

# Man, Animal, and Gods: Animal Remains as Indicators of Beliefs in the Ancient Near East

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# MAN, ANIMAL, AND GODS: ANIMAL REMAINS AS INDICATORS OF BELIEFS IN THE ANCIENT ORIENT

Jwana Chahoud and Emmanuelle Vila

The elements that allow us to approach the question of religion in archaeology are often extremely limited. Artistic expressions, sculptures, paintings and engravings, as illustrations of mental images, are the main material for prehistorians to study the emergence of symbolic systems (Cauvin 2000). Even in regions where the early appearance of writing makes it possible to call upon sources, textual sources that represent knowledge of the religious and sacred sphere sometimes remain very incomplete, particularly with regard to rituals and cultic activities.

Nevertheless, "a religious activity is inscribed in a world of practices that unfold within a material environment" (" une activité religieuse s'inscrit dans un monde de pratiques qui se déploient au sein d'un environnement matériel": Cohen and Mottier 2016: 350). Belief—or rather "doing religion"—is a social dynamic construction where practices make a sacred entity, deity, or spirit, present through features and rituals (Cohen and Mottier 2016). Studies devoted to material cultures, i.e., the tangible forms linked to religious activities, can give an account of the latter and stimulate research perspectives.

Taking into account the place of animals when discussing the material aspects of the remains of ritual and cultic activities, religious practices seems essential because animals are integrated into the sphere of the sacred and participate in the religious phenomenon in all societies: "There is no religion without animals" (Poplin 1989: 13). Skeletal elements are the mineral, tangible parts that remain of animals. While not comparable to other material objects that are considered material culture, faunal remains are part of the world of practices that take place within a material environment. In fact, they are clearly part of the material expressions of human activities, particularly religious ones in relation to beliefs.

We present here the study of animal remains found in temple contexts in the Near East (Syria and Lebanon) dated to the Bronze Age that raise major questions: What information can archaeozoological studies of sanctuary contexts provide? How can animal remains be identified in relation to rituals and religion? Can we characterize them in relation to other archaeological remains linked to secular butchery and food activities? What is an intentional ritual deposit? RELIGIOUS RITUALS IN NEAR EASTERN ARCHAEOLOGY AND ARCHAEOZOOLOGY

In the Near East, the archaeozoological approach to religious activities and the recognition of cultic practices is very complex. Indeed, it is the interpretation of the archaeological contexts and of the material setting that will induce or exclude the religious activities. The latter includes, in a non-exhaustive way, cults to divinities, funerary practices as well as ritual practices related to beliefs (ritual or cultic deposits for example). During the excavation, the context will be interpreted according to the presence of certain installations and artifacts as a religious place ("Temenos," sanctuary, temple, cultic pit "favissa," cultic platform, cemetery, burial ground). This interpretation then influences the analysis of all the cultural material that will be considered as linked to cults (artifacts used during rituals, offerings, sacrifices, votive deposits).

The difficulty is to distinguish between activities that would be related to religious rituals and others that would be of secular practices (Morris 2011; Pluskowski 2011; Sykes 2014). Bone remains and in particular Associated Bone Groups (i.e., ABGs) often interpreted in terms of ritual and sacrificial practices and animal offerings in burials can have non-religious causes. This is the case of animal burials for hygiene reasons (Broderick 2011). It is also the case, for example, for the sacrifice of the donkey foal attested in cuneiform texts for alliance pacts between sovereigns in the Near East (Lafont 2000; Limet 1976). Thus, it is first advisable to question the validity of the faunal assemblage (in relation to food consumption/waste or not, to food consumption/waste in a secular context or not) according to the stratigraphical context, avoiding as much as possible *a priori* on the surrounding archaeological conditions and preconceived models (Gardeisen 2013).

Among the two main categories of cultic contexts more easily identifiable in archaeology, funerary contexts and sanctuaries, we will deal here with sanctuary cases. Indeed, in the Near East, studies of animals and animal sacrifices in funerary practices have developed over the last few decades and some excavations of funerary contexts have generated detailed studies (Chahoud 2016; Chahoud and Vila 2019; Léon and Cordy 2018; Marinova et al. 2012; Minniti 2014; Schwartz 2012; Schwartz et al. 2006; Vila 2005, 2011; Wygnańska 2021; Zarins 1986). These

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studies have shed light on the place of animals, animal sacrifice, burying of animals, and meat offerings, which are little mentioned in the texts and in the funerary cultural system. On the other hand, while archaeozoological studies of the remains of sanctuary faunas are numerous for the Classical periods, particularly from Greece, and in the Mediterranean (Ekroth 2013), few have been conducted in the Near East for the Bronze Age (mainly third and second millennia BCE). The main reason for this is that early excavations in the Near East did not always give importance to possible animal remains found in the excavations of buildings identified as sanctuaries and their surroundings.

According to Mesopotamian texts, from the first city-states of the third millennium BCE to the empires of the first millennium BCE, the king, as an intermediary between people and the gods, had to guarantee the supplying of the gods. Thus, the textual sources show that the diet of the gods was not different from the diet of humans: they mention copious meals served to the gods daily (morning and evening), which consisted of selected pieces of cooked, roasted and grilled meat of different animals (Maul 1994). There is no difference in the Sumerian-Akkadian vocabulary between the offerings intended as supplies to the gods and those attributed as supplies to people (Lafont 1999). The feeding of the gods was thus a ritualized activity, evidence of which can be found in the artifacts and ecofacts collected in the sanctuaries. Faunal remains shed light on the place of animals and meaty foods in the cultic sphere. They have the characteristic of being witnesses in their own right, conveying several categories of zoological, sociological and cultural information, on very concrete aspects (the species selected, their age, their sex, the selected body parts, the pieces of butchery consumed or deposited) as well as on ritualised aspects (the type of deposits).

## RELIGIOUS CONTEXTS AND ANIMAL DEPOSITS

Abundant literature discusses the case of the ritual of feasting in ancient deposits as evidence of communal and cultic activities (Bray 2003; Doumet-Serhal and Chahoud 2013; Grigson 2006; Hamilakis and Harris 2011; Killebrew and Lev-Tov 2008; Lev-Tov and McGeough 2007; Twiss 2008). Most scholars follow the work of M. Dietler in identifying feasts as "public ritual activity centred around the communal consumption of food and drink" (Dietler 2001: 67). Furthermore, K. Twiss defines feasts as "occasions consciously distinguished from everyday meals" including large numbers of participants, large amounts of food and drink, and the consumption of special foods that requires distinct methods of preparation and discard, taking place at specific times or places (Twiss 2008:419). Twiss also states that "feasts are dialectically linked to everyday meals, both in form and in meaning, and are not isolated from quotidian social realities" (Twiss 2008 419). Nevertheless, feasting represents one aspect of cultic practices. It is well defined in archaeozoology of cultic and palace contexts as it is identified mainly due to the large quantity of discarded animal remains. Meanwhile, animal deposits characterized as cultic offerings are less obvious. The main criteria for identifying the animal offering associated with ritual activities was discussed by L. Horwitz (2000) where the author lists the following:

- 1. Spatial association to other archaeological features.
- 2. A narrow range of species.
- 3. A selection of particular age/sex category of animals that is related to the special activity.
- 4. The selective body parts.
- 5. Bone modifications.

These criteria were, for example, identified in the discussion of Late Bronze Age cultic and feasting activities at Hazor and Emar in the Southern Levant (Lev-Tov and McGeough 2007). On the other hand, Hamilakis and Harris, in their studies of Cretan and Mycenaean cultic animal deposits, argue that defining animal remains in ritual activities does not simply follow a check-list of criteria. For these authors, the selective parts and the large amount of food are not exclusively indicative of cultic activities and the preparation of the meal should not differ significantly from patterns attested in secular activities (Hamilakis and Harris 2011).

In our study, animal remains assemblages that are evidence of ritual deposits of animals are considered to combine several criteria. The structured skeletal remains (complete animals, associated bone group, selective parts) should reflect a less speculative and more repetitive distribution than usual food remains attested in secular contexts. The deposits should be discussed in close association to a special context or area. It is in relation to the archaeological features and artifacts associated with them, that it is possible to determine that their position is intentional and not accidental. Special treatment or modification of the animal deposit as burnt parts, and/or deposit of large quantities of selected parts or species, is very important. The identification of sacred activities from animal remains requires the identification of a pattern which differs from secular activities in association with the archaeological context, but it should

not imply the use of exotic species or uncommon types of meal preparation that are not known or practiced by the society (roasting, boiling, burning, etc.). The criteria defined by Horwitz (2000) are quite adequate and should be considered together to identify repetitive activity that denote a sacred use of animals in cultic practices.

In the following Table 1, we present several examples and comparisons of animal deposits that could be material indicators of religious beliefs from our archaeozoological studies:

#### ANIMAL REMAINS IN RITUAL FEASTS

The presence, in a sanctuary context, of courtyards and pits rich in food waste and incinerated sacrificial deposits with deliberately broken ceramic vessels is attested at the Middle Bronze Age temple of Sidon. These deposits reflect an offering activity (sacrifice) and/or the waste products of ritual meals (feasting) that took place in the vicinity or around the temple. Discarded remains of feasting is not clearly attested in other cultic sites. A pit in the palace of Ebla presents similar activities. Among the faunal remains, sheep/goats are the most abundant, while cattle and equids are slightly less numerous. All skeletal parts are present with a slight predominance of limb bones (Mazzoni and Minniti 2000; Peyronel 2008). The remains found at Sidon also have similarities with Aegean, Cypriot, and Cretan sites. For example, the ritual deposit at Nopigeia-Drapanias in the Aegean (1700-1500 BCE, Hamilakis and Harris 2011), consists of the filling of a longitudinal pit with the waste of festive meals including animal bones and vessels. The remains are mainly of sheep/goats and pigs, and the extremities of cattle though these are less frequent; there is no preference for one age class. The Kalavasos finds from the Bronze Age in Cyprus also suggest a banqueting ritual; sheep/goats dominate the assemblage. Cattle and pigs are rare, while bird and fish remains are common (South 2008). Fleshy parts are the most abundant, although extremity bones are not absent. Anklebones are also noted in the assemblage. The ceramic vessels are probably deliberately broken on the spot before being thrown away (South 2008). These sites show banquet waste that is buried with the ceramic vessels which were intentionally broken during the ceremony. The activities practiced in Sidon show similarities with the rituals observed in the eastern Mediterranean.

In the southern Levant, evidence of banquets in general is attested in the Late Bronze Age levels of Tell Miqne Ekron, Hazor, Emar and Tell Dan (Davis 2013; Killebrew and Lev-Tov 2008; Lev-Tov and McGeough 2007). These are faunal remains, especially of sheep and goats, found in open spaces (courtyards). All these remains show similarities with Sidon courtyard deposits, for the practices of the ritual, with a preference for sheep/goats and to a lesser extent cattle, though probably with regional and cultural variations for the spectrum: a selection of equids in Ebla, of pigs in the Aegean, of fish in Cyprus, to accompany goats and sheep on the banquet table. However, in the temple rooms of Sidon, associated groups of bones are burnt and each quarter of the limbs, trunk, and extremities is laid separately. The extremities are discarded in anatomical articulation and probably not eaten. There are no traces of cremation *in situ*, the portions were probably roasted judging by the marks on the extremity of the bones. The meat was then removed and consumed. At the end of the meal, all the remains were collected and thrown away together with the ceramic vessels and the polished caprine ankle bones. Meanwhile, burnt animal sacrifice characterizes the rituals in Mycenaean sanctuaries where articulated sheep, goat, and cattle quarters were offered at the altar (Hamilakis and Konsolaki 2004; Stocker and Davis 2008). The characteristic of a ritual deposit linked to a banquet or a sacrifice is well attested in the temple of Sidon. All the above-described criteria seem to fit with the attribution of cultic animal use.

#### ANIMAL REMAINS AS SYMBOLIC DEPOSITS

### The Talus

The talus (also known as a knuckle bone) is a small rectangular bone of the foot joint, equivalent to the ankle, which separates the hind limb and the posterior extremities. It is a bone that is sometimes found in large quantities in singular contexts. It may be pierced or polished. Depending on the case, various interpretations have been attributed to the presence of talus on the sites. The most common one is that of a divination element, but other interpretations, depending on the context, such as game tokens, coins, or even potter's accessories, have also been proposed (Gilmour 1997; Holmgren 2004). In the Middle Bronze Age at Sidon, deposits of knuckle bones are attested in the temple rooms and in a jar placed vertically to the west of the temple entrance. Knuckle bones are also attested in what are considered ritual contexts considered in the Late Bronze Age, temple or altar, at Megiddo, Lachish, Beth Shean, Taanach, Tell el-Ajjul, Tell Abu Hawam (Affani 2008; Minniti and Peyronel 2005). For example, at Megiddo in the Late Bronze Age, knuckle bones were recorded in a ceramic vessel near other votive objects in the residence of a high official (Loud 1948). These astragals are certainly symbolic objects linked to practices that are difficult to interpret, either magical-religious or sociocultural. One may wonder about the mode of acquisition of these pieces and the market and symbolic value attributed to them (representative of a sacrifice, offering, or a ritual meal).

Other finds of these bones are considered as foundation deposits. At Tell Mishrifé/Qatna, some caprine astragals associated with objects of a votive nature were found under a reinforcing wall of the Royal Palace. This deposit seems to be linked to a foundation rite preceding the construction of the wall (Barro 2003). At Tell Afis, Syria, a very similar foundation deposit was located under the twelfth century BCE wall but this time of a domestic building (Affani 2008). Due to the presence of polished surfaces and the large number of finds, some authors interpret this bone as an object of exchange or currency (Holmgren 2004). For other authors, the talus takes on a magical or religious meaning: it is the key to the soul, the point of departure and entry of the knife inside the animal during the first gesture of skin removal (Gilmour 1997).

As the only remnant of a sacrificed animal, the talus can be considered as evidence of an offering in funerary or religious contexts. Some authors interpret perforated astragal as talismans or amulets, symbols of fertility and divination, which could be hung and worn as pendants (Gilmour 1997; Poplin 1991). Ancient sources such as Ugaritic texts mention the astragal in incantation statements. The bone is seen as an object of prediction or omen (Del Olmo Lete 1999). At Sidon, the loads of caprine astragals could have several possible uses depending on the context. In one of the rooms of the temple, a dice artifact made of deer antler was found together with a set of six polished astragals. These objects could have been used as game pieces or for divination. On the other hand, the eight astragals carefully placed in the shape of a bow in a jar at the entrance of the temple could rather be linked to the religious or even magical-ritual sphere. Thus, several interpretations can be offered for the astragals deposits, but their use in rituals, as a symbol of sacrifice as well as in magic to decipher the future, does not seem inappropriate.

## **The Horns**

Horns are body parts that carry a strong symbolic potential. Most often, deposits in the temples are the horns of domestic animals, sheep, goats, and cattle. The deposits can also be of wild animal horns such as the aurochs in Steinbau I at Tell Chuera. This is a very unusual find, as post-cranial aurochs bone remains are very rare on the site (Vila 1995). According to the in situ position of one of these horns, they must have been hung on the wall of the temple. Similarly, other wild horn cases (gazelle) are attested for the Early Bronze Age ante-cella temple at Tell Brak (Clutton-Brock and Davies 1993). The horns not only have a symbolic function but could also have an ideological significance. The decoration of temple walls at Tell Chuera with bucrania or auroch horns of very large size creates a striking image, serving not only to impress the visitors or to inspire a fear of the deity to whom the temple was dedicated. This decoration is illustrated on a cylinder seal from Susa which shows a prestigious building decorated with horns (Amiet 1961: fig. 659). The horns found in Tell Chuera's Steinbau fit well into the cultural context of the third millennium when the significance of the wild bull is complex. In Mesopotamia, it is associated with multiple deities and used as an epithet for gods, kings, and even cities (Heimpel 1968; Orthmann 1975: fig. 39e; Van Dijk-Coombes 2018). The exceptional hunting of the aurochs seems to have been primarily directed towards the acquisition of horns as symbolic representations and divine attributes: the meat of the aurochs was in fact also exceptional, and therefore its consumption may have carried a symbolic connotation. Meanwhile from the Levant, it is worth noting that a bull's skull was found on the top of a platform in a Late Bronze Age temple at Hazor (Yadin 1972).

#### SELECTIVE ELEMENTS AND CATEGORIES

#### Selective Body Parts and Special Treatment (Ritual of Burning)

It is clear that the right foot concentrations from a Tell Chuera temple (Steinbau IV) reflect animal selection, butchering, and processing in a religious context of the third millennium BCE; the homogeneity of these layers indicates that there was no subsequent disturbance, and it is likely that these deposits were formed in a limited time period (a few years to a few decades). The impressive quantity of individuals and the coherence of the remains show that this was an intentional act: for each animal sacrificed, the right front leg would be set aside and then burned. The cremation of the remains was done on the spot, as the presence of hearths suggests. It should be noted that it is the less prestigious bones of the lower leg that are offered to the sacred fire.

The bone assemblages from Steinbau VI are clearly material evidence of cultic activities in relation to ritual animal sacrifice and bear witness to two moments in the ritual. The first is the removal of the right foot of the animal during the butchery, i.e., a non-fleshy, non-meaty part that is disarticulated during the removal of the skin; the second is the burning of this selected part of the body in the temple. Although there is no trace of communal meals in the temple area so far, it is likely that the ritual slaughter and butchering of carcasses, accompanied by the deposition of the foot, was associated with a feasting banquet. Remains of burnt bones, metapodials and phalanges of caprines identified according to a published photograph (Moortgat 1967: fig. 20), have also been mentioned in another temple *in antis* at Tell Chuera dated to 2300 BCE. The finds from Steinbau IV would be the oldest evidence of a "canonical" practice of cremation directly in the temple, following the sacrifice, of an anatomically selected part of the animal: consecration and propitiatory deposit, which is intended to make the deity favourable or commemoration to mark the memory of the sacrifice ...?

This raises the question of the symbolic value of the feet of sacrificial animals. This practice, clearly identified in the third millennium in north of Syria and the middle valley of the Syrian Euphrates, seems to have existed in Jordan as well, and was found in the Levant in the second millennium. In the temple of Late Bronze Age of Sidon, the animal remains are very fragmentary and burnt, making it difficult to differentiate between those that may have been burnt by accident, in the fire that caused the destruction of the temple, and those that may have been burnt intentionally during "ritual" practices. Moreover, it is difficult to know whether these remains represent offerings or meals that were consumed within the cella, or animal deposits as sacrifices or offerings. Among the highly fragmented and burnt remains are meat-rich limb bones and cranial bones of goats, sheep, and cattle. The remains of the limbs of cattle are mostly worked and modified as objects or tools. Wildlife remains consist of skeletal parts that are not or only marginally used for food. The fauna from the fill of the room were treated separately as they probably correspond to the waste from the building above the cella. These fauna reflect the same domestic species identified on the floor of the cella (Chahoud 2015).

In addition, burnt foot bones from the same period are found in the temple of Halawa in the Euphrates Valley (Boessneck and Driesch 1989). The high frequency of caprine feet or burnt

caprine remains has also been noted in Levantine cult contexts. At Early Bronze Age III Khirbet es Zeraqon, on the round stone platform interpreted as an altar, "the majority of the burnt bones consist of the lower leg bones of sheep and goat" (Genz 2010:48); at Haror, in Middle Bronze Age, the assemblages from the enclosed area show high proportions of burnt remains (60% of the faunal remains from area V and the faunal assemblage from the courtyard contained the highest proportion of cattle and caprine foot bones (Klenck 2002). The burnt bone remains mentioned in the temples are not always accompanied by an anatomical and specific identification, as is the case for the remains found at Tell Kittan in the courtyard of a Middle Bronze temple: "Ash piles containing bones" (Eisenberg 1977:79). At Lachish in the temple structures dated to the Late Bronze Age (ca. 1475-1220 BCE), the remains relate to very young animals and "practically all the identifiable bones are metacarpals of the right foreleg" (Tufnell et al. 1940, 93). It is noted that most of the bones in Structure 3 are burnt but this certainly occurred during the fire that ravaged the temple (Tufnell et al. 1940, 94). At Tel Dan in the Iron Age, toes and cranial fragments of sheep and goats are also found in the rooms of T-West and a jar in the altar room contained burnt sheep and goat bones (Davis 2013; Wapnish and Hesse 1991). At Hazor a large amount of burnt bone remains (69.3%) were found in a Late Bronze monumental building (7050), however it is likely that most of it came from the fire destruction of the building (Lev-Tov 2017). Furthermore, burnt animal sacrifice, defined as the ritual burning of whole or parts of animals or of animal bones as an offering to the gods, which is well known in the Greek world and also appears in temples in the Mycenaean period (Cosmopoulos and Ruscillo 2014), is also attested in the Near East.

## Selection of Young Animals

The remains of young and perinatal animals found in temples, such as in Al Rawda, Sidon, and Tell Kazel, suggest the preferential sacrifice and offering of juvenile animals from birth to a few months and the consumption of tender meat. This is a characteristic that is observed in various Levantine cultic contexts (Avner and Horwitz 2017). In the Al Rawda temple, the presence of very young sheep/goats and the selection of fleshy parts is specific to these assemblages and marks their singularity compared to the faunal assemblages of the domestic dwellings. This singularity is related to sacrificial practices in which lambs often occupy a place

of choice and a clear preference of meat parts for meals that took place in the sacred enclosure. In the Late Bronze Age of Tell Kazel, the fauna of the residences considered as annexes of the temples reflects the life of their occupants. These activities may be related to daily life as well as to special events that took place in these religious buildings. The animal remains in the treasure room show a clear preference for parts rich in tender meat. These concentrations of remains could suggest an activity of storing meat for daily consumption for the temple's occupants or for sacrifices as food offerings for the deity of the temple (Chahoud 2015). This importance of young sheep is not usual in other buildings in Tell Kazel, as the exploitation of animals in general is based on the breeding of adult caprines and cattle for their meat and secondary products as wool and milk (mainly subadult and adult).

#### Whole Carcass Deposits

Animal remains found in temples are not always evidence of cultic or collective meals, nor of symbolic objects, but may also be whole skeletons and remains of carcass deposits, such as the dog and donkeys found in a temple at Tell Brak, dated to 2200 BCE (Clutton-Brock and Davies 1993), and the deposit of a probable wild sheep and two unidentified caprines specifically in the vicinity of a late third millennium BCE temple at Tell Beydar (Van Neer and De Cupere 2000). The significance of such deposits remains unsolved.

### CONCLUSION

Archaeozoological studies provide new information on the use of animals in cultural contexts. Indeed, animals are an integral part of official and collective ritual practices in the Bronze Age in relation to the social, political, and economic complexification that characterizes this period in the Near East. These practices, for some (as at Tell Chuera), appear to be controlled by the powerful institutions, among which are those with religious power, which are set up and organized in the course of urbanization and the development of cities. A certain number of faunal assemblages from the excavations of the temples and their surroundings are clearly material witnesses of practices that took place in sacred places with their own characteristics, different from those of the assemblages collected in the habitats. The combination of several characteristics that singularize these deposits entail their identification as indicators of material religion. These practices are most likely part of different categories of rites involving a considerable number of participants such as rites of exchange and communion, rites of feasting, fasting and festivals, rites of affliction, political rites, and other examples (Bell 2009). They involve the killing of domestic and wild animals, some of which are not part of everyday consumption. They are accompanied by various actions: manipulation of bodies with the selection of notable parts, the roasting of quarters as rites of offering by fire, the creation of votive deposits, the consumption of large amounts of meat at feasts. They are also perceived through indices of repetition and invariance, referring to an idea of formalism and rigorous organization-patterns (Bell 2009). All of this makes it possible to interpret them as being out of reach of the common participants and belonging to rituals organized by higher authorities.

#### **REFERENCES CITED**

Affani, G. (2008), 'Astragalus Bone in Ancient Near East: Ritual Deposition in Iron Age I in Tell Afis', in J. Cordoba, M. Molist, C. Pérez, I. Rubio and S. Martinez (eds), Proceedings of the 5th International Congress on the Archaeology of the Ancient Near East Madrid I, 2006, 77–92, Madrid: Universidad Autónoma de Madrid.

Amiet, P. (1961), *La Glyptique mésopotamienne archaïque*, Paris: Éditions du Centre national de la recherche scientifique.

- Avner, U. and L.K. Horwitz (2017), 'Sacrifices and Offerings from Cult and Mortuary Sites in the Negev and Sinai 6th-3rd Millennia BC', *ARAM*, 29 (1–1): 35–70.
- Badre, L. (2006), 'Tell Kazel-Simyra: A Contribution to a Relative Chronological History in the Eastern Mediterranean during the Late Bronze Age', *Bulletin of the American Schools of Oriental Research*, 343: 65–95.
- Barro, A. (2003), 'New Data from the Royal Palace of Qatna (Operation H) in Tell
  Mishrife/Qatna 1999-2002. A Preliminary Report of the Syrian-Italian-German Project.
  Part 1', Akkadica, 124: 86–87.
- Bell, C.M. (2009), Ritual: Perspectives and Dimensions, New York: Oxford Univ Press.
- Boessneck, J. and A. von den Driesch (1989), 'Die Faunenreste Vom Tell Halawa am Assad-See/Nordsyrien (Drittes und Anfang Zweites Jahrtausend v. Chr.)', in W. Orthmann (ed),

Halawa 1980 bis 1986. Vorläufiger Bericht über die 4.-9. Grabungskampagne, Saarbrücker Beiträge zur Altertumskunde, 113–152, Bonn: R. Habelt.

- Bray, T.L., ed. (2003), *The Archaeology and Politics of Food and Feasting in Early States and Empires*, New York: Kluwer Academic/Plenum.
- Broderick, L. G. (2011), 'Ritualisation (or The Four Fully Articulated Ungulates of the Apocalypse)', in A. Pluskowski (ed), *The Ritual Killing and Burial of Animals: European Perspectives*, 22–32, Oxford: Oxbow Books.
- Castel, C. (2010), 'The First Temples in antis the Sanctuary of Tell Al-Rawda in the Context of Third Millennium Syria', AOAT, in J. Becker, R. Hempelmann and E. Rehm (eds), *Kulturlandschaft Syrien, Zentrum Und Peripherie, Festschrift Für Jan-Waalke Meyer*, 123–164, Munster: Ugarit Verlag.
- Cauvin, J. (2000), *The Birth of Gods and the Origins of Agriculture*, Cambridge: Cambridge University Press.
- Chahoud, J. (2013), '*Diversité faunique, économie alimentaire* et *pratiques socio-culturelles* au *Levant* à *l'Âge du Bronze : Une approche archéozoologique*', PHD, Lyon-Beirut: Université Lumière Lyon 2, Université Libanaise.
- Chahoud, J. (2014), 'L'aspect archéolozoologique des pratiques funéraires à l'âge du Bronze au Liban.', *Archaeology & History in The Lebanon*, 40–41: 74–90.
- Chahoud, J. (2016), L'offrande et l'animal : une approche archéozoologique des pratiques funéraires à Sidon, Liban (2000-1500 av. J.-C.), Beirut: Archaeology and History of Lebanon.
- Chahoud, J. and E. Vila (2019), 'Food for the Dead, Food for the Living, Food for the Gods.
  According to Faunal Data from the Ancient Near East', in M.-L. Arnette (ed), *Religion et alimentation en Égypte et Orient anciens*, Religions, 465–521, Le Caire: Institut français d'archéologie orientale.
- Chahoud, Jwana (2015), 'Reconstruire les pratiques alimentaires liées aux animaux dans les lieux de cultes levantins au Bronze Récent', *Bulletin d'archéologie et d'architecture libanaises*, HS X: 5–32.
- Clutton-Brock, J. and S. Davies (1993), 'More Donkeys from Tell Brak', Iraq, 55: 209–221.
- Cohen, A. and D. Mottier (2016), 'Pour une anthropologie des matérialités religieuses', *Archives de sciences sociales des religions*, (174): 349–68.

- Cosmopoulos, M.B. and D. Ruscillo (2014), 'Mycenaean Burnt Animal Sacrifice at Eleusis', *Oxford Journal of Archaeology*, 33 (3): 257–273.
- Davis, A. R. (2013), *Tel Dan in Its Northern Cultic Context*, Atlanta: Society of Biblical Literature.
- Del Olmo Lete, G. (1999), *Canaanite Religion. According to the Liturgical Texts of Ugarit*, Potomoc, MD: CDL Press.
- Dietler, M. (2001), 'Theorizing the Feast: Rituals of Consumption, Commensal Politics, and Power in African Contexts', in M. Dietler and B. Hayden (eds), *Feasts: Archaeological and Ethnographic Perspectives on Food, Politics, and Power*, 65–114, Washington D.C.: Smithsonian Institution Press.
- Doumet-Serhal, C. (2013), Sidon 15 Years of Excavation, Beirut: Archaeology & History in the Lebanon.
- Doumet-Serhal, C. and J. Chahoud (2013), 'A Middle Bronze Age Temple in Sidon. Ritual and Communal Feasting', in O. Loretz (ed), *Ritual, Religion and Reason*, Studies in the Ancient World (Alter Orient und Altes Testament series, 30–60, Münster: Ugarit-Verlag.
- Eisenberg, E. (1977), 'The Temples at Tell Kittan', The Biblical Archaeologist, 40 (2): 77-81.
- Ekroth, G. (2013), 'What We Would like the Bones to Tell Us: A Sacrificial Wish List', in G.
  Ekroth and J. Wallensten (eds), *Bones, Behaviour and Belief. The Zooarchaeological Evidence as a Source for Ritual Practice in Ancient Greece and Beyond*, 15–30,
  Stockholm: ActaAth.
- Gardeisen, A. (2013), 'L'assemblage osseux comme un dernier état de la présence animale en contexte archéologique: Gestuelle et comportement vis-à-vis de l'animal', in G. Ekroth and J. Wallensten (eds), *Bones, Behaviour & Belief: The Zooarchaelogical Evidence As a Source for Ritual Practice in Ancient Greece & Beyond*, 31–49, Stockholm: Paul Astroms.
- Genz, H. (2010), 'Thoughts on the Function of "Public Buildings" in the Early Bronze Age Southern Levant', in D. Bolger and L. C. Maguire (eds), *The Development of Pre-State Communities in the Ancient Near East. Studies in Honour of Edgar Peltenburg*, 46–54, Oxford: Oxbow Books.

- Gilmour, G. H. (1997), 'The Nature and Function of the Astragalus Bones from Archaeological Contexts in the Levant and Eastern Méditerranean', *Oxford Journal of Archaeology*, 16 (2): 167–175.
- Grigson, C. (2006), 'Farming? Feasting? Herding? Large Mammals from the Chalcolithic of Gilat', in T.E. Levy (ed), Archaeology, Anthropology and Cult The Sanctuary at Gilat, Israel, 215–319, London: Routledge.
- Hamilakis, Y. and K. Harris (2011), 'The Social Zooarchaeology of Feasting: The Evidence from the "Ritual" Deposit at Nopigeia-Drapanias', in E. Kapsomenos, M. Andreadaki-Valzaki and M. Andrianakis (eds), *Proceedings of the 10th International Cretological Congress, Vol. 1*, 225–224, Khania: Fillologikos Syllogos Chrysostomos.
- Hamilakis, Y. and E. Konsolaki (2004), 'Pigs for the Gods: Burnt Animal Sacrifices as Embodied Rituals at a Mycenaean Sanctuary', *Oxford Journal of Archaeology*, 23 (2): 135–151.

Heimpel, W. (1968), Tierbilder in Der Sumerischen Literatur, Rome: Päpstliches Bibelinstitut.

- Holmgren, R. (2004), "Money on the Hoof" The Astragalus Bone Religion, Gaming and Primitive Money', in B. S. Frizell (ed), *Pecus. Man and Animal in Antiquity. Proceedings* of the Conference at the Swedish Institute in Rome, 2002, 212–220, Roma: The Swedish Institute in Rome. Projects and Seminars.
- Horwitz, L. K. (2000), 'The Contribution of Zooarchaeology to the Identification of Ritual Sites', in S. Pike and S. Gitin (eds), *The Practical Impact of Science on Near Eastern and Eagean Archaeology*, 63–69, London: Wiener Laboratory Publication, Archetype.
- Killebrew, A.E. and J. Lev-Tov (2008), 'Early Iron Age Feasting and Cuisine: An Indicator of Philistine-Aegean Connectivity?', in L. Hitchcock, R. Laffineur and J. Crowley (eds), *The Aegean Feast. Proceedings of the 12th International Aegan Conference, University of Melbourne, Centre for Classics and Archaeology, 25-29 March 2008*, Aegaeum, 339– 348, Belgium: Annales d'archéologie égéenne de l'Université de Liège.
- Klenck, J.D. (2002), *The Canaanite Cultic Milieu. The Zooarchaeological Evidence from Tell Haror, Israel*, BAR International Series 1029. Oxford: BAR International.
- Lafont, B. (1999), 'Sacrifices et rituels à Mari et dans la Bible', *Revue d'Assyriologie et d'archéologie orientale*, 93 (1): 57–77.
- Lafont, B. (2000), 'Cheval, âne, onagre et mule dans la haute histoire mésopotamienne : quelques données nouvelles', *Topoi. Orient-Occident*, 2 (1): 207–221.

- Léon, S. and J.-M. Cordy (2018), 'Les offrandes animales', in O. Tunca and A. al-Massih Baghdo (eds), *Chagar Bazar (Syrie) IV – Les tombes ordinaires de l'âge du Bronze* ancien et moyen des chantiers D-F-H-I (1999-2011). Etude archéologique, 145–174, Louvain-Paris-Bristol: Peeters.
- Lev-Tov, J. (2017), 'Can Bones Differentiate Royal Roast from Sacrificial Slaughter? The Case of Hazor's Late Bronze Age Monumental Building', *The Wide Lens in Archaeology: Honoring Brian Hesse's Contributions to Anthropological Archaeology*, 203–244, Atlanta: Lockwood Press.
- Lev-Tov, J. and K. McGeough (2007), '5. Examing Feasting in Late Bronze Age Syro-Palestine through Ancient Texts and Bones', in K.C. Twiss (ed), *The Archaeology of Food and Identity*, 86–111, Board of Trustees, Southern Illinois University: Center for Archaeological Investigations.
- Limet, H. (1976), *Textes Sumériens de La IIIe Dynastie d'Ur*, Document du Proche Orient, Epigraphie 1, Brussels: Mussées Royaux d'Art et d'Histoire.
- Loud, G. (1948), *Loud, G. 1948b. Megiddo II. Seasons of 1935-39*, Chicago: The University of Chicago.
- Marinova, E., V. Linseele, P. Vandorpe and J. van der Valk (2012), 'Middle Bronze Age Ritual, Subsistence and Environment at Tell Tweini Inferred from Bioarchaeological Evidence', in T. Boiy, J. Bretschneider, A. Goddeeris, H. Hameeuw, G. Jans and J. Tavernier (eds), *The Ancient Near East, A Life, Festschrift Karel Van Lerberghe*, Orientalia Lovaniensia Analecta, 345–363, Leuven: Peeters.
- Maul, S. M. (1994), Zukunftsbewältigung: Eine Untersuchung Altorientalischen Denkens Anhand Der Babylonisch-Assyrischen Löserituale (Namburbi), Baghdader Mitteilungen, Mainz am Rhein: Philipp von Zabern.
- Mazzoni, S. and C. Minniti (2000), 'The Northern Palace of Tell Mardikh-Ebla (Syria): Archaeozoologlcal Analysis of the Refuse Pit F.58611F.5701', in P. Matthiae, A. Enea and F. Pinnock (eds), *Proceedings of the First International Congress of the Archaeology* of the Ancient Near East. I 1998, 311–322, Rome: Universita Defli Studi Di Roma "La Sapienza".
- Meyer, J.-W. (2007), 'Town Planning in 3rd Millennium Tell Chuera', Proceedings of the International Conference Organized by the Katholieke Universiteit Leuven, the Université

Catholique de Louvain and Westfälischen Wilhelms-Universität Münster on the 21st and 22nd of November 2002-2007, in J. Bretschneider, J. Driessen and K. Van Lerberghe (eds), *Power and Architecture: Monumental Public Architecture in the Bronze Age Near East and Aegean*, 129–42, Louvain: Peeters.

- Meyer, J.-W. (2021), *Tell Chuera 1958-2011. Zusammenfassung Der Ergebnisse*, Schriften der Max Freier von Oppenheim Stiftung, Wiesbaden: Harrassowitz Verlag.
- Minniti, C. (2014), 'Reassessing Animal Exploitation in Northern Syria from the Early Bronze Age to the Persian/Hellenistic Period: The Evidence from Tell Tuqan', in F. Baffi, R. Fiorentino and L. Peyronel (eds), *Tell Tuqan Excavations and Regional Perspectives. Cultural Developments in Inner Syria from the Early Bronze Age to the Persian/Hellenistic Period*, 459–484, Lecce: Congedo Editore.
- Minniti, C. and L. Peyronel (2005), 'Symbolic or Functional Astragali from Tell Mardikh-Ebla (Syria)', *Archaeofauna*, 14: 7–26.
- Moortgat, A. (1967), *Tell Chuera in Nordost-Syrien. Vorläufiger Bericht Über Die Fünfte Grabungskampagne 1964*, Wiesbaden: Schriften der Max Freiherr von Oppenheim-Stiftung 6.
- Morris, J. (2011), 'Animal "Ritual" Killing: From Remains to Meanings', in A. Pluskowski (ed), *The Ritual Killing and Burial of Animals: European Perspectives*, 7–21, Oxford: Oxbow Books.
- Orthmann, W. (1975), Der Alte Orient, Berlin: Propyläen Verlag.
- Peyronel, L. (2008), 'Domestic Quarters, Refuse Pits and Working Areas. Reconstructing Human Landscape and Environment at Tell Mardikh-Ebla during the Old Syrian Period (c. 2000-1600 BC)', in H. Kühne, R. M. Czichon and F. J. Kreppner (eds), *Proceedings of the 4th International Congress of the Archaeology of the Ancient Near East I. 29 March 3 April 2004*, 177–189, Wiesbaden: Harrassowitz Verlag/Freie Universität Berlin.
- Pluskowski, A. (2011), 'Introduction: The Ritual Killing and Burial of Animals in the Past', in A.
  Pluskowski (ed), *The Ritual Killing and Burial of Animals: European Perspectives*, 1–7, Oxford: Oxbow Books.
- Poplin, F. (1989), 'Matière, animal, homme, esprit. Introduction à l'animal dans les pratiques religieuses', *Anthropozoologica*, 3e numéro spécial: 13–21.

Poplin, F. (1991), 'Réflexion sur l'astragale d'or de Varna, les pieds fourchus et la métallisation de l'animal', in J.-P. Mohen and C. Eluere (eds), *Découverte du Métal*, 32–33, Paris: Picard.

- Schwartz, G.M. (2012), 'Archaeology and Sacrifice', in A. Porter and G.M. Schwartz (eds), Sacred Killing: The Archaeology of Sacrifice in the Ancient Near East, 1–32, Winona Lake, Ind: Eisenbrauns.
- Schwartz, G.M., H.H. Curvers, S.S. Dunham, B. Stuart and J.A. Weber (2006), 'A Third-Millennium B.C. Elite Mortuary Complex at Umm El-Marra, Syria: 2002 and 2004 Excavations', *American Journal of Archaeology*, 110 (4): 603–641.
- South, A. (2008), 'Feasting in Cyprus: A View from Kalavasos', in L. Hitchcock, R. Laffineur and J. Crowley (eds), *The Aegean Feast. Proceedings of the 12th International Aegan Conference, University of Melbourne, Centre for Classics and Archaeology, 25-29 March* 2008, Aegaeum, 309–317, Liege: Annales d'archéologie égéenne de l'Université de Liège.
- Stocker, S. R. and J. L. Davis (2008), 'Animal Sacrifice, Archives, and Feasting at the Palace of Nestor', *Hesperia*, 73 (2): 179–195.
- Sykes, N. (2014), 'The Chapter about Ritual', *Beastly Questions: Animal Answers to Archaeological Issues*, 114–131, London: Bloomsbury Publishing Plc.
- Tufnell, O., C. H. Inge and L. Harding, eds. (1940), *Lachish II. The Fosse Temple*, London-New York-Toronto: Oxford University Press.
- Twiss, K. C. (2008), 'Transformations in an Early Agricultural Society: Feasting in the Southern Levantine Pre-Pottery Neolithic', *Journal of Anthropological Archaeology*, 27 (4): 418– 42.
- Van Dijk-Coombes, R. M. (2018), 'Mesopotamian Gods and the Bull', *Sociedades Precapitalistas*, 8 (1): e030.
- Van Neer, W. and B. De Cupere (2000), 'Faunal Remains from Tell Beydar (Excavation Seasons 1992-1996 and 1997 Partim)', Turnhout, in K. Van Lerberghe and G. Voet (eds), *Tell Beydar. Environmental and Technical Studies*, Subartu, 69–115, Bruxelles: Brepols.
- Vila, E. (1993), 'A propos de vestiges de chevilles osseuses d'aurochs retrouvées à Tell Chuera (Bronze ancien, Syrie) : un exemple possible de chasse à vocation première non alimentaire', in J. Desse and Audoin-Rouzeau (eds), *Exploitation des animaux sauvages à travers le temps, XIIIème Rencontres Internation. d'Archéologie et d'Histoire d'Antibes*, 279–292, Juans-les-Pins: A.P.D.C.A..

Vila, E.

(1995), 'Analyse de la faune des secteurs nord et sud du Steinbau I (Tell Chuera, Syrie, IIe millénaire av. J.-C.)', in W. Orthmann (ed), *Ausgrabungen in Tell Chuera in Nordost-Syrien I: Vorbericht über die Grabungkampagnen 1986 Bis 1992*, 267–79, Saarbrücken: Saarbrücker Druckerei & Verlag.

- Vila, E. (2005), 'Réflexions sur les offrandes animales dans des tombes de la nécropole de Abu Hamad sur les piémonts du Bischri (Syrie, 3e millénaire av. J.-C., Bronze ancien)', in C. Falb, K. Krasnik, J.-W. Meyer, E. Vila, *Der Friedhof von Abu Hamed (Syrien)*, Gräber des 3.Jahrtausends v. Chr. Im syrischen Euphrattal, 335–357, Saarwellingen: Saarländische Druckerei&Verlag,
- Vila, E. (2011), 'Les restes de faune dans le complexe funéraire royal de Qatna', Harrassowitz, in
  P. Pfälzner (ed), *Interdisciplinäre Studien zur Königsgruft von Qatna*, Qatna Studien, 383–402, Wiesbaden: Harrassowitz.
- Vila, E. (In press), 'Sacrificial Practices in Early Bronze Age of Syria: Faunal Remains from Steinbau VI in Tell Chuera'.
- Vila, E. and M. Albesso (In press), 'Exploitation des animaux et économie pastorale à Al-Rawda', Publications de la Maison de l'Orient et de la Méditerranée, in C. Castel, O. Barge and N. Arwad (eds), Une ville neuve du IIIe millénaire aux franges du désert de Syrie: Travaux de la mission archéologique franco-syrienne de Tell Al-Rawda 2002-2010, Lyon: MOM éditions.
- Wapnish, P. and B. Hesse (1991), 'Faunal Remains from Tel Dan: Perspectives on Animal Production at a Village, Urban and Ritual Center', *ArchaeoZoologia*, 4 (2): 9–86.
- Wygnańska, Z. (2019), 'Burial in the Time of the Amorites. The Middle Bronze Age Burial Customs from a Mesopotamian Perspective', Ägypten und Levante 29: 380-421.

Yadin, Y. (1972), Hazor: The Schweich Lectures, 1970, Oxford: Oxford University Press.

Zarins, J. (1986), 'Equids Associated with Human Burials in Third Millennium B.C. Mesopotamia: Two Complementary Facets', in R.H. Meadow and H.-P. Uerpmann (eds), *Equids in the Ancient World I*, 164–93, Wiesbaden: L. Reichert Verlag.