



McDONALD INSTITUTE CONVERSATIONS

Fierce lions, angry mice and fat-tailed sheep

Animal encounters
in the ancient Near East

Edited by Laerke Recht & Christina Tsouparopoulou



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with contributions from

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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.

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Chapter 22

Sacred and the profane: donkey burial and consumption at Early Bronze Tell eṣ-Şâfi/Gath

Haskel J. Greenfield, Jon Ross, Tina L. Greenfield & Aren M. Maeir

In recent years, there has been a renewed focus on the domestication and importance of donkeys for ancient Near Eastern and other early societies (Mitchell 2017; 2018). Based on genetics, donkeys appear to have been domesticated in northeast Africa (c. Somalia or Ethiopia) sometime during the fifth millennium BC (Rossel *et al.* 2008). From there, they spread first to Egypt where they appear in late Pre- and Early Dynastic sites (Marshall 2000; Rossel *et al.* 2008), and become ubiquitous across the Near East soon afterwards (e.g. Gardiner *et al.* 1952; Partridge 1996; Förster 2007). Early domestic donkey remains are found across the Near East by the beginning of the Early Bronze Age (EB), initially in the southern Levant (c. 3500 BC) (Grigson 2012; Milevski & Horwitz 2019) and soon afterwards across the rest of the Near East (by 3000 BC) (Way 2010; Potts 2011; Zarins 2014). The evidence for early donkeys is diverse, and includes figurines, iconography, isolated bones, and complete burials, as well as textual references.

While most of the literature focuses on domestication (Grigson 2012; Milevski & Horwitz, 2019) or the special nature of donkeys as more than beasts of burden (Way 2010; 2011), it is clear that donkeys were utilized from the beginning for both the sacred (dedicated to a religious or ritual purpose) and the profane (non-religious purposes) (e.g. Rappaport 1971; Besserman 2006; Way 2010; Porter & Schwartz 2012). Donkeys are used to carry or pull the elite (Way 2010; Zarins 1986; 2014), as ceremonial sacrificial animals in elite tombs (Scurlock 2002; Rossel *et al.* 2008; Zarins 2014), and as beasts of burden (Jans & Bretschneider 1998; Al-Ajlouny *et al.* 2012; Makowski 2014; Shai *et al.* 2016) based on texts, iconography, figurines, and burials. Yet, most analyses of the zooarchaeological remains do not consider the larger evidence for their use in both domains within the same site. In this chapter, we present the corpus of zooarchaeological and

artefactual data for the use of donkeys as both sacred and profane, in non-elite domestic contexts from the EB site of Tell eṣ-Şâfi/Gath.

Tell eṣ-Şâfi/Gath

Tell eṣ-Şâfi/Gath (modern Tell eṣ-Şâfi; ancient Gath) is located in central Israel at the westernmost edge of the Judean Foothills (*Shephelah* – Hebrew). It is positioned atop a natural limestone outcrop that overlooks the Elah River Valley and the coastal plain (Fig. 22.1). It is approximately 20 km from the coast, which can almost be seen on a clear day from the western pinnacle of the mound. From its pinnacle, one can see in all directions, which makes it a natural commanding location.

The location of the site allowed for access to fresh water and exploitation of a rich variety and abundance of natural food resources from both the rolling foothills and coastal plain, which may help to explain the long occupation with repeated destruction and abandonment over time. It was occupied periodically from the later Chalcolithic (c. 4000 BC) until it was finally abandoned in AD 1948 (Maeir 2012a,b). Given the results of the surface survey and extensive excavation across various parts of the mound, it was approximately 24 ha in size (Fig. 22.2) during the EB II-III (c. 3100–2600/2550 BC). As such, it was one of the largest and among the most important Early Bronze settlements in the region (Maeir 2012a,b; Uziel & Maeir 2012; Shai *et al.* 2014; Greenfield *et al.* 2016; 2017).

During this period, the site becomes one of several major regional and fortified urban centres that dot the landscape across the region (Miroshedji 2009; Levy-Reifer 2012; 2016; Nigro 2014; 2016; Shai *et al.* 2016; Chadwick *et al.* 2017; Welch *et al.* 2019). The nature of the regional settlement hierarchy (in conjunction with extensive excavation data) suggests that this period marks the beginning of complex urban and possibly

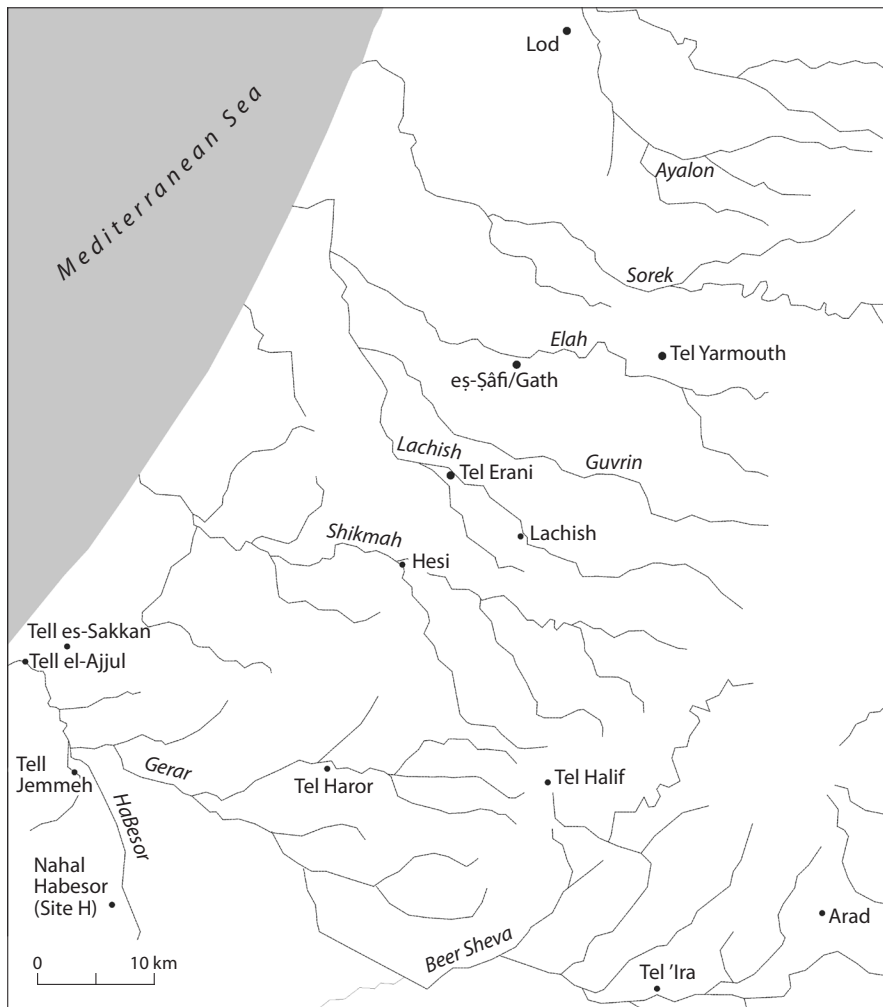


Figure 22.1. Map showing location of Tell eṣ-Ṣâfi/Gath and some other major Early Bronze III sites in the region.

low-level state societies in the region. Coinciding with the appearance of regional settlement hierarchies with fortified urban centres at the top of the hierarchy are large public buildings (probably palaces) (Miroschedji 2003; Ussishkin 2018), large ritual complexes (probably temples) (Ussishkin 2018), large-scale and centralized storage facilities (Greenberg 2002; 2014; Mazar & Rotem 2009), and various types of administrative activities, as indicated by the use of glyptic devices (Miroschedji 1997; 2006; 2009; Greenberg 2001; 2011; Maeir *et al.* 2011; Albaz *et al.* 2017).

These all suggest a robust and centralized system of administrative, ritual, social, and economic activities within and between urban centres in the region (and beyond). In this system, city-states vied with each other for control over both people and resources, as evidenced by the presence of large-scale fortifications that surround almost all major settlements in the region during this period (Miroschedji 1999; 2006, 2009; Greenberg 2002; 2014; Uziel *et al.* 2014; Levy-Reifer 2016; Nigro 2016). Most likely, they were

political units similar to peer-polities that controlled their immediate hinterlands (e.g. Renfrew & Cherry 1986). The site is positioned adjacent or close to several routes of movement that extend through the region (north-south ‘Trough Valley’ along the base of the Judean Mountains to the east; north-south along the coastal plain to the west; east-west from the coast to the highlands through the Elah Valley) (Dorsey 1991).

The Early Bronze occupation at Area E

Evidence for an extensive EB occupation (based on systematic surface collection and excavations) has been found across the entire tell (or upper mound) at the site (Fig. 22.2). Preserved EB deposits have been excavated across a large part of the eastern half of the site (Areas A, E, J, and P), and at the western end (Area F). In addition, excavations in the last year of the nineteenth century and confirmed by our excavations demonstrate that the entire tell was encircled by an EB fortification system with a thick and high stone wall

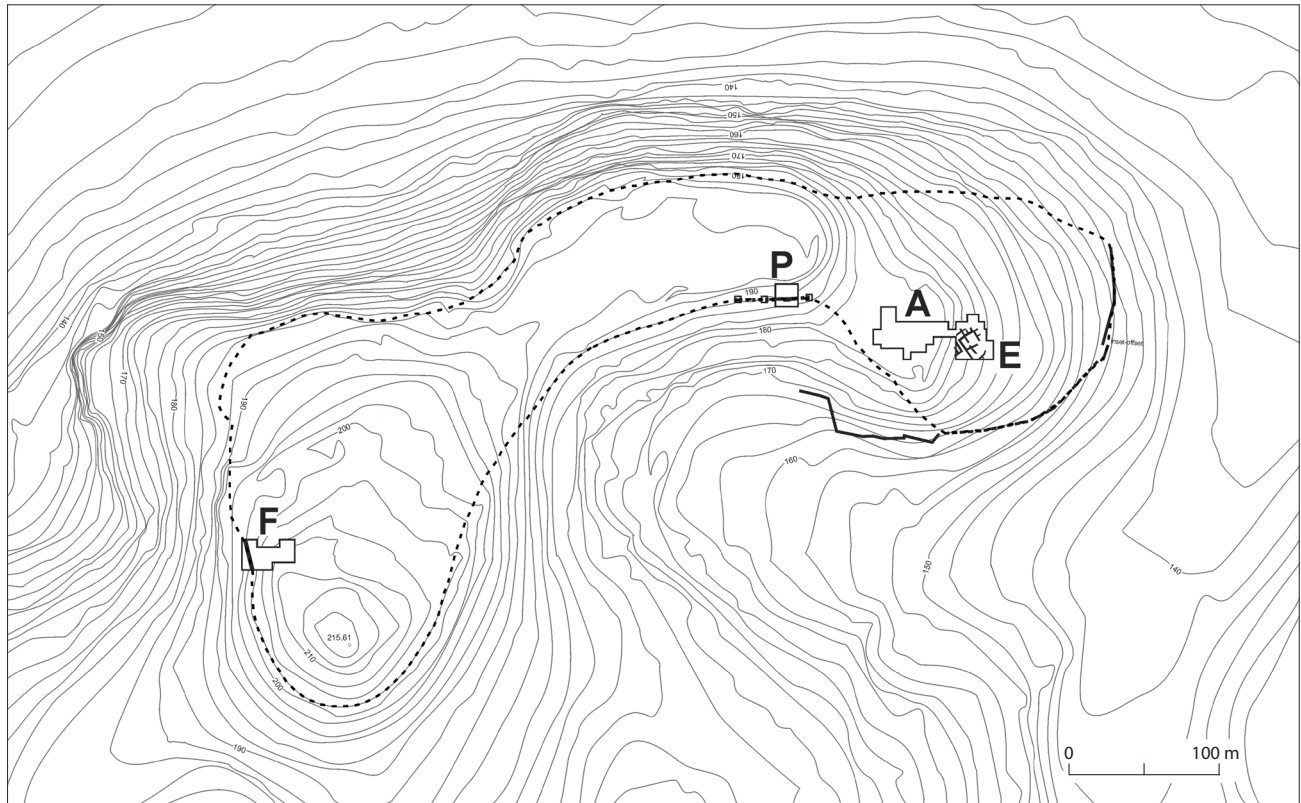


Figure 22.2. Map of Tell eṣ-Şâfi/Gath archaeological site with the location of the various excavation areas. The dotted line shows the suggested size of EB settlement and fortification line on the upper tell. Excavation areas are labelled by letters.

base (Bliss & Macalister 1902; Shai *et al.* 2016; Avissar *et al.* 2017; Chadwick *et al.* 2017; Welch *et al.* 2019).

In Area E, at the eastern end of the site, our excavations uncovered part of an EB III urban neighbourhood. Sections of several non-elite domestic residential buildings and an intervening alleyway have been investigated (Fig. 22.3). The most extensively investigated of the EB strata in this excavation area belong to the E5 strata (with 3 phases: E5a/latest, E5b/middle, and E5c/earliest). During the earliest of these, Stratum E5c, the overall layout of the buildings was established, and subsequently underwent two major renovations where rooms were subdivided over time (Strata E5b and E5a).

Terminal radiocarbon dates for this stratum obtained through high precision dating based on short-lived organics (i.e. olive pits) from very secure final deposits at the termination of the stratum (e.g. within restorable ceramic vessels) suggest that Stratum E5a was terminated *c.* 2550–2600 BC based on a one-sigma calibrated date range (Regev 2013; Shai *et al.* 2014). This date is close to the widely accepted data for the end of the EB III across the region (Adams

2017b; Höflmayer 2017). Stratum E5c is estimated to begin *c.* 2700 BC, however ¹⁴C dates of the earlier part of the E5 strata are not yet available. This is the stratum under discussion here.

The buildings in Stratum E5c (Fig. 22.3) are constructed on a series of terrace-like steps to compensate for the natural slope of the terrain. The structures to the west are higher in elevation than those to the east. In almost all cases, the floors of each room are earthen. A few of the rooms have cobbled sections. None of the donkey skeletons are buried beneath the cobbled sections. A thick (10–20 cm) layer of grey ashy soil accumulated above the floors during the occupation. After approximately 50 years (based on ethnographic analogies, and our recent estimation of the length of occupation for the EB in the area and the number of phases of occupation), parts or all of the mudbrick walls and upper stories of the buildings were torn down and utilized to provide the foundation for the next level of earthen floors.

Most of the articulated donkey remains derive from Stratum E5c. There are four (and possibly more) completely articulated donkey skeletons buried beneath

the earthen floor of courtyards in two large buildings on either side of the alleyway. There are also donkey skeletal elements randomly distributed across the excavation area. The significance of these in terms of the two themes (sacred and profane) are discussed next.

The method of recovery of faunal remains in the Area E excavations was very systematic. At first, we tried to dry sieve everything through 5 cm mesh. However, it was quickly realized that this caused more damage to the faunal remains than benefit. The bones were very fragile and would often fragment or even disintegrate when put into the sieves. At first, it was thought this might be a function of sloppy excavation. However, after participation in the field, it became very clear that this occurred despite careful excavation and recovery. It is estimated that over 75 per cent of the larger faunal assemblage exhibit modern damage as a result of their state of preservation. As a result, the team shifted to a more selective dry and wet sieving operation. For the most part, only primary deposits (pits, floors, accumulations above floors, etc) were carefully hand-collected, dry sieved, or water-sieved in a flotation tank. All donkey pit deposits were floated.

All specimens discussed here are curated at Bar-Ilan University with the rest of the archaeological assemblage from the site.

The sacred asses of Tell eṣ-Şâfi/Gath

Four completely articulated domestic donkey skeletons were excavated in shallow pits beneath the floors of two of the large buildings in Stratum E5c. One is below Building 13407 and the other three below the floor of Building 17E82D08.

Below the dirt floor of Courtyard 114502 of Building 134307, within Stratum E5c, a complete skeleton of a domestic donkey (*Equus asinus*) was found (Locus and Pit 134602, Fig. 22.4). This space within the building was probably an open courtyard given its large dimensions (c. 8 × 8 m) and the absence of pillars. It was placed in a shallow pit excavated into the underlying Stratum E6 and sealed by the Stratum E5c dirt floor. There is no evidence of a pit through the Stratum E5c floor and the deposit is securely dated to the moment immediately before the construction of the Stratum E5c building. The deposit was clearly a ritual interment, since the



Figure 22.4. Photograph of sacrificial donkey (L134602) from the Early Bronze III Stratum E5c in Area E at Tell eṣ-Şâfi/Gath, facing south.



Figure 22.5. Photographs of the three donkey burials beneath Building 17E82D09 from the Early Bronze III in Stratum E5c in Area E at Tell eš-Šâfi/Gath: a. Donkey burial 20E93A05 in pit 20E93A05, photo facing northwest; b. Donkey burial 19E83C09 in pit L19E83C09, photo facing southwest; and c. Donkey burial 19E82D04 in pit L19E82D04, photo facing west.

skeleton was carefully placed in the pit on its right side with the torso facing west (toward the setting sun), the front and hind legs were tied together (trussed) below the abdomen, and the upper neck (cervical) vertebra and cranium dismembered and placed on the abdomen facing east (toward the rising sun). There was no evidence of any other objects found associated with the burial. It is evident the animal was sacrificed, since the head was fully cut off and carefully placed on the abdomen facing in the opposite direction (Greenfield *et al.* 2012).

Three additional complete domestic donkey skeletons (Fig. 22.5) were found across the alleyway in Courtyard 17E82D08 of a second building (Building 17E82D08) (Greenfield *et al.* 2018). Again, it is assumed this space was also probably an open courtyard given the

absence of pillars and its large size. These animals were also placed in shallow pits excavated into the underlying Stratum E6. Each deposit was below the Stratum E5c dirt floor. All three skeletons were lying on their left sides. Similarly, there were no objects associated with these interments, and all were old subadults or young adults who were killed in the prime of their life.

In contrast to the sacrificed donkey discussed above, all three of the donkey skeletons found in this building were fully intact with their craniums still attached. The skulls of all four donkeys faced eastwards (toward the rising sun), suggesting a cultic/ritual orientation towards the east for the burials. Nevertheless, given their similar age, orientation and structured deposition, it is likely that each of the donkeys buried

beneath the floors of the Stratum E5c buildings were ritual (sacrificial) deposits (Greenfield *et al.* 2018). Furthermore, one of the donkeys (Donkey burial in pit L20E93A05) exhibited evidence of a butchery mark on the medial face of the epistropheus, possibly suggesting the nature of its slaughter.

We have theorized elsewhere that the burial of all four donkeys, of similar age and sex, with a similar orientation (heads pointing towards the rising sun), under the floors of courtyards in buildings of a domestic neighbourhood at the eastern periphery of the city, suggests that this might be the residences of merchants. The presence of non-local goods (grinding stones from the Golan and Galilee, bitumen from the Dead Sea, ceramics from further up the Levantine coast, and at least two animals from Egypt can be used to support this theory (Shai *et al.* 2014; Arnold *et al.* 2016; Shai *et al.* 2016; Greenfield *et al.* 2018). In the next period (Middle Bronze) of the Near East, merchant neighbourhoods are found at the periphery of settlements (Larsen 1967; Veenhof 1995). Merchants, ethnographically and historically, have used the donkey as an important totem and symbol of their role in society (Milevski 2011).

It has been proposed elsewhere that the donkey burials may be nothing more than random disposal of dead animals not appropriate for consumption as food (e.g. Grigson 2012; Milevski & Horwitz 2019, 78). However, the careful interments along the same orientation within the same stratum suggest otherwise. The completeness of each individual skeleton in combination with burial in an area that was continuously occupied for several hundred years suggests that these animals were carefully chosen, sacrificed and interred as part of the ritual renewal of the neighbourhood. It would seem that each time the neighbourhood is renewed physically, it is also renewed spiritually.

The profane asses of Tell eṣ-Şâfi/Gath

There are several non-ritual domains in which donkeys are exploited at Tell eṣ-Şâfi/Gath, including as beasts of burden and food. The evidence for this is presented next.

Beasts of burden

The donkeys were also used to carry goods, as is depicted on figurines at various sites (Shai *et al.* 2016; Shai *et al.* 2017). Animal figurines from various sites across the region and at Tell eṣ-Şâfi/Gath often have large jars or baskets depicted on both sides of the animals (Al-Ajlouny *et al.* 2011; Al-Ajlouny *et al.* 2012). This suggests that they were carrying large loads. Textual and iconographic sources from Egypt very clearly show that donkeys were used as pack animals for both local

and long-distance movement of goods. Osteological evidence from one of the donkeys (sacrificial) shows that it exhibited minor pathologies at limb joints (Shai *et al.* 2016; Greenfield *et al.* 2018; Greenfield *et al.* 2021).

It is likely that the donkeys also carried people – i.e. were ridden. There is clear evidence for bit wear on the teeth on some of the donkeys at Tell eṣ-Şâfi/Gath. It is likely that a soft bit was used, such as rope, hide, wood, or bone since the wear is slight – however, the donkeys were relatively young and the bit wear was only in its early stages of development. The presence of donkey figurines with saddles at other sites also suggests that they were ridden, as well as used for carrying goods (Hizmi 2004; Makowski 2014; Greenfield *et al.* 2018).

Evidence for movement

Donkeys during the Early Bronze Age were clearly carrying goods and people not only locally, but also between widely separated regions. Aside from ancient Egyptian and Mesopotamian texts that detail caravans of donkeys moving goods across the region (Hennessy 1967; Rainey 2006; Sallaberger 2014; Shai *et al.* 2016; Rosen 2019), dental isotopic analyses (carbon, oxygen, and strontium) from the clearly sacrificed donkey skeleton (Donkey Burial 134602) and a sample of ovicaprines from the site were conducted. The results suggest that there is zooarchaeological evidence for movement of domestic draught/draft (donkey) and husbandry animals (goat) between Old Kingdom Egypt and EB III Canaan (Arnold *et al.* 2016; Arnold *et al.* 2018). The donkey and one goat were born and raised in Egypt and only arrived in the region around Tell eṣ-Şâfi/Gath for a brief time (6 months) before it was slaughtered (Arnold *et al.* 2016) (Fig. 22.8a-c).

There is little variation in the dental isotopes in the first and second molars of the sacrificial donkey (Donkey burial 134602). There is a clear shift in the isotopic pattern of the third molar that reflects the movement from the Nile region to the region around Tell eṣ-Şâfi/Gath. These results stand in contrast to that seen in the majority of analysed sheep and goat teeth. The majority of sheep and goats were herded and grazed in the region surrounding Tell eṣ-Şâfi/Gath (Arnold *et al.* 2018).

Donkeys as food

The remains of several other donkeys have been found scattered throughout the excavation area of the Stratum E5c occupation. There are 74 different NISP (Number of identified specimens that are not articulated with another) composed of 78 bone/teeth fragments and 82 bone/teeth elements that could be assigned to a secure depositional context (Table 22.1).

Table 22.1. Frequency distribution of non-articulated *Equus asinus* (domestic donkey) bone elements in Stratum E5c by building number, room number, deposit type, and bone element.

Building, room, deposit type, element	Sum of NISP	Sum of # pre-excavation fragments (TNF)	Sum of # elements
Bldg 134307	11	11	11
Room 114502	9	9	9
Floor makeup	1	1	1
Rib	1	1	1
Accumulation above floor	8	8	8
Loose tooth	1	1	1
Patella	1	1	1
Phalange	1	1	1
Rib	1	1	1
Sesamoid	1	1	1
Tibia	1	1	1
Vertebra	2	2	2
Room 134307	1	1	1
?	1	1	1
Scapula	1	1	1
Room 134311	1	1	1
Accumulation above floor	1	1	1
Radius	1	1	1
Bldg 134817	2	2	2
Room 134814	1	1	1
Accumulation above floor	1	1	1
Metapodium	1	1	1
Room 134817	1	1	1
Accumulation above floor	1	1	1
Loose tooth	1	1	1
Bldg 16E83A10	2	2	2
Room 16E83A10	1	1	1
Accumulation above floor	1	1	1
Cranium	1	1	1
Room 20E83A05	1	1	1
Accumulation above floor	1	1	1
Vertebra	1	1	1
Bldg 18E84A02	12	12	12
Room 18E84A02	12	12	12
Building collapse	9	9	9
Astragalus	1	1	1

None appear to be articulated with other bones, unlike the clearly articulated burials. These do not appear to be part of ritual donkey burials described above and are divided amongst a variety of deposits across the entire excavation area.

Building, room, deposit type, element	Sum of NISP	Sum of # pre-excavation fragments (TNF)	Sum of # elements
Calcaneus	1	1	1
Cranium	1	1	1
Femur	1	1	1
Humerus	1	1	1
Radius	1	1	1
Rib	1	1	1
Scapula	1	1	1
Tibia	1	1	1
Accumulation above floor	2	2	2
Metacarpus	1	1	1
Tibia	1	1	1
Floor	1	1	1
Scapula	1	1	1
Bldg 93A South Building	1	1	1
Building collapse	1	1	1
Astragalus	1	1	1
Alleyway	44	48	52
Alleyway accumulation	44	48	52
Cranium	6	6	6
Femur	2	2	2
Humerus	1	1	1
Loose tooth	2	2	2
Loose tooth – lower	3	6	5
Loose tooth – upper	4	4	4
Mandible	4	4	10
Metacarpus	1	1	1
Metatarsus	1	1	1
Phalange	6	6	6
Radius+ulna	2	2	2
Rib	1	1	1
Sesamoid	2	2	2
Tarsal	1	1	1
Tibia	2	3	2
Calcaneus	1	1	1
Vertebra	7	7	7
Grand Total	74	78	82

The non-articulated specimens include a variety of age groups (infant, juveniles, subadults, and adults – Table 22.2). All ageable bones are included in this table to ensure sufficient sample size representation. A minor frequency (13 per cent) were not ageable at

Table 22.2. Frequency distribution of non-articulated *Equus asinus* (domestic donkey) bone elements in Stratum E5c by age groups.

Age and sub-age class	Sum of NISP	% NISP	Sum of NISP	% NISP2
Neonate	2	1.24%	2	1.75%
Old	2	1.24%		
Juvenile	8	4.97%	8	7.02%
Young	1	0.62%		
Old	3	1.86%		
Unknown	4	2.48%		
Subadult	40	24.84%	40	35.09%
Young	3	1.86%		
Old	15	9.32%		
Unknown	22	13.66%		
Subadult/Adult	25	15.53%		
Unknown	25	15.53%		
Adult	64	39.75%	64	56.14%
Young	11	6.83%		
Middle	4	2.48%		
Old	4	2.48%		
Unknown	22	13.66%		
Grand Total	161	100.00%	114	100%

all and a substantial proportion could not be aged to more than the indeterminate subadult/adult category (15 per cent). When these are removed (NISP2), the vast majority are adults (56 per cent), most of which are younger individuals. This is followed by subadults (35 per cent), which are dominated by older individuals. There are very few neonates (1.7 per cent) and juveniles (7 per cent) in the assemblage. Clearly, the majority of donkeys were kept alive into adulthood and were probably only slaughtered when they were no longer useful for traction and/or transport.

First, and very surprisingly, no loose donkey remains were recovered from Building 17E82D08 even though this is where three complete donkey skeletons were buried. Second, the largest group of loose donkey bones was found in the alleyway (NISP=45; Table 22.3; Fig. 22.6). These are described first. Donkey bones are dumped/discarded in the alleyway with the remains of other animals and other artefacts (ceramics, ground stone, chipped stone, etc.). These include Loci 19E83C06, 20E83C04, and 134814, which contained a small number of elements that cover the entire skeleton – including cranium, loose tooth, mandible, vertebra, humerus, radius, femur, tibia, metapodium, sesamoids, carpal, tarsal, and phalange elements. There is no clear concentration of bones, although many were found along the length of the eastern face of the western wall face of the alleyway (W104206), and mixed with

the bones from other taxa. Their concentration along this wall is probably a result of the larger bones being kicked to the side of the alley, where they were able to better survive various attritional forces, such as trampling. They can be considered part of the filling in or dumping of debris in alleyway.

Loose donkey bones were also found in several buildings (NISP=29; Table 22.3; Fig. 22.6). The smallest quantity (a single astragalus) was found in a poorly defined building (because of intrusive LB pits) at the south end of Square 93A (labelled as 93A South Building in L16E93A08). Building 18E84A02 contained the most specimens (NISP=12). In Building 18E84A02, most of the donkey bones were found in the building collapse layer (NISP=9), and fewer in the ash accumulation above the floor (NISP=2) or floor makeup (NISP=1). They include the following elements – cranium, rib, scapula, humerus, radius, femur, tibia, metacarpus, astragalus and calcaneus. As with the alleyway, they are a mix of hard and more fragile

Table 22.3. Frequency (NISP) of Stratum E5c *Equus asinus* osteological elements by depositional context (alleyway and buildings). Data used in Figure 22.6. Data from insecure deposits not included.

Element	Depositional context					
	Alleyway	18E84A02	134307	16E83A10	134817	93A South Building
Cranium	6	1		1		
Mandible	4					
Loose tooth	9		1		1	
Vertebra	7		2	1		
Rib	1	1	2			
Scapula		2	1			
Humerus	1	1				
Radius		1	1			
Radius+ulna	2					
Femur	2	1				
Patella			1			
Tibia	2	2	1			
Astragalus		1				1
Calcaneus	1	1				
Tarsal	1					
Metacarpus	1	1				
Metatarsus	1					
Metapodium					1	
Sesamoid	2		1			
Phalange	5		1		1	
Total	45	12	11	2	3	1

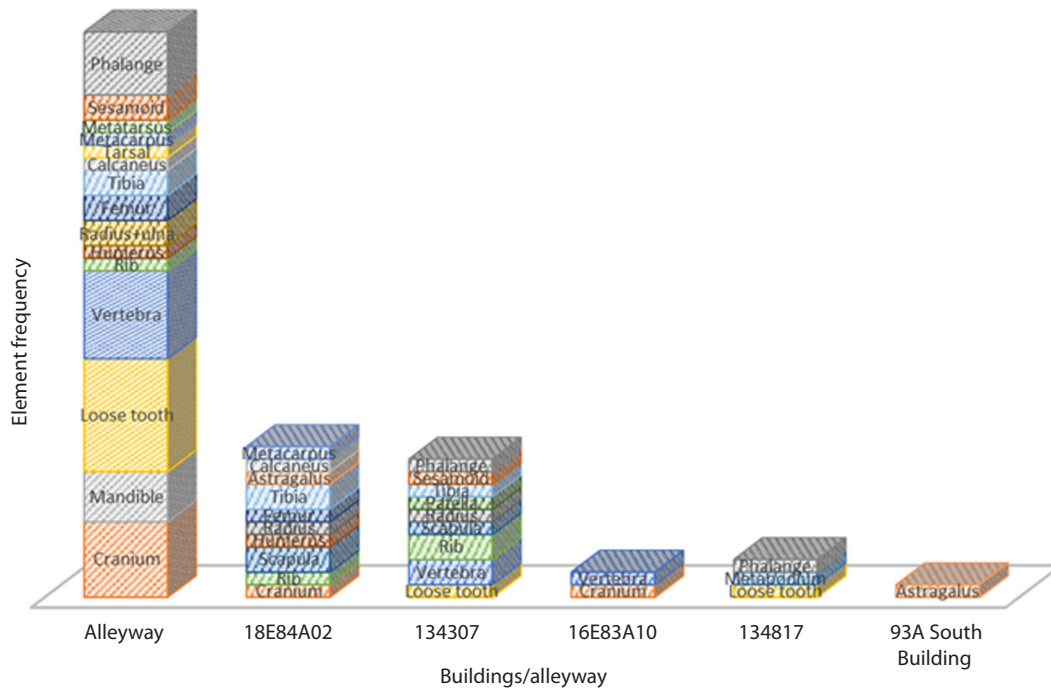


Figure 22.6. Histogram of *Equus asinus* osteological element frequency (NISP) by secure depositional context in Stratum E5c. Each minimum line on the y-axis represents a single specimen.

elements. But only the astragalus and calcaneus are complete. In Building 134307, the 11 donkey bones are lightly distributed between three rooms – Rooms 114502, 134307, and 134311 (Tables 22.1 and 22.3; Fig. 22.6). They were found in a variety of deposits, but the majority cluster in the ash accumulation above the floor (loose tooth, rib, vertebra, tibia, and phalange). Two were found in the floor makeup (rib) and in an indeterminate deposit type (scapula). Two fragments were in Building 134817 – a metapodium (in Room 134814) and a loose tooth (in Room 134817). Two more donkey bones were found in Building 16E83A10. All were found in deposits that could not be identified as accumulation above floor or building collapse, and are hence labelled as indeterminate layers – a cranial fragment in Room 16E83A10 and a vertebra in Room 20E83A05. Were these the remains of food? Or were the donkeys merely utilized for their skins? It is unlikely that the donkeys were utilized only for their skins given the distribution of all body parts in most houses. The large skeletal element distribution in addition to the presence of butchering marks on some of the donkey elements suggests that some of the flesh was consumed (albeit not in large quantities).

Three of the loose (unarticulated) donkey bone elements from the E5c Stratum display signs of butchering marks – a vertebra (atlas) in Locus 20E83C04, Basket 20E83C049), rib, and posterior first phalange in



Figure 22.7. Photograph of plantar face of a donkey (*Equus asinus*) third phalange bone with butchery slicing marks – from Locus 19E83C06 and Basket 19E83C262, Stratum E5c at Tell eš-Šâfi/Gath. Photograph by Haskel J. Greenfield.

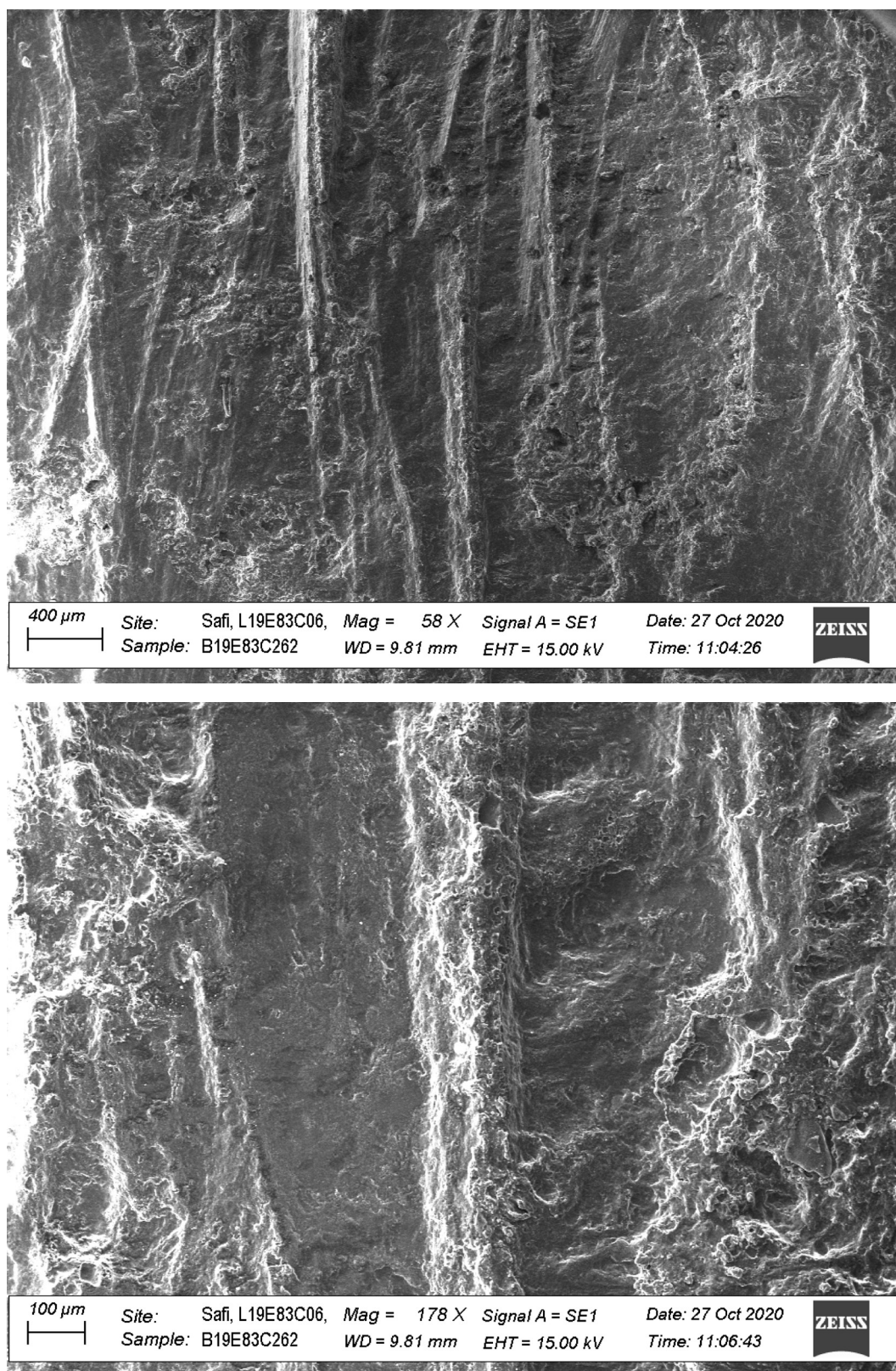


Figure 22.8a-b. Scanning Electron Microscope photograph of butchery slicing marks on the donkey (*Equus asinus*) first phalanx from Locus 19E83C06 and Basket 19E83C262 at Tell eṣ-Şâfi/Gath. Photographs by Haskell J. Greenfield.

Locus 19E83C06, Baskets 19E83C262 and 19E83C220, respectively) (Fig. 22.7). All three had been discarded in the alleyway. They were part of a cluster of loose donkey bones found amidst discarded bones (and other items) toward the NW end of the alley along the east face of W104206 (in Square 83C). All three belong to either old subadults or young adults. The atlas and first phalange are from young adults, while the rib could only be aged to the more general subadult/adult category, based on their state of ossification/fusion and muscle attachments on the bone. The sex could not be determined, but the atlas and first phalange probably belonged to females given their gracile nature and small size.

The atlas and phalange bones with butchering marks were examined microscopically. The grooves on the phalange were on the plantar face of the shaft and were the result of multiple intersecting slices (Fig. 22.8). They were likely from skinning since they are not at either end of the bone where disarticulation normally occurs. Two sets of slicing marks were observed on the atlas bone of the vertebral column. The first was oriented diagonally to the long axis of the bone, at the lateral edge just above the anterior/cranial articular cavity, on the dorsal face. The second was oriented perpendicular to its long axis, and located on the caudal edge of the right lateral wing on the ventral face. Both sets of slice marks on the atlas were related to the disarticulation process of the cranium from the cervical vertebra. Light optical and scanning electron microscopy of the butchery marks on the phalange and other bones suggest that the slicing marks were made by uniaxially produced, but not retouched, chipped stone tool flakes or blades.

The presence of butchering marks on the loose donkey bones complements the recently recognized presence of slaughtering marks on one of the sacrificed donkeys (Donkey burial 20E82D04). Together, these suggest that consumption of donkey flesh as well as the use of their skin, in addition to ritual, was an important part of daily life in the EB at Tell eṣ-Şâfi/Gath.

Conclusions

The goal of this chapter is to integrate our understanding of both the profane and sacred roles of early domestic donkeys during the Early Bronze Age of the southern Levant and neighbouring regions, particularly with respect to the finds at the site of Tell eṣ-Şâfi/Gath. Early donkeys were domesticated in NE Africa and quickly became an important part of life, for both the elite and lower strata of society. They are slaughtered and buried in royal tombs in Egypt and Mesopotamia (Postgate 1986; Rossel *et al.* 2008; Way 2010; Mitchell

2018), and under houses of commoners throughout the southern Levant (Sapir-Hen *et al.* 2017; Greenfield *et al.* 2018), and probably much further afield (Vila 1998; 2005; 2006; Way 2010; 2011). They are used from the earliest times to transport people, goods and information across and between Egypt and the Near East. This has long been documented through textual and iconographic data, and recently confirmed through provenance sourcing of archaeological artefacts (e.g. Stager 1992; Ashton *et al.* 2000; Nicholson & Shaw 2000; Shaw 2000; Sowada 2009; Miroschedji 2012; Höflmayer 2014; Adams 2017a; Finkelstein *et al.* 2018; Joffe 2019).

Recent zooarchaeological data utilizing stable isotope analysis of the enamel of donkey teeth from Tell eṣ-Şâfi/Gath confirm the movement of animals between Egypt and the southern Levant during the Old Kingdom (Arnold & Greenfield 2018; Arnold *et al.* 2018; Arnold *et al.* 2016). Egyptian texts describe caravans with hundreds of donkeys carrying goods back and forth from the Middle Kingdom (Dynasty 12) onwards. The plethora of Early Bronze donkey figurines with riders and carrying goods also attests to both of these roles (Hizmi 2004; Al-Ajlouny *et al.* 2012; Makowski 2014; Shai *et al.* 2016). But, it is generally presented as mostly one way movement of goods – from Canaan to Egypt (Bard 2015). The evidence now suggests that movement of animals (and goods) between these two (and probably other) regions was a likely two-way exchange from the beginning of the Bronze Age with the spread of donkeys across the region (Sowada 2009; 2014; Potts 2011).

Donkeys are much more suitable than cattle (an earlier domestic) for carrying heavy loads over long distances and uneven ground. They revolutionized the transport of goods across the region by enabling bulk transport of larger quantities and heavier goods than in earlier periods. This is reflected in the larger frequencies of mundane goods being transported far from distant sources than in earlier periods.

In light of the results from the excavations of the Early Bronze III levels at Tell eṣ-Şâfi/Gath, it is possible to further suggest that donkeys were also used in the profane domain. Not only were they used as beasts of burden, but also as food. The small number of isolated donkey bones mixed in with the larger faunal assemblage, plus the presence of a few bones with butchering marks, shows that they are a minor part of the diet, but one that cannot be ignored.

The use of domestic donkeys as food and to transport people and goods between the regions probably dates from the moment when they spread from northeast Africa across the Near East during the fourth millennium BC shortly after their domestication (Ovadia 1992; Rossel *et al.* 2008; Way 2011;

Grigson 2012; Zarins 2014; Mitchell 2018). Along with the spread of donkeys, there is a dramatic increase in the scale of regional and inter-regional exchange systems. This likely occurred to satisfy the demands of both the newly emerging elites and growing urban populations. This is evident from the large quantities of heavy goods (e.g. grinding stones, mace heads, ceramics, etc) that are transported across and between regions (Sowada 2014; 2018; Beller *et al.* 2016; 2019). Donkeys become and remain an essential part of the economy and religions for early Near Eastern cultures from the beginning of the Bronze Age and remain so until modern times. In sum, donkeys during the Early Bronze Age were exploited for their primary products (meat, skin), secondary products (transportation), as well as for ritual purposes.

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Fierce lions, angry mice and fat-tailed sheep

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

Domesticated animals had great impact on social, political and economic structures – for example cattle in agriculture and diet, or donkeys and horses in transport, trade and war. Fantastic mythological beasts such as lion-headed eagles or Anzu-birds in Mesopotamia or Egyptian deities such as the falcon-headed god Horus were part of religious beliefs and myths, while exotic creatures such as lions were part of elite 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.

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