have been similar dog packs and corresponding cemeteries at other sites that were dedicated to the healing goddess.

If we attempt to discuss the function of these packs of dogs in the context of the temples we are on much less solid ground. It is impossible to answer in this context and based on the limited evidence available, to what degree these dogs formed part of the ritual aspects of Gula’s temple or to what degree they may even have been connected to the healing rituals as such, for example by licking wounds of injured supplicants.

Gula’s association with dogs has been discussed extensively within the realm of healing itself. Several scholars, among them Fuhr (1977, 137–9) have adduced evidence for dogs licking wounds for healing purposes. This, as Böck has pointed out, is indeed backed by some clinical evidence, but whether the ancient medical practitioners were indeed aware of this remains unknown (Böck 2014, 38). If dogs were really involved in the treatment of wounds and injuries, it still remains unclear whether their effect was considered more of a physical or spiritual nature or whether we are here dealing with substitution rituals, transferring the human ailment onto the animal, a possible explanation for the fractures observed on the bones from the Isin dog cemetery. A Neo-Assyrian cylinder seal (Teissier 1984, no. 231) depicts a dog over a hut or tent structure in which a healing ritual is performed, but it remains unclear whether the dog in this instance is a symbolic

representation of Gula herself or if this indicates the presence of dogs during healing rituals. Direct evidence of dogs being used in the process of healing, at any rate, remains rare, apart from a Neo-Assyrian Omen report discussed by Avalos which involves purification by touching the dog of Gula (Avalos 1995, 208) and which, for the time being, remains unique.

It remains equally elusive where the dogs in the temple pack originated and whether they were selected according to certain criteria: were they specifically bred to be temple dogs or could they have been selected according to certain physical characteristics? Avalos' suggestion, explaining the injuries that the dogs from the Isin cemetery sustained before their death with the function of the Gula temple as an early animal shelter maybe seems too modern a concept, but whether the dogs were purposefully harmed in the course of a potential substitution ritual cannot be decided with the evidence at hand.

The Ur III documentary texts remain the only conclusive evidence for the association of the healing goddess with dogs dating to the third millennium BC. Considering the lack of evidence for an association between the other healing goddesses and dogs and the fact that the only available evidence relates to Gula, one is led to wonder whether the association with dogs was originally limited to Gula and was then – after the increasing amalgamation of the different healing goddesses at the beginning of the second millennium – transposed onto the other healing goddesses, including Ninisina.

Notes

- 1 Some often-cited examples are YOS 8, 76: 2 and VS 16, 181: 17.
- 2 I am very grateful to Christina Tsouparopoulou for discussing the evidence with me and for sharing a preliminary version of her recent article on the topic (Tsouparopoulou 2020).
- 3 The uniform group of texts listing deliveries of sheep for Gula and the dogs are: Boson 1939, 235.2; AUCT 1, 376; BCT 1, 74; BIN 3, 68; BPOA 6, 82 & 578; BPOA 7, 2656; MVN 8, 102; MVN 8, 132; MVN 11, 184; OIP 115, 295, 301 & 313; PDT 1, 439; TRU 330; WMAH 160. Further documents mentioning the dogs and the same officials involved in the transaction also belong to the same dossier, see Tsouparopoulou 2020, Table 1 for a complete list.

References

- Avalos, H., 1995. *Illness and Health Care in the Ancient Near East. The Role of the Temple in Greece, Mesopotamia, and Israel*. (Harvard Semitic Monographs 54.) Atlanta: Scholars Press.
- Böck, B., 2014. *The Healing Goddess Gula. Towards an Understanding of Ancient Babylonian Medicine*. (Culture and History of the Ancient Near East 67.) Leiden & Boston: Brill.
- Boessneck, J., 1977. Die Hundeskelette von Išān Bahrīyāt (Isin) aus der Zeit um 1000 v. Chr., in *Isin – Išān Bahrīyāt I. Die Ergebnisse der Ausgrabungen 1973–1974*, ed. B. Hrouda. (Bayerische Akademie der Wissenschaften, Philosophisch-Historische Klasse, Abhandlungen, Neue Folge, Heft 79; Veröffentlichungen der Kommission zur Erschließung von Keilschrifttexten, Serie C, 2. Stück.) Munich: Verlag der Bayerischen Akademie der Wissenschaften, 97–109.
- Bonatz, D., 2010. Dog, in *Iconography of Deities and Demons in the Ancient Near East*, eds. J. Eggler & C. Uehlinger. Electronic Pre-Publication (Last Revision: 27 April 2010) http://www.religionswissenschaft.uzh.ch/idd/prepublications/e_idd_dog.pdf (Accessed 10 May 2020).
- Boson, G., 1939. Alcune iscrizioni inedite sumere della III dinastia di Ur del Museo Egiziano di Torino. *Aegyptus* 19, 227–38.
- Collon, D., 1982. *Catalogue of the Western Asiatic Seals in the British Museum. Cylinder Seals II: Akkadian, Post-Akkadian, and Ur III Periods*. London: British Museum Publications.
- Collon, D., 2009. Gula, in *Iconography of Deities and Demons in the Ancient Near East*, eds. J. Eggler & C. Uehlinger. Electronic Pre-Publication (Last Revision: 1 July 2009) http://www.religionswissenschaft.uzh.ch/idd/prepublications/e_idd_gula.pdf (Accessed 10 May 2020).
- Di Martino, S., 2005. Tell Mozan / Urkesh. Archeozoologia della struttura sotterranea in A12. *Studi Micenei ed Egeo-Anatolici* 47, 67–80.
- Edrey, M., 2008. The dog burials at Achaemenid Ashkelon revisited. *Journal of the Archaeological Institute of Tel Aviv University* 35(2), 267–82.
- Fuhr, I., 1977. Der Hund als Begleiter der Göttin Gula und anderer Heilgottheiten, in *Isin – Išān Bahrīyāt I. Die Ergebnisse der Ausgrabungen 1973–1974*, ed. B. Hrouda. (Bayerische Akademie der Wissenschaften, Philosophisch-Historische Klasse, Abhandlungen, Neue Folge, Heft 79; Veröffentlichungen der Kommission zur Erschließung von Keilschrifttexten, Serie C, 2. Stück.) Munich: Verlag der Bayerischen Akademie der Wissenschaften, 136–45.
- George, A.R., 1993. *House Most High. The Temples of Ancient Mesopotamia*. (Mesopotamian Civilizations 5.) Winona Lake (IN): Eisenbrauns.
- Gibson, M., 1993. Nippur, sacred city of Enlil, supreme god of Sumer and Akkad. *Al-Rāfidān* 14, 1–18.
- Halpern, B., 2000. The canine conundrum of Ashkelon: a classical connection? in *The Archaeology of Jordan and Beyond. Essays in Honor of James A. Sauer*, eds. L.E. Stager, J.A. Greene & M.D. Coogan. (Harvard Semitic Museum Publications, Studies in the Archaeology and History of the Levant 1.) Winona Lake (IN): Eisenbrauns, 133–44.
- Hrouda, B., 1977a. Ausgrabungsergebnisse. Die Grabung im Nordabschnitt N I (1. Kampagne), in *Isin – Išān Bahrīyāt*

- I. *Die Ergebnisse der Ausgrabungen 1973–1974*, ed. B. Hrouda. (Bayerische Akademie der Wissenschaften, Philosophisch-Historische Klasse, Abhandlungen, Neue Folge, Heft 79; Veröffentlichungen der Kommission zur Erschließung von Keilschrifttexten, Serie C, 2. Stück.) Munich: Verlag der Bayerischen Akademie der Wissenschaften, 17–20.
- Hrouda, B., 1977b. Statuenfragmente und sonstige Klein- funde (mit Ausnahme der glyptischen Erzeugnisse), in *Isin – Išān Bahrīyāt I. Die Ergebnisse der Ausgrabungen 1973–1974*, ed. B. Hrouda. (Bayerische Akademie der Wissenschaften, Philosophisch-Historische Klasse, Abhandlungen, Neue Folge, Heft 79; Veröffentlichungen der Kommission zur Erschließung von Keilschrifttexten, Serie C, 2. Stück.) Munich: Verlag der Bayerischen Akademie der Wissenschaften, 39–51.
- Hrouda, B., 1981. *Isin – Išān Bahrīyāt II. Die Ergebnisse der Ausgrabungen 1975–1978*. (Bayerische Akademie der Wissenschaften, Philosophisch-Historische Klasse, Abhandlungen, Neue Folge, Heft 87; Veröffentlichungen der Kommission zur Erschließung von Keilschrifttexten, Serie C, 3. Stück.) Munich: Verlag der Bayerischen Akademie der Wissenschaften.
- Hrouda, B., 1987. *Isin – Išān Bahrīyāt III. Die Ergebnisse der Ausgrabungen 1983–1984*. (Bayerische Akademie der Wissenschaften, Philosophisch-Historische Klasse, Abhandlungen, Neue Folge 94; Veröffentlichungen der Kommission zur Erschließung von Keilschrifttexten, Serie C, 4. Stück.) Munich: Verlag der Bayerischen Akademie der Wissenschaften.
- Hrouda, B., 1992. *Isin – Išān Bahrīyāt IV. Die Ergebnisse der Ausgrabungen 1986–1989*. (Bayerische Akademie der Wissenschaften, Philosophisch-Historische Klasse, Abhandlungen, Neue Folge 105; Veröffentlichungen der Kommission zur Erschließung von Keilschrifttexten, Serie C, 5. Stück.) Munich: Verlag der Bayerischen Akademie der Wissenschaften.
- Kelly-Buccellati, M., 2016. Urkesh: the morphology and cultural landscape of the Hurrian sacred, in *L'archeologia del sacro e l'archeologia del culto. Sabratha, Ebla, Ardea, Lanuvio. Ebla e la Siria dall'Età del Bronzo all'Età del Ferro*, ed. P. Matthiae. (Atti dei Convegni Lincei 304.) Rome: Bardi, 97–115.
- Liggett, R. M., 1982. Ancient Terqa and its temple of Ninkarak: the excavations of the fifth and sixth seasons. *Near East Archaeological Society Bulletin* NS 19, 5–25.
- Ornan, T., 2004. The goddess Gula and her dog. *Israel Museum Studies in Archaeology* 3, 13–30.
- Recht, L., 2014. Perfume, women, and the underworld in Urkesh. Exploring female roles through aromatic substances in the Bronze Age Near East. *Journal of Intercultural and Interdisciplinary Archaeology* 1, 11–24.
- Sallaberger, W., 1993. *Der kultische Kalender der Ur III-Zeit*. (Untersuchungen zur Assyriologie und Vorderasiatischen Archäologie 7.) Berlin & New York: de Gruyter.
- Seidl, U., 1971. Gula. B. In der Bildkunst, in *Reallexikon der Assyriologie und vorderasiatischen Archäologie* 3: *Fabel – Gyges*, eds. E. Ebeling & E.F. Weidner. Berlin & New York: De Gruyter, 697.
- Stager, L. E., 1991. Why were hundreds of dogs buried at Ashkelon? *Biblical Archaeology Review* 17(3), 26–42.
- Teissier, B., 1984. *Ancient Near Eastern Cylinder Seals from the Marcopoli Collection*. Berkeley, Los Angeles & London: University of California Press.
- Tsouparopoulou, C., 2012. The K-9 corps of the Third Dynasty of Ur. *Zeitschrift für Assyriologie und Vorderasiatische Archäologie* 102, 1–16.
- Tsouparopoulou, C., 2020. The healing goddess, her dogs and physicians in late third millennium bc Mesopotamia. *Zeitschrift für Assyriologie und Vorderasiatische Archäologie* 110, 14–24.
- Walker, C.B.F., 1978. Isin. Inscriptions. *Sumer* 34: 99–103.
- Wapnish, P. & B. Hesse, 1993. Pampered pooches or plain pariahs? The Ashkelon dog burials. *The Biblical Archaeologist* 56(2), 55–80.
- Wyganska, Z., 2017. Equid and dog burials in the ritual landscape of Bronze Age Syria and Mesopotamia. *ARAM* 29, 141–60.

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 symbolising 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.*

The McDonald Institute for Archaeological Research exists to further research by Cambridge archaeologists and their collaborators into all aspects of the human past, across time and space. It supports archaeological fieldwork, archaeological science, material culture studies, and archaeological theory in an interdisciplinary framework. The Institute is committed to supporting new perspectives and ground-breaking research in archaeology and publishes peer-reviewed books of the highest quality across a range of subjects in the form of fieldwork monographs and thematic edited volumes.

Cover design by Dora Kemp and Ben Plumridge.

ISBN: 978-1-913344-05-4

