Food Taboos and Biblical Prohibitions

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Reassessing Archaeological and Literary Perspectives

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Introduction

Setting the Table

Peter Altmann, Anna Angelini, and Abra Spiciarich

1. Context and Purposes of the Present Volume

This volume represents a number of contributions presented at "The Larger Context of the Biblical Food Prohibitions: Comparative and Interdisciplinary Approaches" conference that took place in Lausanne, Switzerland on June 14–15, 2017. The conference itself considered the topic of one subproject of the larger Swiss National Science Foundation Sinergia project entitled "The History of the Pentateuch: Combining Literary and Archaeological Approaches" carried out jointly by researchers at the Universities of Lausanne, Tel Aviv, and Zurich under the auspices of Konrad Schmid, Thomas Römer, Christophe Nihan, Oded Lipschits, and Israel Finkelstein. As part of the larger project, the aim of this conference and the resulting volume was to study the biblical food prohibitions from comparative and interdisciplinary perspectives.

The dietary prohibitions of the Hebrew Bible have long fascinated biblical scholars as well as anthropologists, and, more recently, have started to draw the attention of archeologists. These multiple areas of research have given rise to numerous publications in the different fields, but unfortunately they rarely cross the boundaries of the specific areas of scholarship. However, in our opinion the biblical food prohibitions constitute an excellent object for comparative and interdisciplinary approaches for several reasons: their very materiality, their nature as comparative objects between cultures, and their nature as an anthropological object. The present volume tries to articulate these three aspects within a perspective that is both integrated and dynamic.

Food prohibitions in general represent a topic concerned with both symbolic representations as well as with materiality. The symbolic dimensions of biblical food avoidances have received lengthy discussion in previous research, leading to highly relevant overarching theories, which continue to raise debate in biblical scholarship.[1] The material aspects of the food prohibitions have garnered less

[1] The huge discussion surrounding the work of Mary Douglas (Douglas 1966, 1972, 1999)

attention in recent biblical scholarship. Such concerns merit a privileged role in theories concerning human consumption,[2] and the work of Houston points in this direction.[3] By affirming this point, we do not, however, suggest a return to the past, i. e., to purely materialistic explanations, like those suggested by Harris,[4] nor to exclusively functionalist theories. We instead propose an emphasis on the necessity of a more dynamic dialogue between biblical scholars, scholars of the broader ancient Mediterranean, and archeologists in order to outline more complex and appropriate approaches to the biblical dietary prohibitions.

On the one hand, within archaeology, the recent development of zooarchaeology offers a relevant contribution to a wider understanding of the context for the biblical food prohibitions. An excellent example of the way in which recent archaeological developments challenge part of the assumed knowledge regarding patterns of consumption in ancient Israel appears in the studies on the pig conducted by Lidar Sapir-Hen and others from the University of Tel Aviv.[5] She convincingly demonstrates that pig avoidance does not reflect daily life in the Northern Kingdom of Israel in the Iron Age IIB, and, more generally, that the presence or absence of pig bones cannot work, *ipso facto*, as an ethnic identity marker concerning the presence or absence of Israelites. Overall, the newest methodological developments in the archaeology of food, such as organic residue, biomolecular, and DNA analyses, advance the discipline considerably and lead to the questioning of more traditional and "essentializing" approaches to foodways.[6]

On the other hand, the internal diversity of the logic underlying the formulations of food prohibitions requires attention from archaeology. This means, for example, that the textualization of the food prohibitions may not have served simply and always to regulate societal practice: *several divergent reasons* can give rise to the mention or the exclusion of certain animal types. Moreover, the chronological process involving the redaction of the food prohibitions requires adequate attention. In order to renew the discussion and to foster fruitful dialogue between archaeological and textual data, we shift the focus from the issues concerning the ultimate origins of these prohibitions, as well as from the related question of "what came first, the taboo or the criteria?"[7] Instead, we draw attention to the multiple contexts surrounding the developments, transmission, and

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constitutes a paradigmatic example. See further the essay of Altmann and Angelini in this volume.

[2] Fowles 2008

[3] Houston 1993.

[4] Harris 1975, 1979.

[5] Sapir-Hen et al. 2013; Sapir-Hen 2016.

[6] See, e. g., the recent conference organized by Aren Maeir and Philipp Stockhammer for the "Minerva-Gentner Symposium, Food and Identity Formation in the Iron Age Levant and Beyond: Textual, Archaeological and Scientific Perspectives," Weltenburg Abbey, April 28th to May 1st, 2019.

[7] Milgrom 1990, 184; see also Houston 1993, 65–67.

enactment of dietary laws in antiquity. Such contexts offer better documentation both in texts and archaeology; moreover, they can also be contrasted with comparative evidence from other ancient Mediterranean societies.

In this regard, food prohibitions fit particularly well with the proposed approach. They constitute a common feature of many ancient cultures and are still at the heart of some contemporaneous religions and philosophies. They therefore provide an intriguing subject for comparison. Despite the fact that ancient as well as modern religious systems might share food avoidances, it is worth remembering that food prohibitions are *conceptualized divergently* in different cultures. One of our goals is to highlight such divergent conceptualizations. More specifically, the way in which the Hebrew Bible presents dietary prohibitions displays relevant similarities, but also significant differences from their formulations in neighboring cultures, such as Egypt and Mesopotamia, where food prohibitions largely concern locally oriented or specific cultic contexts. In this regard, the permanent and delocalized nature of biblical dietary prohibitions represents a rather exceptional situation in ancient contexts. However, the gaps between biblical formulations and what we can reconstruct about the sociology of food consumption in the ancient Levant calls for a reexamination of the relationship between the theory and the practice of the biblical dietary laws

2. The Essays in This Volume

In their opening contribution, Peter Altmann and Anna Angelini address the theoretical and methodological issues related to the peculiar nature of the food avoidances in ancient Israel. These issues point toward a more complex relation between the theory and the practice of the biblical food regulations. In this regard, a close collaboration between biblical scholars and archaeologists proves fruitful.

After presenting competing perspectives on dietary prohibitions from current anthropology with its focus on disgust and much of biblical scholarship that views the texts through a more structuralist lens, Altmann and Angelini turn to the texts of Lev 11 and Deut 14 themselves. They highlight a number of differences between the two chapters, leading to the conclusion that each individual text performs significant and partly distinct functions within its immediate context. Thus, a diversity of meanings prevails: in Leviticus the prohibitions evince a ritual dimension concerned with the purity and holiness of the sanctuary. In Deuteronomy on the other hand, the language of abomination (*to'ebah*) serves to connect dietary prohibitions with a number of other types of practices detested by Yhwh. Furthermore, the concern for meat consumption plays a larger role in Deuteronomy's legal statutes, providing insight to the use of Deut 14:4–5 to ground the prohibitions into Deuteronomy's point of view. Utilizing

the theoretical perspective provided by Dan Sperber, the essay fleshes out the significance of the diachronic and synchronic differences with regard to the genesis of the prohibitions as well as their reception in Judaism.

The essays of Youri Volokhine and Stefania Ermidoro provide what we might call the "broader context" of the biblical food laws. By illustrating the characteristics of food avoidances, especially meat avoidance but also other foodstuffs, in the religious contexts of Egypt and Mesopotamia, they demonstrate the divergent ways in which these cultural-religious settings approached food prohibitions. The comparison casts the biblical texts in a new light. For unlike the ancient Near Eastern texts, the present form of the biblical texts conceives of the dietary laws as absolute prescriptions for Israel: i. e., as divine rules intended for everyday observance in every location, thereby constituting an *unicum* among the practice of food prohibitions in antiquity.

Ermidoro's investigation of prohibitions in Mesopotamia in the first millennium BCE addresses ritual, omen, medical, and hemerological texts. From this survey, she concludes that all meat prohibitions concern temporary though detailed observances. One had to avoid different substances at different times or places such than no one item was completely banned. However, for the most part, these rules govern action in religious contexts, often serving the success of specific rituals. Generally speaking, the range of foodstuff prohibitions – as well as preparation techniques or etiquette – display considerably more diversity than what appears in Lev 11 and Deut 14 or the rest of the biblical material. Furthermore, the consequences for breaking the prohibitions in Mesopotamian contexts resulted, according to the texts, in a considerable variety of punishments, even for eating the same animal meat.

The essay by Volokhine highlights how the debate on dietary prohibitions in Egypt is largely constructed by Classical traditions. Ancient Greek and Roman authors considered Egyptians and Jews "nations of priests" who kept food taboos (especially the taboo of pork). However, such a discourse does not reflect social reality in any Egyptian contexts. Volokhine's survey of the available Egyptian evidence (funerary texts, calendars, Ptolemaic lists of nomes, and other scattered documents) reaches conclusions similar to Ermidoro's analysis of Mesopotamian materials. No permanent dietary taboos existed in Egypt, but only temporary and localized prohibitions. Purity concerns for the king might explain the avoidance of particular animals in specific circumstances, as it is the case for the fish and, occasionally, for pork. Calendar texts also provide mythical etiologies, which trace the origin of particular food prohibitions back to a specific god or cult. However, no link whatsoever seems to be attested between occasional dietary prohibitions and issues of "Egyptian" identity outside of Greek texts. This also proves that the "sociology" of diet in ancient Egypt was a rather complex phenomenon, regulated by more factors than just priestly rituals and religious concerns.

Within the broader context of ancient Near Eastern cultural-religious instances of food prohibitions, the volume also turns to discussions of the overlap between textual and material evidence within the southern Levant. Although some effort has been attempted in this direction,[8] the time is now more fully ripe, we believe, to pursue this line of inquiry actively. While this collaboration helps biblical scholars by providing a concrete background against which to interpret biblical food prohibitions, it also serves zooarchaeologists from a methodological perspective, in order to evaluate the complexity of the relationship between the reconstruction of food prohibitions within the material culture and the information coming from the texts. To this end Abra Spiciarich addresses the methodological issues related to the identification of the biblical food laws in zooarchaeology.

Spiciarich, working from the archaeological perspective, uses zooarchaeological methods as a means to connect the physical remains to the textual sources. She argues that applying zooarchaeological principles and methods to the discussion of the biblical food laws sheds light on the extent to which these laws were incorporated into ancient daily life. The core of her exploration follows the methodological issues of presence versus absence of not only certain species, but also of specific body parts deemed pure or impure in the biblical texts. Her discussion results in the establishment of a series of parameters for the identification of the biblical food laws within archaeological assemblages.

This second section goes on to explore the relationship between biblical food laws and zooarchaeology with specific case studies. These essays discuss methodological issues, as well as new zooarchaeological data, addressing different patterns of animal consumption from different sites.

Jonathan Greer presents a case study from the site of Tel Dan in which he suggests that, while tentative, the avoidance of pig consumption at Tel Dan proves significant. In order to push the discussion further, he proposes that support from the other side of the spectrum of specialized food status, the priestly prescription of the right limb, demonstrates a link between cultic consumption and dietary prohibitions. Greer explores issues of ethnicity, socioeconomics, archaeological context, and environmental conditions in relation to the presence of the biblical food laws at the site of Tel Dan.

A further issue for exploration is constituted by the analysis of patterns of fish consumption, which was the subject of the presentation by Omri Lernau in the conference, although the author unfortunately did not choose to submit his work for publication in this volume. This analysis challenges the *communis opinio* of a generalized lack of interest in fish by ancient Israelites, thereby questioning the

[8] See for example Amar, Bouchnick, and Bar-Oz 2010 on the identification of some of the clean quadrupeds mentioned in Deuteronomy by crossing ancient literary witnesses with evidence coming from southern Levantine zooarchaeology.

assumption of a straightforward relationship between the theory and the practice of the food prohibitions, instead suggesting the necessary reexamination of the origins of the biblical prohibitions on unclean aquatic animals.[9]

The third section of essays focuses on the relevance of dietary practices for the beginning of processes of ethnogenesis in different historical contexts: the distinction between Judea and Philistia by Deirdre Fulton and the fashioning of Jewish identity during the Hasmonean period by Débora Sandhaus. The analyses of these processes also consider the role of other elements of material culture related to food, notably pottery.

Fulton's essay, "Distinguishing Judah and Philistia: A Zooarchaeological View from Ramat Raḥel and Ashkelon," investigates the overlap and differences between the zooarchaeological remains from two specific sites – one Judahite and the other Philistine – and their meaning for dietary prohibitions. She specifically presents data from the late-Iron II marketplace, located in Grid 50 and 51 in Ashkelon and several loci, including a festive pit in Locus 14109 from Ramat Raḥel. Her comparison yields a generally negative conclusion: little separates the consumption habits in the two locations, except for what arises from external economic pressures. Instead, both generally consume foods in accordance with the texts of the Pentateuch, though both exhibit consumption of Nile Catfish, a prohibited type.

On the other hand, the evidence collected by Reem from the Hellenistic period onwards (especially third-second century BCE), points towards a connection between patterns of food consumption and the expression of Jewish identity. She analyzes cooking assemblages in the central Shephelah, alongside the 'Ella Valley, a boundary zone between the provinces of Yehud/Judea (North) and Idumea (South), an area experiencing a large presence of foreigners. While the southern (Idumean) side developed significant openness to foreign pots beginning in the third century BCE, the expansion of Hasmonean hegemony over the entire valley resulted in the rejection of foreign pottery types, presumably to solidify the Hasmonean identity in the region. Once this was secured, a renewed openness to foreign types developed, these being now produced in the Central Hill region of Judea. The different and partly new cuisine practices emerging in the region, and sometimes coexisting with older culinary traditions, involve different strategies of acceptance, rejection, adoption, appropriation of foreign practices that eventually transformed the local cuisines.

[9] However, one can see, e. g., the reports on fish bones in Reich et al. 2007; Lernau 2008; Lernau 2011; Horwitz et al. 2012; and Fulton et al. 2015.

3. Results and Future Perspectives

With this volume we hope to offer a number of new and insightful perspectives on the dietary prohibitions. Especially viewed as a group, the contributions demonstrate the wide range of investigations required for understanding both the food laws specifically, and the more general ways in which these laws reach deeply into the archaeology, anthropology, and literature of the southern Levant and broader ancient Near East.

Several important directions for research and desiderata for future scholarship arise from the discussions in this volume. Integrating archaeological perspectives within the study of food prohibitions not only allows for the deconstruction of previous assumptions concerning both the rigidity and the extent of their applications as well as their supposed more or less symbolic meaning. It also substantially contributes to the appreciation of the complexity of the dynamics of exchange and cultural participation between ancient Israelites and neighboring societies.

In this regard, the dialogue between text and archaeology should extend to other areas of investigation related to foodways. A number of archaeological questions remain unexplored. While included in Omri Lernau's presentation on "Remains of Non-Kosher Fish in Excavated Jewish Settlements in Israel" in Lausanne, this volume does not offer a discussion of the widespread consumption of prohibited aquatic animals throughout the Iron Age and even later southern Levant. A similar overview discussion of the zooarchaeological evidence on birds could address this further category of prohibited animals.[10]

Moreover, the spectrum of the comparison with other prescriptions regarding food in antiquity requires further expansion. An important perspective could be offered through investigation of Persian, Greek, and Roman food avoidances. While these cultures remain a bit more removed from the likely provenance of the rise of the biblical dietary prohibitions, they offer suggestive ways of viewing animals and animal consumption that certainly influenced the reception of the biblical material, if not perhaps playing some role in their formulation. The enlargement of the comparative perspective should also carefully consider the role played by ancient discourses in associating foodways with issues of ethnic identity.

Finally, understanding the relationship between food consumption and processes related to the construction of identity in ancient Israel biblical dietary prohibitions calls for a larger complementary study of dietary habits and practices concerning ways of preparing, cooking, and consuming food. Patterns of storage and consumption of vegetables and liquids (notably oil, wine, and beer) should also be the object of an integrated analysis. This further venue is justified first

[10] See, however, Altmann 2019.

by the fact that these items progressively became part of the Kashrut in ancient Judaism. Secondly, reconstructing discourses about identity requires interaction between food choices and the more complex dimensions involved in the entire sphere of a culture's cuisine.

On the whole, this volume provides a number of larger parameters and several depth discussions necessary for circumscribing and understanding the practices, causes, and meanings of the biblical dietary prohibitions in their broader archeological, cultural, and theoretical settings. As such, it both lays a foundation and provides a roadmap for further scholarly discussion.

Purity, Taboo and Food in Antiquity

Theoretical and Methodological Issues

Peter Altmann and Anna Angelini

Several methodological and theoretical issues arise with regard to topics that seek to combine the disciplines of ancient Near Eastern studies, archaeology, and Hebrew Bible studies, as intended in the contributions in this volume. The primary issues that this essay seeks to address are the questions of the nature, the structure, as well as the cultural meanings attributed to the practices in the texts of Lev 11 and Deut 14. In particular, we investigate the differences and overlap between the understandings of the dietary prohibitions in two different parts of the Pentateuch.

The discussion will develop as follows: (1) reflection on recent scholarship, (2) consideration of the biblical texts themselves, offering a discussion of their relationship with one another and their individual internal logics. (3) The identification of the complexity results in the need to articulate a different theoretical approach to account for the multiplicity of meanings throughout the compositional history of the prohibitions within their literary settings of Lev 11 and Deut 14. (4) The final section will highlight some of the meanings from their pre-scriptural origins to their reception in Hellenistic contexts.

1. Reflections on Explanations from Anthropology and Biblical Studies

Recent anthropological research highlights significant factors for the explanation of the emergence of food taboos, with particular focus on meat avoidances. Among these factors, a relevant role seems to be played by the combination of specific features of the environment with normative moralization, i. e., the tendency to attribute moral value to common patterns of behavior, and the subsequent prestige-biased transmission, that is, the propensity to conform to prevailing patterns of behavior.[1] Many studies underline the propulsive role of disgust

[1] E. g., Fessler and Navarrete 2003.

in eliciting meat avoidance.[2] While these criteria may help with interpreting some of the aspects related to biblical dietary restrictions, such as the relationship between delineation of food taboos and exercise of power by self-interested parties, they tend to overlook the religious dimension of the food prohibitions. This dimension instead constitutes a prominent characteristic of food avoidance in antiquity.

Conversely, structuralist approaches, beginning with Mary Douglas' theories,[3] and continuing on through all the explanations and corrections resulting from the numerous critiques that followed her work,[4] point to a different series of issues that remain quite compelling for the study of ancient food restrictions. Largely viewing the food prohibitions as one piece of a larger cultural system, structuralist approaches are able to take into account the integration of food prescriptions within broader aspects of ancient societies. This includes the relationship between regulations concerning food and other purity rules, a relationship which is of primary importance, at least in the formulation of the dietary laws in the book of Leviticus. While the general questions raised by symbolic and structuralist approaches are central in approaching and interpreting biblical food prohibitions, the generalized view offered by structuralism, which tends to see the biblical food laws as a comprehensive system primarily conveying symbolic value, remains unpersuasive for a number of reasons.

First, as we will demonstrate below, biblical food prohibitions did not appear as a unified system from their beginning. They were instead the product of a long compositional and transmission process that developed in different historical moments. Moreover, the stages of this process are far from completely clear, and the two main corpora that preserve biblical food prohibitions, Lev 11 and Deut 14, still present significant differences from one another. Second, although we approach the ensemble of the biblical food laws in their final form as a meaningful synchronic body of regulations, the texts do not always display a strict unified logic, and multiple differences remain in the formulations of the various sets of rules. The prescriptions concerning quadrupeds, fish, birds, insects, and reptiles neither follow a single scheme nor a consistent order. Most of the given criteria classify animals based on their means of locomotion, but this is not always the case (e.g., chewing the cud is one of the main requirements for the cleanness of ruminants, and there is no connection between this criterion and means of locomotion). In some cases, such as the fish, only criteria appear without any examples of clean or unclean types or species. In other cases such as that of birds, no criteria appear at all, but we instead only find a list of prohibited types.

[2] Rozin et al. 1997; for recent application of theories on disgust to biblical food prohibitions see Kazen 2011, 71–81.

[3] Douglas 1966, 1993, 1999.

[4] Tambiah 1969; Sperber 1996b; Eilberg-Schwartz 1990; Milgrom 1991; Nihan 2011; Meshel 2008; Burnside 2016.

Furthermore, as we will explain below, a practical sacrificial pattern may have performed some functions in the case of the permitted and prohibited quadrupeds. In other cases, however, the species and types mentioned in the lists of unclean animals are such that it is hard to imagine that someone may have ever considered eating them, for example the bat or the vulture in the list of birds, and more generally the animals mentioned in the list of rodents and reptiles.

Due to this internal diversity, one can even question whether it is appropriate to speak of a "system" at all. For these reasons, the rigid application of the categories of structuralism, recently proposed again for the interpretation of the biblical food laws by Meshel,[5] appears problematic. Reading the texts from a synchronic perspective and on this basis trying to discern a complete and coherent structure cannot avoid the risk of de-contextualizing them from their historical and cultural setting. Moreover, such an approach inevitably leads to a forced reading of the texts, in which one detects elements of a systematic classification that in most cases are simply not stated by the texts themselves.

The most recent attempt to detect a unified symbolic logic in the food prohibitions is found in Burnside's article.[6] The author proposes an explanation of them through what he calls a "narrative paradigm." He reads the laws in terms of a narrative, meaning that one should read from beginning to end, assuming the logic of the earlier portions of the text as the necessary context and foundation for understanding the latter portions. Following this logic, one can, for example, derive the unstated paradigm for clean birds from the previous paradigm that is explicitly settled for clean quadrupeds, and so on. He argues that the laws were intuitively clear to their original audience because the legislator referred to an assumed and implicit social knowledge that derives from the environment and is organized by a series of typified images, themes, and stereotypes. The normativity of the laws would depend on everyday ancient practice and would be shaped by practical wisdom, although we, as moderns, are no longer able to reconstruct all the elements of this practice.

This fascinating hypothesis nonetheless raises a series of problems. We argue that reconstruction of the implicit paradigms for the animal categories reveals too high a degree of arbitrariness with regard to the excluded animals for one to conclude that it actually corresponds to the inner logic of the texts. For example, the fact that herbivores are the paradigm for the definition of clean quadrupeds and subsequently for the unnamed clean birds is not stated anywhere in the texts and cannot be easily proved.[7] As a matter of fact, several herbivorous land animals, like the hare, are considered unclean. To provide another example, although the various kind of unclean lizards mentioned in Leviticus (11:29–30)

[5] Meshel 2008.
[6] Burnside 2016.
[7] Ibid., 232–33.

appear to us as "half land and half aquatic" creatures,[8] there is no trace in the text of their connection with the paradigm of fish. Moreover, it remains difficult to reconstruct which sort of practice can have given rise to the prohibition of eating animals such as bats or various kinds of lizards. Finally, this theory still cannot completely account for the *internal diversity* in the formulations of the food prohibitions.

Such difficulties point to a further issue, namely to what extent we are able to reconstruct ancient Israelite animal taxonomy through the lists of animals provided in Lev 11 and Deut 14. Although these texts offer an important glimpse into Israelite, or rather Levantine, zoological classifications, one should avoid a straightforward application of modern taxonomic categories to them. In this regard, Richard Whitekettle's attempts to derive a coherent system of animal classification from Lev 11 are perhaps too optimistic.[9] First, the identification of many items in these lists remains problematic, especially regarding the names of birds and of insects. Second, ancient animal taxonomies differ from the modern Linnean classification, especially with regard to the criteria used to differentiate between animal species and the less systematic character of the classification, and therefore of the implied hierarchies. For example, while it is highly probable that the expression *lemino* ("according to its kind") identifies a group of animals sharing similar features, it is difficult to evaluate whether this concept always operates as a specific species distinction or if it can serve also to separate between genera.

Instead of trying to detect consistency within the lists of Lev 11 and Deut 14 at all costs, we follow the line of research inaugurated by Houston, in his monograph *Purity and Monotheism: Clean and Unclean Animals in Biblical Law*,[10] which remains a major reference for the study of biblical food prohibitions. His reply to Milgrom's question, "which came first: taboo or criteria?"[11] contains one of Houston's most important contributions for the research on biblical food laws. Houston correctly points out how two different cultural currents are actually merged in the text. On the one hand, the presence of a *formal* concern of organization through systematization and expansion is undeniable. On the other hand, the impact of *historical* dietary customs certainly played a relevant role, and this impact renders it probable that any system will remain imperfect, somewhat inconsistent, and sometimes absent.[12] The combination of both these tendencies, which represents at once the fascination and the complexity of the biblical food prohibitions, pushes Houston into an initial survey of the material and social context surrounding biblical dietary rules. We intend, therefore, to follow in the wake of Houston's methodological impulse, seeking to articulate

[8] Ibid., 231.
[9] Whitekettle 2003, 2009.
[10] Houston 1993.
[11] Milgrom 1990, 184.
[12] Houston 1993, 64–66; earlier Hunn 1979, 112–14.

a robust methodological approach for these texts of dietary prohibitions in Lev 11 and Deut 14.

2. Leviticus 11 and Deuteronomy 14 in Their Biblical Contexts

The relationship between the two primary texts on dietary prohibitions, Lev 11 and Deut 14, raises numerous redactional and text-critical issues on which much has been written.[13] While these questions largely remain outside the scope of this paper, we will highlight several observations in order to provide the overall textual framework for understanding food regulations in the Hebrew Bible and the related theoretical and methodological issues that form the focus below.

2.1. The Relationship between Lev 11 and Deut 14

Although scattered passages of the Hebrew Bible make reference to the consumption of unclean food (e. g., Hos 9:3; Isa 66:17; Ezek 8:10; Zech 9:7), the contents of the food prohibitions are largely concentrated in the texts of Lev 11 and Deut 14. As is well noted in scholarship, these texts, when taken together, comprise an exemplary case: an extensive set of instructions is repeated twice in the Pentateuch. These two chapters share many similarities and contain several identical passages, such that they constitute something of a double corpus. Nevertheless, a notable number of differences remain between the texts of Lev 11 and Deut 14. Multiple and diverse theories of diachronic development and possible derivation exist,[14] although we would argue that no satisfactory model can explain the derivation of one corpus from the other. We find the theory of a shared source originally containing some of the instructions concerning prohibited animals the most plausible alternative. However, the development from original (oral or written) tradition to the current forms of the texts took on a complexity that lies beyond the reach of current scholarly methods and the available evidence.

A first glance at the overall structure and the contents of Lev 11 and Deut 14 provides a sense of some major differences between the two texts:

- As far as it concerns quadrupeds, Deut 14 (vv. 4–5) provides a list of five clean quadrupeds missing in Lev 11, where examples only appear for unclean species.
- Leviticus 11 has a longer section that includes a supplementary criterion in order to distinguish between clean and unclean flying insects (*šereṣ ha'of*, literally: "swarming flying things"), also providing a list of four kinds of permitted insects (vv. 20–22). The statement in Deut 14 (vv. 19–20) is much shorter and does not contain any such list. As a result, Leviticus exhibits a four-part

[13] Cf. Nihan 2011.
[14] Cf. Otto 2016; Veijola 2004; Milgrom 1991.

structure and a more complex taxonomy within vv. 2–23, which parallels Deut 14:3–20: Lev 11:2b–8 addresses animals moving *over* the ground (*behemah*), Lev 11:9–12 aquatic creatures; Lev 11:13–19 large winged animals, and Lev 11:20–23 small-winged animals or swarming flyers. On the other hand, Deut 14 exhibits three categories, namely land animals (14:4–8), water animals (14:9–10), and air/flying animals (14:11–20): here the swarming flyers (*šereṣ ha'of*) in Deut 14:19 comprise a subsection *within* the third section on flyers.

– Leviticus 11 contains a longer and secondary section (vv. 24–40) dealing with impurity conveyed by different forms of contact with a carcass (*nebelah*) of both unclean and clean animals (cf. also Lev 11:8//Deut 14:8), and these verses provide instructions for purification. Within this section, rodents and reptiles are also listed among the unclean animals (*šereṣ šoreṣ 'al ha'areṣ*, "swarming things that swarm on the ground," vv. 29–30). This section is entirely absent from Deuteronomy. Moreover, this proposed addition provides for the clear distinction between subcategories of *šereṣ*, "swarming" or "creeping" animals, among those belonging respectively to the sea (v. 10), to the air (v. 20–21), and to the ground (vv. 29–30): these distinctions do not appear in Deut 14, which speaks only of *šereṣ ha'of*.
– Deuteronomy 14:21 contains a couple of final instructions missing from Lev 11, namely the reference to the prohibition of "cooking the goat kid in/by its mother milk" (cf. Exod 23:19; 34:26) and the permission to sell carcasses, which are unclean for Israelites, to foreigners.[15]

In addition to these main structural divergences, a large series of minor textual differences occurs in the passages shared by the two texts: these differences concern the use of pronouns, adjectives, and syntactical marks, as well as slight variations in the ways of listing unclean quadrupeds and birds.[16] While we do not deal with these issues in detail here, the lack of structural uniformity in the texts points to diachronic development. We view this – which is a key point for our paper – as raising theoretical problems for synchronic, systematic, symbolic, and unitary explanations of the meanings of the prohibitions, as we will indicate below.

The transmission of the list of birds, shared by Lev 11 (13–19) and Deut 14 (12–18) constitutes a relevant example of the complexity involving the transmission of the food prohibitions into the Hellenistic Period.[17] The earliest Greek manuscripts of Lev 11 and Deut 14 still show great fluidity in the transmission of the lists, characterized by a wide variance in the order of the birds' appearance and by the absence of the raven (*'oreb*) in both the lists in the earliest Greek texts. The texts, therefore, continued to interact and influence one another as each took on

[15] Cf. Altmann, forthcoming a.
[16] Cf. Nihan 2011.
[17] Angelini and Nihan, 2020.

its *unique* structure and concerns. However, if the history of the textual relationship between Lev 11 and Deut 14 remains very hard to reconstruct in detail, it is still possible to consider how each individual text came to perform significant and partly distinct functions within its immediate context.

2.2. The Logic of Dietary Prohibitions in Each Corpus

The intent of biblical food prohibitions is stated quite clearly within each of the texts. The concluding verses of Lev 11 (vv. 44–45) summarize their scope. Deuteronomy 14 opens and closes the section on dietary laws with a very similar declaration (vv. 2, 21). These passages overlap in many respects:

> Lev 11:44–45: For I am Yhwh your God, so you shall sanctify yourselves and you shall be holy, for holy am I. But do not defile yourselves with all swarmers slinking upon the ground. For I am Yhwh who brought you up out from the land of Egypt to be for you God, so you shall be holy because I am holy.
>
> Deut 14:2, 21: For you are a people holy to Yhwh your God; it is you Yhwh has chosen out of all the peoples on earth to be his people, his treasured possession. … For you are a people holy to Yhwh your God.

Though containing different formulations, both texts ultimately serve the intention of separating the Israelites to Yhwh, and for Deuteronomy apart from their neighbors. However, in the contexts of their final forms, the texts interact with the different logics of the particular literary corpora into which they are inserted, which at least partly account for their different structure. As such, the manner in which an earlier shared tradition on dietary restrictions has been incorporated into two different literary contexts shows how cultural representations of food avoidance could be radically reshaped to take on new meanings.

The text of Lev 11 presents the more detailed and developed structure regarding food prohibitions, and, especially in the second section (vv. 24–40), extends its concerns to include issues of pollution and purification deriving not only from ingestion, but also from the contact with dead animals (this aspect is not completely absent from Deut 14, which however provides a much shorter indication, cf. Deut 14:8, 21). This is unsurprising, as purity is one of the central interests of the Priestly groups considered responsible for the redaction of the book of Leviticus. In this regard, we could say that food prohibitions in Lev 11 have a ritual dimension, concerned with the purity and the holiness of the sanctuary. The focus on pollution transmitted by contact makes a connection between Lev 11 and Lev 12–15, which deals largely with various forms of impurity derived from skin diseases and human discharges. Overall, these rules aim at establishing and controlling the degree of sanctity that Israelites should maintain in relation to the sanctuary, close to which the community is imagined to live, and preventing

the community from any kind of defilement.[18] In the logic of Leviticus, Israelites ultimately maintain their holiness in order to avoid defiling the sanctuary itself, where the deity resides and which therefore must remain in a permanent state of holiness.

Moreover, food prohibitions in Leviticus have a cosmological dimension through their connection with the description of the God's table (i. e., with the rules for animal sacrifice given in Lev 1). As scholarship has long noted, this cosmological link results in the division of the animal kingdom into three categories: sacrificial animals (God's table) – clean animals (Israelites) – unclean animals (the rest of humanity).[19] This categorization creates a comprehensive dietary structure in which God's diet and humanity's diet are at once made parallel and ordered hierarchically. Moreover, in the narrative logic of the Pentateuch, the food prohibitions of Leviticus express an intermediate position between the purely vegetarian diet of the origins, described in Gen 1, and the postdiluvian uncontrolled consumption of meat (Gen 9): this equilibrium serves to move one step toward restoring the creational order, which was broken by the flood.[20]

Finally, the food prohibitions in Lev 11 as a whole involve an epistemological dimension: the list of animals included in Lev 11 extends beyond the threefold division land-water-air, attempting to articulate the nature of the animal world more precisely through the mention of other categories or subcategories of animals such as the land and air swarmers, the smalls rodents, etc. This amplification of the animal taxonomy expresses a concern for biological classification. In this regard, the fact that "technical terms" like *lemino* are exclusively attested in writings associated with Priestly or priestly traditions (Gen 1; 6–9; Lev 11; Deut 14; Ezekiel) may suggest that zoological knowledge is a self-conscious intellectual interest of the Priestly élite.[21]

Unlike Lev 11, Deut 14 explicitly connects the food prohibitions to the land of Israel through the narrative logic of the book according to which Israelites should keep the food prohibitions once they have entered into the land. Eating, especially eating meat, relates closely to the Deuteronomic concern with centralization to influence the hearers to embrace a communal Yahwistic identity. This identity is focused around a singular sanctuary and, at the same time, is diffused throughout the land as Israel.[22] Deuteronomy balances the drive toward one chosen place with the allowance of domestic sacred slaughter and consumption of quadrupeds according to Deut 12. This connection provides special meaning to meat from clean quadrupeds, which are addressed in 14:4–5, a text missing from Lev 11 that concerns large game animals as noted above. As a result,

[18] On this see Jenson 1992; Nihan 2007, 296–394; 2013.
[19] Milgrom, 1991, 721–22.
[20] Houston 1993; Nihan 2007.
[21] Whitekettle 2003, 165–66.
[22] Altmann 2011.

Deuteronomy's logic of holiness transfers the exclusive link with the sanctuary to every Israelite household, at the domestic level.[23] Moreover, Deut 14:3 introduces the dietary rules with the general prohibition of eating abomination (*to'ebah*), absent in Lev 11. The word *to'ebah* appears often in Deuteronomy, generally indicating cultic faults that one might sum up as concerning "worshipping *to'ebah*." The term can also appear in ethical contexts, referring to non-cultic behaviors or speech incompatible with adherence to Yhwh, similar to the usage of the term in Proverbs. This is noted by Preuss:

> Thus these *tô'ēḇâ* injunctions not only protect the purity of the cult (and not just from the practices of Israel's neighbors; cf. 17:1) but also prohibit conduct that is ethically incompatible with Yahweh and his people ("abomination in your midst": 13:15[14]). Israel must not adopt such practices (usually from its neighbors), because to do so would imperil its faith in Yahweh. … In Dtn/Dtr texts, therefore, the use of the *tô'ēḇâ* concept is intimately associated with the idea of the people of God and the uniqueness and nature of Yahweh.[24]

Deuteronomy 14, by placing dietary prohibitions in the category of *to'ebah*, broadens the category of improper worship to include seemingly mundane practices removed for a sanctuary, thus bringing together the "wisdom" and the "cultic" dimensions of the term.

Although the redactors of Deuteronomy seldom show concern with the topic of holiness and defilement, this theme does appear explicitly in the context of the announcement of the food prohibitions (Deut 14:1–2, 21): respecting the food prohibitions thereby becomes a quintessential practice of holiness, and the dietary laws become representative of the election of the Israelites. This special connection between the dietary prohibitions and Israel's election allows for a combined, and, in some regards, complementary reading of the food prescriptions of Leviticus and Deuteronomy. This combined reading, which underlines the universal and de-territorialized character of the food laws, contains their potential for becoming representative of the entire Torah. While this interpretation begins within the Hebrew Bible itself (for example in presumably late passages like Lev 20:25), the reference to dietary prescriptions as paradigmatic of the entire law will become a *topos* in the apologetic literature of the Hellenistic period, where keeping of the dietary laws becomes the sign par excellence of the Jewish identity.[25]

To summarize, there are significant differences in some of the details of the two passages, in their conceptions of reasons for the prohibitions, and in their literary settings. However, there is little question that the ritual actions proscribed

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[23] Cf. Markl 2012; Nelson 2002, 176. Note that this opens an important question with regard to the nature of the overlap between the dietary prohibitions and household religious practice, a question that invites interdisciplinary discussion with household archaeology.

[24] Preuss 2006.

[25] Moore 2015, 204–54; Angelini, forthcoming.

by Lev 11:2–23 and Deut 14:3–20 largely coincide. As a result, the formulation as well as the literary setting of each text provides the shared practices with a different significance.

3. Thinking and Performing Dietary Prohibitions

While Lev 11 and Deut 14 mandate the same ritualizing actions, their different contexts invite divergent reflections on the actions prescribed, some of which we have described in the previous section. In other words, the dietary prohibitions do not have one single meaning, even in the texts of the Hebrew Bible. However, we will now take this hypothesis one step further: biblical food prohibitions, whose original background we can no longer fully reconstruct, were reworked and transmitted in different contexts throughout different times. This much has been argued many times within scholarship. Yet we contend that this process of transmission repeatedly transformed the laws, amplifying and adapting them according to the logic of the different groups responsible for their textualization while generally still retaining the possibility for a combined reading within the Torah as a whole. Once a particular reading was transmitted on its own terms, new modifications occurred, and new meanings could again be generated.

We turn to the work of the anthropologist D. Sperber to aid in explanation.[26] For one, Sperber's anthropological work offers a useful tool to understand such processes of transformation, such as those involved in the different diachronic formulations for the dietary prohibitions from an early written or oral stage and eventually resulting in the different extant MT and LXX texts of Lev 11 and Deut 14. He traces the mechanisms of the *transmission* of culture through the concept of what he designates the "epidemiology of cultural representations": that is, how actions and meanings of culture become broadcast through a given group. He describes it as follows: "An epidemiology of representations is a study of the causal chains in which these mental and public representations are involved: the construction or retrieval of mental representations may cause individuals to modify their physical environment."[27] Intrinsic to this conception is the overlap between ideas or mental representations and materiality, which he terms "physical environment" – or theory and practice.

A second seminal concept for Sperber are "cultural representations," that is, how humans communicate their individual understandings of shared practices to one another. Sperber explains:

> When we talk of cultural representations … we refer to representations which are widely shared in a human group. To explain cultural representations, then, is to explain why some

[26] Sperber 1996a.
[27] Ibid., 62.

representations are widely shared. Since representations are more or less widely shared, there is no neat boundary between cultural and individual representations.[28]

Sperber's conception provides insight in that it works to overcome the problem of the transmission of culture views of dietary prohibitions like those found in Lev 11 and Deut 14 from person to person, while allowing for variation among a particular group and over time. This contrasts with the notion of some kind of a structuralist system as argued by many interpreters of the dietary prohibitions since Douglas' epoch-making work,[29] which does not account well for diachronic differences between texts or literary traditions. Sperber's more materialist focus offers a number of improvements. His approach not only allows for overlap and differences between the textual representations in the various versions of Lev 11 and Deut 14, but it allows for them in the archaeological record as well. There can be widely shared representations, which means they provide explanations across a broad number of people in a shared tradition, but this need not imply that all individuals either understand or practice them in the same way. And, this is accomplished without needing to consider *one particular* formulation of the prohibitions (e. g., MT of Lev 11) as the most pristine conception.

Key to this analysis is his notion that "representations are transformed almost every time they are transmitted and remain stable only in certain limiting cases."[30] In other words, almost every time a bit of culture, like the dietary prohibitions, is passed on, it undergoes some change.

This *theoretical* point has far-reaching implications for our study of the dietary prohibitions in Lev 11/Deut 14 and the rest of the ancient literary and material remains addressed in this volume. Once we consider the dietary laws as cultural representations, we should *expect* transformation in meaning. This also obtains in those instances when the actual practice remains constant – in this case avoidance of the meat from a particular category of animal – in every iteration of the transmission of bits of culture like dietary prohibitions. It remains constant whether on the large scale of comparisons between Egypt, Greece, Assyria, and Israel, or on the much smaller scale of Leviticus and Deuteronomy's uses of a shared source and versions of one another on the road to their received forms. As a result, one should not expect complete systemizations such as those proposed by structuralists and those who continue to accept their methodology in their biblical, archaeological, and ancient historical studies, as we will discuss in the next section.

[28] Ibid., 82.
[29] Douglas 1966.
[30] Sperber 1996a, 25–26.

4. Meanings and Origins

Building on Sperber's insights, how can one view the origins and development of meaning biblical dietary prohibitions? One prominent hypothesis concerning the origins of the biblical food prohibitions, which appears to fit quite well with the framing concerns in Lev 11:44–45 and Deut 14:2, 21, interprets them largely as an exilic-period formulation to affirm a distinction between the "Israelites" and their neighbors.[31]

Beginning with this interpretation as an example of a global explanation, a problem arises for its application to the prohibitions as a whole. The dietary customs of Levantine, Mesopotamian, and Egyptian neighbors differ too little from those prescribed in the Pentateuch to render the desire for Israelites to differentiate themselves from the host culture a compelling singular explanation of their origins. A minimal number of animals appear in Egyptian and Mesopotamian documents and iconography that do attest to the consumption of some meat designated as unclean in the biblical sources. Mesopotamian deities found bandicoot rats delicious, which fall under the category of "swarmers upon the ground" (in the later text of Lev 11:29), but otherwise the menu of Mesopotamia deities consists of meats generally adjudged clean in the biblical texts, though the types of fish remain difficult to identify.[32] Consumption of ostriches – prohibited if they are indeed denoted by *bat ya'anah* in Lev 11:16/Deut 14:15 – is attested primarily for Persians[33] and their eggs in Mari.[34] Some consumption of swine also appears in Mesopotamia and Egypt.[35] Finally, Arabian Bedouin tribes consumed camels.[36] Yet on the whole, these examples constitute exceptions: the greatest number of animals consumed – when they were consumed, given that meat constituted a high value and rare food throughout the ancient Near East,[37] it largely consisted of animals deemed acceptable in Lev 11 and Deut 14.

As a result, there are *some* types of prohibitions that could arise from the desire to distinguish the "Israelites" from others, as the two texts of Lev 11:44–45 and Deut 14:2, 21 imply was part of the basic motivation. However, too many other members of the list do not accord with this conclusion: vultures and bats represent two good examples. There is little evidence for the consumption of any sort of these types of birds across the ancient Near East. As a result, Sperber's approach proves amenable: the collective cultural representations of animal prohibitions allow for a degree of divergence among explanations for avoidance

[31] Gerstenberger 2009, 185.
[32] Scurlock 2002, 389–90.
[33] Athenaeus, *Deipnosophistae* 4.145.
[34] Salonen 1973, 166.
[35] Houston, 1993, 155, 177.
[36] Ibid., 87.
[37] Altmann, forthcoming b.

of certain types of meat. They could include but also extend beyond the explanations given in Deut 14:2 and Lev 11:44–45, which represent late texts in their respective contexts.[38]

Given the lateness of this interpretive meaning within the texts, in terms of origins, we find it more probable that, as Houston already suggested, some of these laws originated in the context of preexilic Israelite sanctuary, from practices connected with a Yahwistic cultic setting.[39] In this regard, their original context probably did not differ significantly from what we understand of food prohibitions in other ancient cultures like Mesopotamia, Egypt, or Greece.[40] The best textual evidence for this conclusion may appear in the first category of animals addressed in the text of Lev 11 and Deut 14: the large land animals that formed the focus for the offerings of animals in the ancient Levant.

Nevertheless, the present forms and intrinsic explanations of the food law texts in the Hebrew Bible do not correspond to the way they originated. Their forms and meanings appear, instead, to have resulted from a process of progressive transformation that continued as long as the texts were undergoing modifications and expansions. By moving beyond a specific ritual setting and ritual time and losing their connection with the sanctuary, biblical food laws draw near to the realm of custom in that they aim to regulate everyday practice. However, this does not mean that dietary restrictions assumed a purely mundane character. As a "religiously based system of prohibitions,"[41] biblical food restrictions remain more than a custom, and they can therefore be situated on a *continuum* between mundane custom and sanctuary ritual, which is populated, as Bell has shown, by various ritualizing actions.[42]

This articulation of the biblical food prohibitions between ritual and custom has at least two important consequences for our discussion. The first one concerns the relationship between meat prohibitions and sacrificial patterns. A sacrificial paradigm, that is the selection of perfect specimens of pure types based on the primary animals that can be offered on the altar (i. e., cattle, sheep, and goats), seems to work as an explanation for the distinction between clean and unclean quadrupeds.[43] Yet a similar assumption appears more problematic in the case of other categories, especially the fish and insects, and doubts arise in the case of the birds. This discrepancy raises further issues with the possibility of detecting a singular overall logic that governs the formulation of the food laws as an ensemble. Moreover, this perhaps original sacrificial paradigm would not

[38] Milgrom 1991, 695–97; Altmann, forthcoming a.
[39] Houston 1993, 123, 232; Nihan 2007, 334; however, now see Nihan 2011, 417.
[40] Ermidoro 2014, 2019; Volokhine, 2019; Parker 1996, 358.
[41] Houston 1993, 16–17.
[42] Bell 1992, 74.
[43] Firmage 1990; Milgrom 1991, 713–36; and for a critique of the sacrificial paradigm as an exclusive explanation Houston, 1993 114–22.

have continued to carry the same weight once the dietary prohibitions extend beyond the sacred space and the sacred time of the sanctuary.[44] In this regard, the relationship with "sacrificial consumption" and attending ritual actions proves more complicated than a singular explanation, once again indicating the problems with unified structuralist approaches.

The second consequence arising from the universalization of the biblical dietary laws and our reconstruction of their de-territorialization is their transformation into a paradigmatic case for the entire Torah. This is understandable partly because the practice of the food laws came to play a considerable role in processes of ethnogenesis and identity definition, as documented in later texts of the Hebrew Bible itself like Daniel or Judith, and especially in biblical writings in Greek, such as the books of Maccabees.[45] Furthermore, the textualization of biblical food prohibitions strengthened the ideological potential embedded in these laws, permitting them to survive the destruction of the Temple and to represent "Jewishness" in every time and in every space.

In this regard, the biblical dietary laws have often been studied as direct antecedents of *kashrut*, which developed in early Judaism, and which can actually be considered in many respects as "ritualized everyday behavior."[46] However, the reception of the biblical food prohibitions in the early rabbinic period implies both the considerable amplification and transformation of these laws. Biblical and rabbinic dietary restrictions, in addition to belonging to different historical and cultural contexts, respond to different concerns, are organized differently, and perform different functions. To provide a few examples, in rabbinic sources *kashrut* regulations pay almost no attention to the selection of animals, for they take for granted the knowledge of which meat is edible and which is not. Instead, they focus on the definition of the participants in non-cultic slaughtering, and more generally on the proper ways to prepare and cook the food. Their concerns especially address issues of commensality, as the issue is no longer what Israelites can or cannot eat, but with whom Jews are allowed to share meals.[47] The function of separation, which was attributed to the dietary laws in the biblical texts, is then reinterpreted in a broader sense as prohibiting the sharing of meals with non-Jews.[48] To set the study of the biblical food

[44] That is, they bring only minimal "ritualizing" aspects of sanctuary practice into daily practice. Ritual consumption can also include the time, the place, a specific order, matters of commensality (questions concerning with whom one consumes), and methods of preparation, manners, or disposal (which make a minor appearance in the Hebrew Bible in Ezek 4:12–15).

[45] See, e. g., MacDonald 2008, 196–218; also see the discussions of Deirdre Fulton and Débora Sandhaus in this volume.

[46] This seems still to be the implied rationale of the recent volume of Rosenblum 2016.

[47] See, e. g., Rosenblum 2010.

[48] Furthermore, the focus of *kashrut* regulations extends to include bread, wine, and oil: products which can be defined as clean only if produced by Jews (see, e. g., Goodman 1990 on kosher oil).

prohibitions in their earliest contexts can therefore help correct the traditional view of the straightforward emergence of *kashrut* regulations from biblical texts. The complexity suppressed by the rabbinic view of the straightforward development from the biblical texts to *kashrut* consists in part in the attempt to identify an overarching meaning for the prohibitions of the specific animals or types of animals.

As a result, such a contextualization in the various periods of the historical development of the prohibitions serves to provide a framework to evaluate more precisely the processes of continuity and discontinuity between the different functions achieved by food prohibitions in ancient cultures. From this perspective, if the absolute value attributed to the biblical food prohibitions at a particular time differentiates them from the main tendencies observable in ancient cultures, this same value can nonetheless be compared with other purity regulations that are typical of sectarians movements of antiquity, such as Orphics, Pythagoreans, or Cynics, among whom dietary precepts function as part of a permanent way of life. Pythagorean doctrines are similar in some ways to biblical dietary rules in that they prohibit particular types of meat and fish (e. g., white rooster, red mullet, and others),[49] or specific organs of animals for purity reasons (e. g., genitals, bone marrow, heart, and brain).[50] Interestingly enough, these philosophies arise in polemics against the territorialized cult of the polis, and their followers conceived themselves as "citizen of the world" more than "citizen of the polis."[51] However, even in this case, significant differences emerge. Pythagorean and Orphic purity regulations do not focus exclusively on animals but also include abstention from certain kinds of vegetables (most notably broad beans). Moreover, in the traditions attributed to Pythagoras or Orpheus, condemnation of meat consumption is strictly associated with the critique of blood sacrifice. In this perspective, Pythagorean discourse is opposed to biblical prescription on quadrupeds, which seems to have been derived from, or shaped by sacrificial patterns, as we suggested above. Moreover, the scarcity of primary sources may point to a certain degree of difference between discourse and practice, as some prescriptions seem to have been circumscribed to cultic contexts.[52]

[49] Diogenes Laertius, *Vita Pythagorae* 8.19, 33–34 (= Aristotle, Fr 195 Rose); Jamblicus, *Protrepticus* 21; *Vita Pythagorae* 98. See on this Berthelot 2001.

[50] Porphyrius, *Vitae Pythagorae* 34, 42–43; Jamblicus, *Vita Pythagorae* 109; cf. Diogenes Laertius, *Vita Pythagorae* 8.19.

[51] See on this Angelini, forthcoming.

[52] Borgeaud 2013; on Cynics see Notario 2015.

5. Conclusions

Scholarship since the twentieth century dealing with the topic of biblical dietary laws has primarily remained focused on questions concerning the origins of the practices mandated by the laws as well as the historical setting for their textualization. Such a perspective is often accompanied by a search for a consistent structure in the formulation of the laws, and/or for an overarching explanation of their meaning: even the most recent scholarship seems not to have escaped this path.[53]

On the contrary, the more dynamic approach suggested here articulates formal concerns of organization related to the textualization of the laws within their historical development, which may have been largely based on current custom and cultic practice. We believe that such an approach accounts better for the inclusion of evidence from archaeology and comparative ancient Near Eastern cultures within the study of biblical foodways in antiquity, while at the same time it helps explain the so-called "gaps" in the formulation of the laws. Moreover, conceiving food laws as cultural representations that are "epidemiologically" transmitted, we suggest distinguishing the issues related to the origins of dietary laws from those concerning the composition and the transmission of the corpora containing such prescriptions. Within this perspective, we prioritize the study of the ways in which these texts functioned in their ancient literary and cultural contexts, which seem more complex than what is usually acknowledged. The study of such diversity therefore offers fruitful avenues for further research.

[53] Meshel 2008; Burnside 2016.

Animals in the Ancient Mesopotamian Diet

Prohibitions and Regulations Related to Meat in the First Millennium BCE

*Stefania Ermidoro**

In structured, hierarchical societies, central authorities formulate and supervise well-defined sets of cultural laws that justify and guarantee their power over the lower levels of the population – which, in their turn, accept the *status quo* by virtue of the same repertoire of norms. Because of their authoritative nature, these sets of behavioral and cultural regulations determine the identity of each community. In a society permeated with writing such as the Mesopotamian one, rules of behavior could be conveyed by different sources: their origins could be explained in wisdom or etiological poems, their applications were depicted in historical and royal texts, myths assigned them a divine aura, and religious protocols guaranteed their observance – not to mention law codes, where the consequences of breaking such rules were clearly stated. Explicit prohibitions, bans, and implicit ethical concerns appear in cuneiform tablets from the third millennium BCE onwards, providing us a glimpse of what was abhorred, accepted, or compulsory – allowing us at the same time to verify the changes that took place in attitude and sensibility.

Among the attested regulations, dietary restrictions are continuously present in the ancient Near Eastern sources, starting from the earliest Sumerian texts to the Late Babylonian ones. In the Mesopotamian culture, food is a powerful and potentially dangerous substance, since it not only comes in contact with the human body, but it also becomes part of it – and the physical body is the means through which humans can interact with the earthly and, most importantly, the supernatural world. Among the edible substances, meat has been considered throughout human history as a supreme food, the core around which the main

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meals and feasts can and should be arranged. Red meat, in particular, is usually associated with ideas of masculinity, power, and prestige – whereas vegetables hold a lower status, being mainly considered as mere supplements.[1] Meat is also broadly conceived as symbolically charged with meaning: despite its elite nature, in fact, it is the most likely target of vetoes and regulations, when compared with other edible substances.[2] The purpose of this article is to investigate the essence and purpose of prohibitions concerning meat in first-millennium Mesopotamian society.

Animals had a particular relationship with Mesopotamian gods. Several deities were in fact associated with creatures which embodied particular characteristics or functions: god-animal couples can be found in texts and images all over the Near East.[3] The most crucial role of animals in the ancient Near Eastern religion was, however, that of sacrificial victims to be offered to the gods, who ate them in their temples during ceremonies which took place on a daily basis.[4] In addition to the ordinary meals, gods also enjoyed rich banquets on the occasion of the major festivals of which the Mesopotamian religious calendar was full. The divine diet was certainly particularly rich in meat:[5] mostly unblemished fattened sheep and goats, but also other kinds of animals were offered to deities (pigeons and other birds, rodents, game, and even seafood). One notes the rarer presence of pig on the gods' tables, as well as the absence of draft animals from the divine menu. Pig sacrifices, however, though rare are still present in Mesopotamian religion (mostly in rituals with nocturnal or chthonic nature),[6] while the absence of horses and donkeys may be explained by the fact that this meat was not commonly eaten by humans either, being an "unconscious taboo": it was not, then, an explicit ban.[7]

The abovementioned special associations between gods and animals might have led to the development of special interdictions against specific kinds of meat that could not be offered to the gods. Such prohibitions are, so far, attested by just one text: a Late Babylonian ritual from Uruk,[8] according to which: "In the temple of Šamaš mutton will not be served to Šakkan. In the temple of Sîn beef will not be served to Ningublaga. Fowl will not be served to Bēlet-ṣēri; neither beef nor

[1] Cf. Fiddes 2004 and, with regard to the association between men and meat (particularly in contemporary Western societies), Sobal 2005.

[2] Fessler and Navarrete 2003; Fonseca 2015; Simoons 1994.

[3] Scurlock 2002a, 361–63; Watanabe 2002, 156.

[4] See Ermidoro, forthcoming; Nowicki 2014; Scurlock 2002b.

[5] Cf. Gaspa 2012.

[6] See Lion and Michel 2006.

[7] On the involuntary dietary restrictions, compared to the voluntary ones, which are present in all human societies see Beer 2010, 11–12.

[8] The text, TU 38, dates from the beginning of the second century BCE: it provides detailed instructions for the regular offerings, to be observed for the four daily meals set up in the temples of Uruk. See Linssen 2004, 132–38 and 172–83.

fowl will be served to Ereskigal."[9] Lambert has already explained these interdictions in the light of the attributes of the mentioned animals and the associations between the gods and the creatures from which meat would have been taken.[10]

Humans, thus, depended on animals not only for their sustenance and daily diet, but also for their religious life: because of such tight relations, and given the animate nature of animals, it is not surprising that these were subject to emblematic and symbolic reasoning, as it is witnessed by the written sources at our disposal.[11]

This article includes at first two introductory paragraphs in which I consider the Sumerian and Akkadian words referring to interdictions and their relevance in the realm of dietary regulation, and then present the texts dated to the first millennium BCE that provide the most useful information on the relationship between Mesopotamian people and meat, with a particular reference to its ban. Then, I discuss in detail the types of prohibited animals and the particular circumstances in which vetoes were observed, giving some practical examples particularly from the hemerological texts. Finally, the consequences of the infringement of dietary proscriptions are discussed, together with the countermeasures taken in order to appease the gods and regain a pure status.

1. The Notion of "Taboo" in First-Millennium Mesopotamia

Before considering which kinds of meat were prohibited and in which specific occasions meat-related bans were observed, it might be useful to recall how the notions of "taboo" and purity were conceptualized and expressed in the Mesopotamian vocabulary.[12]

My analysis of the terminology used in the cuneiform writing tradition to address these notions will be synthetic, due to the wide and recent bibliography already available on this topic.[13] My purpose is not only to list the three Akkadian

[9] TU 38, ll. r. 40–42.

[10] Lambert 1993, 199.

[11] On the animal symbolism in ancient Mesopotamia see Watanabe 2002.

[12] I use here the term "taboo" in its connotation of "Set apart for or consecrated to a special use or purpose; restricted to the use of a god, a king, priests, or chiefs, while forbidden to general use; prohibited to a particular class (esp. to women), or to a particular person or persons; inviolable, sacred; forbidden, unlawful; The putting of a person or thing under prohibition or interdict, perpetual or temporary; the fact or condition of being so placed; the prohibition or interdict itself. Also, the institution or practice by which such prohibitions are recognized and enforced" (*Oxford English Dictionary* definition). As the introductory pages and many papers published in this volume prove, however, such term should be only cautiously used in relation to ancient societies, including the Mesopotamian one.

[13] Terms for "taboo" have been discussed by many Near Eastern scholars: the last ones in order of time who addressed this issue have been Böck 2016 (esp. pp. 305–11) and Durand 2015, but see also Geller 1990, 2012, and previously Hallo 1985; van der Toorn 1985, 42–43.

terms used to express the idea of "prohibited action/thing," but to investigate also if and how these were applied to restrictions related to food.

1. Sumerian níg.gig = Akkadian *ikkibu*
As it has been already proved,[14] the semantic fields of these two terms are overlapping, though they are not exactly alike. The Sumerian níg.gig is a compound noun constructed with the terms for "thing" (níg) and an adjective which has the basic meanings of both "sacred" and "sick" (gig). Originally, it denoted something which should and could not be approached. In the *Sumerian Proverbs*, the term níg.gig appears in different contexts which depict improper behaviors, conceived as outrages committed against the gods or the customary practices of a developed human society.[15] It is also used, however, to indicate something that is set apart from the general consumption and, as such, reserved for the deities alone, as in the case of wheat flour.[16]

Such meaning evolved and was enriched with the passing of time, and in the first millennium BCE the term *ikkibu* referred to something "sacred," set apart, and hence taboo; to something incongruous, a direct affront to a god; or also to something conceived to be against nature, not conforming to the expectations.[17]

2. Sumerian azag = Akkadian *asakku*
The Sumerian term is considered to be an artificial back loan from the Akkadian *asakku*.[18] The Sumerian sign is written with two logograms: that for "pure" (kù) and the one for "god" (dingir). In origin, it indicated the treasure belonging to the temple, but in a translated meaning it also pointed to something which, being consecrated to a deity, was consequently withdrawn from profane use.

3. Sumerian anzillu = Akkadian *anzillu*
Originally, this term designated holy objects and substances handled in religious contexts; very soon it came to denote a "prohibited thing, transgression" in general. Mostly used in the Old Babylonian literature, it is less attested in the written sources of the first millennium BCE. According to Durand,[19] this is the term which specifically denotes a contact taboo.

Thus, among the Akkadian words used to define something "abhorred," *ikkibu* is the one that covers the broadest semantic spectrum. It transmits, in fact, the

[14] Geller 1990.
[15] See the instances collected by Alster 2005, 337–38.
[16] See the Proverb 3.169, edited by Alster 1997: "Wheat-flour (zíd-gig) is a 'reserved thing' (níg.gig) for his (personal) god."
[17] A fourth notion expressed by the Sumerian níg.gig was that of something causing trouble or difficulty, rendered into Akkadian with the term *maruštu*, "hardship."
[18] Geller 2012.
[19] Durand 2015, 3. See also CAD A, 153, s.v. *anzillu*.

notions of dread and holiness; it encompasses many of the connotations of the other two terms *asakku* and *anzillu*, but it goes even beyond them.[20] With regard to food, *ikkibu* is the only term used in the first millennium BCE in association with dishes and ingredients that must not be eaten.

It must be highlighted that none of these three terms conveyed an idea of wickedness in itself. In the course of time, however, the expression "to eat a taboo" became synonymous with "to commit an infringement" – thus assuming an entirely negative connotation. In such phrasing, the first two above-mentioned terms may appear: both "*ikkiba akālu*" and "*asakka akālu*" are in fact attested. Remarkably, these particular expressions are always used in a metaphorical sense, and they do not refer to interdictions related to food.[21]

Because food laws and dietary regulations are very often linked to the issues of cleanliness and purity, it is also noteworthy to mention the fact that there is no Akkadian term which denotes "pollution" as a separate entity.[22] On the contrary, several expressions are attested, which signify an unclean state caused by the infringement of a taboo. The adjective *lu'û* meant "soiled, dirty, unclean," and it was used especially in ritual contexts; (*w*)*aršu/maršu* designated an impure state. The two adjectives *lu'û* and *aršu* appear together in the *ezib* formulas of the Neo-Assyrian divinatory queries. In these texts, it was requested of the gods that they may answer the diviner, disregarding that he may be "dressed in his ordinary soiled garments" (*ginêšu aršāti labšu*) or may have "eaten, drunk, anointed himself with, touched, or stepped upon anything unclean" (*mimma lu'û*).[23] An additional expression was the negation *lā ellu*, "not pure": this referred to a state which rendered a person or a situation unfit for ritual or divinatory performances.[24]

2. First-Millennium Sources Providing Information on Dietary Regulation

Scholars from Ancient Mesopotamia never brought together all their thoughts on the moral code that was to be observed in one coherent compendium, nor

[20] According to VAN DER TOORN (1985, 42–43), among the Akkadian terms for "taboo," *ikkibu* was the closest to the idea of a deviation from a proper religious context and, as such, it especially referred to matters of cultic etiquette and moral code.

[21] BÖCK 2016, 309–10; GELLER 2012.

[22] This aspect of the Mesopotamian language differs from the Hittite cultural world in which not only the expressions *āra* = "suitable, correct, right" and *natta āra* = "not permitted, not right, not allowed" are attested (see COHEN 2002), but also the substantive *papratar* = "pollution" exists. Cf. FEDER 2016; MOUTON 2015 (the author discusses the establishment of taboos, including those related to food, as a consequence of the existence of the idea of the "sacred" itself in the Hittite religion). On the concept of "purity" in the Hittite religion see also MOUTON 2012.

[23] See, to mention just one example, SAA 4, 267, r. 1–2. Many more instances can be found in the volume by STARR 1990.

[24] For an analysis of these terms in their textual contexts, cf. FEDER 2016.

did they codify it in a systematic text or series. Thus, we are compelled to use a variety of written sources in order to understand their mentality. Cuneiform tablets show how the criteria of cleanliness and decency varied over time, being also tightly bound to each single place and event.

The fact that some animals were bearers of impurity was widespread knowledge: wisdom literature testifies to the fact that even the commoners knew that some bans were to be observed in order to maintain a state of cleanliness. The clearest example can be found in the so-called *Popular Sayings*[25] – a collection of aphorisms preserved on a large Neo-Assyrian tablet (ninth–seventh c. BCE). In this source, various anecdotes are arranged by subject, reproducing short animal or insect fables together with human stories. Four lines taken from the section that refers to the pig state:

"The pig is unholy (*lā qašid*) [. . .] bespattering his backside,
Making the street smell, polluting the houses.
The pig is not fit for a temple, lacks sense, is not allowed to tread on pavements,
An abomination to all the gods (*ikkib ilāni*), an abhorrence [to (his) god],
accursed by Šamaš."[26]

Here, thus, the flesh of the pig is not explicitly mentioned as food, but it is the animal itself which is depicted as impure and defined with the term *ikkibu*. The pig might have been abhorred by the sun god Šamaš because of its connection with the Netherworld and the chthonic deities, but one should also remark that pigs do not always have negative connotations in Mesopotamian texts: not only was their meat generally eaten by kings and common people, but pigs might also have positive features in omen literature – being considered in a few instances as bearers of good fortune and progeny.[27]

Prayers and ritual texts provide us with interesting information related to food prohibitions that had to do with etiquette. Humans had to be pure in order to approach the gods, not only in their external appearance (thus having no flaw in their body, being clean and dressed up with immaculate robes), but also "internally," having committed no crime and no other action that could bother the gods. Among the cultic prescriptions, one often finds the prohibition of eating leek, onion, and garlic because of their effects on the breath (one finds this ban, for example, in the *namburbî* series according to which abstinence had to begin three days before the ritual took place).[28] Other dietary laws were mentioned as well: it is the case of a so-called šu.íl.la prayer (lit. "lifted hand(s)-prayer") addressed to the goddess Tašmetum, in which one finds (ll. r. 45–46): "When you

[25] Lambert 1996, 213–21.

[26] VAT 8807, ll. r. iii 13–16.

[27] For the first millennium BCE, see the papers by Villard ("Le porc dans les sources Néo-Assyriennes") and Abrahami ("Le cochon dans les collections d'oracles de la Mésopotamie") in Lion and Michel 2006.

[28] Maul 1994, 39.

perform (the ritual), you must not eat garlic, cress, leek and pork: it is indeed forbidden (*lū ikkibu*)."[29]

More incantations, invocations, and instructions for ritual practices have been collected by the people of the Ancient Near East in large series, one of which was given the title *Šurpu* (its name, "Burning," refers to the cultic operation that was to be carried out while the recitations took place).[30] Although some parts of *Šurpu* have been dated to the Old Babylonian period, it was in the first millennium BCE that the series enjoyed its broadest distribution: the largest number of witnesses for this text has been found, in fact, in the so-called "Library of Ashurbanipal."

The second tablet of this series contains an invocation to the gods and goddesses, beseeching them to forgive and release the downcast patient who suffers as a consequence of his moral or cultic offences or of accidental contact with an unclean person. The term NÍG.GIG/*ikkibu*(*m*) is attested three times: once, the idea of offence against the gods is conveyed by referring to someone "who has eaten what is preserved to his god, who has eaten what is preserved to his goddess."[31] Then, the supplicant is said to be in pain "because of the evil taboo he has eaten" (i. e., "because of evil infringement he has committed").[32] Finally, the offence is committed against the city or city community: "he ate what was preserved for his city."[33]

References to possible contagion derived from having eaten at the table or having drunk from the cup of an accursed person are listed in ll. 102–103.[34] At the end of this tablet (II 185–192), the gods are asked to "extirpate the sins, the errors, the crimes, the offences, the oaths"[35] of the beseecher: interestingly, neither one of the terms for "taboo" appears in this list – a confirmation that none of the previously discussed words had an inherently negative connotation. In the third tablet, there is a list of other possible infringements of a ban: in this passage, among the inventoried offences one finds "to eat stolen meat."[36]

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[29] Ebeling 1953, 124–27.

[30] For the edition of this text cf. Reiner 1958.

[31] L. II 5: NÍG.G[IG] DINGIR-*šu i-ku-lu* NÍG.GIG ^{d}XV-*šu i-ku-lu*. The same expression "to eat what is taboo to one's god" appears in the fourth tablet, l. 4.

[32] L. II, 69: *ina* NÍG.GIG *mar-ṣi šá i-ku-lu*.

[33] L. II, 95: NÍG.GIG URU-*šú i-ta-*⌜*kal*⌝. Note that Geller 2012 has suggested to translate the term NÍG.GIG/*ikkibu* as "taboo" in these lines (hence "one has violated a taboo of one's god" and "violated a taboo of one's city:" he states that since "these acts are not punishable by law, they can be classified as 'taboos')."

[34] *ina* ^{giš}BANŠUR *ta-mi-i i-ta-*⌜*kal*⌝ / *ina* DUG.GÚ.ZI *ta-mi-i il-ta-t*[*i*].

[35] [*ár-ni*]-*šu ḫi-ṭa-ti-šú gíl-la*-[*ti-šú*] [*en-ni*]-*ti-šú* ⌜*ma*⌝-*ma-ti-šu*.

[36] L. III, 58: *ma-mit* UZU *šur-qí a-ka-lu*. The fear for contagion appears again at ll. III, 131–137: "The ban: to eat an accursed man's food, the ban: to drink an accursed man's water, the ban: to drink an accursed man's leftovers, the ban: to talk to a sinner, the ban: to eat a sinner's food, the ban: to drink a sinner's water, the ban: to drink a sinner's leftovers." The term for "ban" used in these lines, *māmītu*, originally referred to an oath and, possibly, to the maledictions linked to its infringement. In a translated meaning, *māmītu*, was also used to indicate a spell or a cause of disease: see Maul 2004.

These lines from *Šurpu* clearly show the mechanism of "contamination appraisals" at work: according to the Mesopotamian conceptualization of the world, "physical contact between the source and the target (of contamination) results in the transfer of some effect or quality (essence) from the source to the target."[37] In this case, eating prohibited meat could contaminate a person who in turn could become a source of contagion for other people, situations, or objects just by coming into contact with them. For this reason, a polluted person needed to be distanced from the cultic environment until he/she became pure again.

Not only the meat source (in the case of *Šurpu*, a possibly accursed person) but meat itself could turn out to be dangerous. After the ritual killing and the offering to the god(s), the meat of the sacrificed animal was available for consumption to those who carried out or attended the ceremonies, or else to the king himself and members of his family.[38] In the case of oracular requests, the answer obtained from the query was crucial: as it is inferable from a medical text,[39] ill-omened meat (that is, the flesh of those sheep from which an inauspicious omen came) must be avoided because it would cause severe illness.

Another important source for dietary regulations is represented by omen literature, a peculiar component of Mesopotamian erudition consisting of thousands of imaginable situations (both possible or impossible in the real world), each one accompanied by an interpretation. A passage of the text entitled *Šumma ālu ina mēlê šākin* ("When a city is set on a height") reads as follows:

"If a man, having risen to go to the house of his god, he touched the bolt: he is pure;
if a man *ditto* and touched Gula's dog: he is pure.
If a man *ditto* and he chews *kakkussu*-plant: he is pure;
if a man *ditto* and chews tamarisk: he is pure.
If a man *ditto*, washed himself, drank wine and ate: he is pure;
if a man *ditto* and put meat into his mouth: he is pure.
If a man *ditto* (but) he ate leek, cress, garlic, onion, beef or pork: he is not pure.
If a man *ditto* but he ate apple[?][40]: he is not pure."[41]

The context, here, is clear: in order to be able to approach a god, the Mesopotamian worshiper must observe some basic purity rules. He/she could eat and drink, but must pay attention to the foodstuffs that he/she ingested: meat was generally allowed, but not that of cows or pigs. Failure in the observance of these proscriptions would make him/her an impure man/woman, and as a consequence the god would not listen to his/her invocations and prayers.

[37] Feder 2016.

[38] On the symbolic significance of such redistribution see Milano 1998, 120–27. For a discussion on the profound meanings of the ceremonial practices linked to the offering, distribution and consumption of meat in Mesopotamia, particularly in third-millennium BCE Ebla, see Milano and Tonietti 2012.

[39] BAM 468, ll. 4–5.

[40] For this translation see Guichard and Marti 2013, 83.

[41] *Šumma ālu*, tablet 96 (K.4057), ll. 8–12.

Although considerable data can be inferred from the sources mentioned so far, the largest amount of information on first millenium Mesopotamia forbidden meat undoubtedly comes from a specific class of texts, i. e., hemerologies. These form a special branch of the omen literature that introduces the time element by linking various acts and circumstances to the cultic calendar.[42] Though a few exemplars are known already for the mid-second half of the second millennium BCE, most of the witnesses stem from the main cities of Assyria and Babylonia of the first millennium, up to the Seleucid time.[43] Allowed or prohibited acts are listed in these tablets according to the *fas* or *nefas* nature of each day, which influences the possibility to carry out specific or general actions.

Food taboos also appear in medical texts: these are linked to hemerologies not only since the consequences of breaking a taboo is often depicted as a sickness,[44] but also due to many literary cross-references.[45] A person who had lost divine protection by knowingly or unknowingly breaking a taboo was open to any kind of misfortune such as financial ruin, social problems, or sickness. Dietary regulations and banned meat as they appear in hemerological and medical texts will be discussed more extensively below.

Finally, one Late Babylonian tablet links food taboos to the Zodiac: at least one text has been edited[46] in which each zodiacal sign is associated with a stone, a tree, a plant, a date (month and day), and finally specific advice taken from hemerologies, mostly of the "not eat/drink" type. Here, the prohibition concerns fish and leek, milk, pork, and an unidentified food.

3. Forbidden Meat According to the Hemerologies

As already mentioned, hemerological texts are the richest in information on dietary proscriptions, and the ones in which vetoes directed towards the consumption of some animals (on specific days) most often appear. Interdictions are in fact attested ever since the earliest witnesses of this genre known so far, the Old Babylonian bilingual tablet H77:[47]

[42] The assumption that days are charged with an inherently favourable or unfavourable nature was common to all ancient cultures where a specific genre, that of hemerologies, developed. For a synthetic overview of the specific features of hemerologies in various past societies see von Stuckrad 2006.

[43] These texts have been recently published by Livingstone 2013. See also, however, the important additions and corrections to this edition made by Marti 2014.

[44] Marti 2015, 54–60.

[45] On the relationship between medical texts and food prescriptions see Ermidoro 2014, 82–86.

[46] BM 56605, edited by Heeßel 2000.

[47] The edition of this text has been provided by Cavigneaux and Al-Rawi 1993.

(Sum.) "He shall not eat fish, there would be *būšānu* disease
(Akk.) Fish shall not be eaten, it is unsound because of *būšānu* disease.
(Sum.) He shall not eat *raqqu* turtle or *šeleppû* turtle, the illness …
(Akk.) … shall not be eaten, it contains illness.
(Sum.) He shall not eat … flesh.
(Akk.) Pork shall not be eaten, because of …"[48]

As for the later first-millennium hemerological texts,[49] a thorough analysis of their contents shows that they record a total of twenty-three prohibited food and drinks, namely: beef, goat, beer, blood, cress, dates, dairy products, dormouse, fish, fowl, frog, fruit, garlic, leek, meat, milk, onion, pigeon, pork, rooster, water, wine, and the so far ambiguous *na-ad-du-ta*[?]. Thus, ten taboos are related to types of animals or meat, four to vegetables, four to liquids, two to fruit, one to dairy products, and one is unknown.

The food that incurs in the most frequent proscription is fish (being banned seventeen times), followed by leek (fourteen times), pork and beef (nine times), dates (six times), fowl and garlic (five times), onion and cress (four times), dormouse and water (two times), and then all the others, which appear only once. This result must not be taken as a rigorous, mathematical statistic: our knowledge is compromised by the partial and incomplete nature of the written sources.[50] However, the other sources mentioned in the previous paragraph confirm these data: looking at the ritual, medical, omen, and even literary texts,[51] the foodstuffs that are prohibited the most are again fish and leek (which appear often as a couple, for example in the Zodiac, while the leek is mentioned alone in *Šumma alu*). Pork should not be eaten according to the Zodiac, the already mentioned šu.íl.la prayer, and *Šumma alu* – while pig is defined an "abomination" in the *Proverbial Sayings*. Beef is also prohibited, as the species of the onion genus, in *Šumma alu*; garlic appears together with cress in the šu.íl.la prayer. Fish, garlic, leek, and cress are banned when one has to get ready for the *namburbî* ritual.[52]

Fish is, then, the most abhorred animal in the first-millennium Mesopotamian sources, but the reasons behind this prohibition are not easy to identify. Fish were certainly commonly consumed in human meals; they were set upon the royal table on the occasion of big banquets and were offered in temples for the gods' consumption.[53] In the Mesopotamian symbolic worldview, the fish

[48] H77, ll. 10–15.

[49] See Livingstone 2013.

[50] The long-awaited complete edition of the hemerological texts by Livingstone has, in fact, intensified the discussions on their problematic rather than decreased them; see, for example, Marti 2014, 2015.

[51] See, for example, the description of the demons who accompany Inana in her *Descent to the Netherworld*, l. 305: "they eat no fish, they eat no leeks." Cf. ETCSL translation: t.1.4.1.

[52] Maul 1994, 39.

[53] For a synthetic overview on fish consumption and processing in Ancient Mesopotamia, see Curtis 2001, 238–40, and the bibliography mentioned there. There is admittedly one case in

was a powerful creature, living in the silent and invisible realm under the earthly surface, the Apsû, and thus in contact with its king, the god of wisdom Enki/Ea. Therefore, fish might have been banned because of their liminal nature – although a more practical reason, due to their effect on human breath in cases of specific recipes cannot be ruled out. It has been suggested, in fact, that fish (and the other forbidden meat, as well) at that time was often consumed "rancid, thus giving out a strong smell of rot."[54] A specific, better explicable case of fish avoidance is represented by the first three days of Nisannu, when a festival for Marduk was celebrated. On this occasion, fish was likely avoided because, according to the *Enūma Eliš*, after their cosmic battle Marduk divided his enemy Tiamat in two parts "as a dried fish."[55]

In hemerologies, prohibitions related to meat are sometimes directly linked to a specific god, who is said to consider the consumption of that specific animal on that specific day as an *ikkibu*. Thus, dormouse is "taboo to Enlil" (one tablet has "Ninlil," Enlil's spouse) on the first day of Tašritu; on the seventh day of the same month, pigeon and rooster are "taboo to Bidu," fish and leek together are "taboo to Šulpa'e," and a stalk of leek is "taboo to Ennugi." Though the understanding of these connections is hampered by the fact that they only appear once in our sources, and even listed in a somewhat decontextualized frame of reference, in few instances it seems possible to identify the reasons behind these definitions.

For example, Šulpa'e is one of the gods that are considered "fish-eaters" – moreover, he oversees the growing of vegetables: thus, eating "his food" might have been considered an offense to him. The consequences of breaking such regulation, in effect, is an illness which was thought to be sent directly by the god: in medical texts, in fact, his hand is the cause of epilepsy.[56] Pigeons and rooster are taboo to Bidu, the "Gatekeeper of the Netherworld." Another text confirms the association between these birds and the realm of the dead: that is the so-called *Birdcall Text*,[57] a composition known from Neo-Assyrian tablets in which bird-calls were interpreted as short phrases with a mythological content, and each bird was thus linked to the deity to whom the phrase applied. In the *Birdcall Text*, the rooster is said to be "the bird of Nusku" (protective god associated with the night and the light), but also the "the bird of Enmešarra" (another god associated with the Netherworld), and his cry was rendered as *taḫṭaṭâ ana Tutu*, i.e. "You sinned against Tutu" (the god associated with the art of spells).[58]

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which a fish is explicitly said to be prohibited and not suitable for the gods' altars: the so-called *Home of the Fish* (cf. Civil 1961). This is, however, a peculiar literary Sumerian text dated to the Old Babylonian period, and the term n í g . g i g does not refer here to the entire animal category, but only to the m u r -fish, i.e. a stingray (see ll. 93–94).

[54] Guichard and Marti 2013, 84, n. 155.

[55] *Enūma Eliš* IV, 137.

[56] Cf. Delnero 2012, 286, § 6.

[57] Lambert 1970.

[58] Cf. STT 341//K. 10832, 2 and KAR 125, 15, both edited by Lambert 1970.

One of the most interesting facts of the proscriptions related to meat in ancient Near Eastern sources is that hemerologies also present some cases in which the generic term for "meat," *šīru*, is used without being referred to a specific prohibited animal, but rather to a cooking technique. The ban may thus concern "meat grilled on a skewer," "grilled meat," "dried meat," and "meat cooked on charcoal."[59] The first three are attested exclusively for the first six days of Tašritu, the seventh month – whose seventh day was characterized by complete fasting. This was a delicate moment within the cultic calendar, a preparatory period coinciding with the beginning of the second half of the year that has been associated to a "lent"[60] and that ended with purification rites to be performed the eighth day of Tašritu. The taboo for "meat cooked on charcoal" appears with an extremely high frequency exclusively in one hemerology, *Inbu bēl arḫi* ("Fruit, lord of the month") which collected regulations valid for one person only, i. e., the Neo-Assyrian king. It is possible that this particular ban went against the kindling of a fire, in general – since it could be sometimes expressed through the phrase "the shepherd of the numerous people will eat nothing that has touched fire." Two more non-hemerological cases are attested: "stolen meat" is defined as an *ikkibu* in *Šurpu* (as mentioned above), while raw meat is considered an abomination in the Sumerian literary text *The Marriage of Martu*.[61]

A specific characteristic of food prohibitions in ancient Mesopotamia is undoubtedly their transitory nature: the hemerologies themselves in fact invite people to eat the same foodstuffs that were prohibited on some other well-established occasions. On the first day of the first month Nisannu – a day in which fish was banned – it was actually recommended to consume beef, mutton, or fowl together with emmer bread and beer.[62] Scurlock has explained this as a way to express the desire for the opportunity to eat more meat in the year that was beginning.[63] Also the tenth of Ayyaru (the second month of the year) was

[59] See also the instructions sent to the Assyrian king by the exorcist Nabû-nādin-šumi, including purity rules to be observed before performing an exorcistic ritual: "Concerning the injunctions about which the king wrote to me, the king should observe the injunctions carefully: 'The king does not eat anything cooked, the king wears the clothes of a nurse'" (SAA 10, 275, 14-r.5).

[60] Casaburi 2000.

[61] For a translation of this text see ETCSL t.1.7.1. Although raw meat is not directly linked to a term for "taboo," it appears in connection with the word anzillu in the description of the god Martu at ll. 126–141, where he is described as the one who "eats what Nanna forbids" (anzil gu_7 ^{d}nanna-[kam], l. 128) and who "eats raw flesh" (uzu nu-cej_6-ja_2 al-gu_7-e, l. 136). On this passage and the food proscriptions that it contains, cf. also Charpin 2015, esp. pp. 35–38.

[62] Cf. SAA 8, 38, a letter reporting the text of a hemerology, ll. r.1–2: "He eats emmer bread and beef, he drinks emmer beer: when he speaks to god, king, mighty or noble, it is favourable for him." In another letter, SAA 8, 231, referring to an unknown month since the upper part of the tablet is broken, there are both positive and negative instructions: see ll. r.3–6: "He may eat emmer bread, he may drink emmer beer; he may eat beef, mutton and fowl; he may not eat garlic, leek or fish; afterwards, he should … happiness."

[63] Scurlock 2002, 394–95.

propitious for eating bread, beef, mutton, or fowl and drinking date wine.[64] Fish, usually quite a "dangerous" food, was actually recommended on the first day of the same month of Ayyaru, when celebrations for Ea were carried out – not only this: a pious worshipper should also bathe in fish oil instead of water that same day, obtaining as a consequence that "he will achieve attention (from the gods) and will quickly be granted mercy." This unusual recommendation could be explained because Ea was the lord of the Apsû, the ocean that flowed underneath the earth: these acts were thus meant to be signs of devotion towards him.[65]

4. Consequences and Countermeasures for Having Eaten Prohibited Meat

Hemerologies do not just list food prohibitions, they also provide us with information about the consequences of eating some specific animals on the wrong days of the year: as a matter of fact, the cases in which the outcome of the infringement of a dietary law was explicit are more than the ones in which the prohibitions were not "justified." The conscious or unconscious infringement of food laws, including those related to meat, had consequences for the sinner's health and/or lifestyle. Each ban was in fact directly linked to its consequences, mostly referring to illnesses but also to social disgraces. Gods acted as senders of diseases and misfortunes: for a person to fall ill, a superhuman being – god or demon – must have placed the ailment inside the body of the person, by physical contact (for example, by food).

Eating the same animal on different days did not always have the same consequences. Thus, eating fish could lead to either loss, sickness, or a bad reputation; when combined with leek, the consequences were misfortune, darkness of demeanor, or the sting of a scorpion – together with fowl, instead, it provoked jealousy. Fowl by itself led to headache and shivering. Pork would have as consequence *maškadu*-disease or lawsuit; if eaten with beef and mutton it caused headache – with beef, it would mean loss. Beef could provoke the "hand of a ghost" (i.e., sickness) or loss; "hand of a ghost" was also the consequence of eating pigeon or rooster on the wrong day; frog would also cause loss – misfortune or jaundice were instead provoked by dormouse. Finally, as for the cooking techniques, grilled meat caused leprosy or seizure by a demon; meat grilled on a skewer meant headache; dried meat led to a curse. No explicit consequences are described for "meat cooked on charcoal."

[64] Cf. the ritual text SpTU 2, 23, 8.

[65] This prescription is mentioned in the Assyrian tablets of the *Prostration Hemerologies*, particularly in the § 2, l. 5. See the edition of this text by Jiménez and Adali 2015, with their comments on p. 184.

All the consequences of eating prohibited meat on an unpropitious day according to the hemerologies are listed in the chart below. It should be highlighted that when the third column is empty, this is due not to a lacuna on the tablet (with the exception of the twenty-seventh day of Šabatu) but to the absence of explicit consequences on the tablet.

Day	Prohibited Food	Consequences	Source
I.1	Fish and leek	He will experience misfortune	OBH
I.2	Fish and leek	He will experience darkness of demeanor	OBH
I.3	Leek	He will experience darkness of demeanor	OBH
I.3	Fish	He will experience loss	BA
I.3	Fish and leek	He will experience darkness	BA Bors.
I.3	Fish and leek	He will experience darkness of demeanor	HN
I^{2}.2	Fish		OBH
II.9	Fish	Sickness will seize him	BA
II.10	*kintur*-frog	He will experience loss	OBH
V. 16	Fowl	He will sicken with headache and shivering	PH
V. 25	Fruit||Fowl	He will be rescued from headache and flu	PH
V. 30	Pork	The *maškadu*-disease will seize him	BA
VI.17	Fish		OBH
VI.18	Pork		BA
VII.1	Fish and leek		BA
VII.1	Dormouse	He will experience misfortune	HN
VII.2	Fish	He will have loss	OBH
VII.2	Grilled meat	Leprosy will clothe him	PH
VII.2	Grilled meat	Leprosy will clothe him	HN
VII.2	Beef, mutton, and pork	He will get a headache	HN
VII.3	Fish		BA
VII.3	Fish	Insolence and slander will fall on him	PH
VII.3	Fish	Malicious talk will fall upon him	HN
VII.4	Fish	His eyes$^{?}$ […]	OBH
VII.4	Beef, mutton, and pork	He will get a headache	PH
VII.4	Fowl	[Let him release a captive bird]	HN
VII.5	Pork	There will be a lawsuit against him	HN
VII.5	Grilled meat	A demon will seize him	HN
VII.5	Beef	There will be the hand of a ghost upon him	HN
VII.5	Meat grilled on a skewer	There will be headache for him	HN

Day	Prohibited Food	Consequences	Source
VII.6	Dried meat	A curse will get him	PH
VII.6	Dried meat	A curse will get him	HN
VII.7	Pigeon and rooster	The hand of a god will seize him	OBH
VII.7	Fish and leek	A scorpion will sting him	OBH
VII.7	Dormouse	He will sicken with jaundice	PH
VII.12	Beef and fowl		EH
VII.13	Beef and fowl		EH
VII.14	Beef and fowl		EH
VII.27	Pork and beef	He will experience loss	BA
VII.8	Pork		OBH
XI.12	Dairy products and meat		EH
XI.12	Dairy products and meat		EH
XI.12	Dairy products and meat		EH
XI.27	Beef	[...]	IBA
XII.12	Fish and fowl		EH
XII.13	Fish and fowl		EH
XII.13	Fish and fowl	People will wish for his fortune	PH
XII.14	Fish and fowl		EH
XII.20	Milk, flesh, and blood	The income of Šakkan (= shepherding) will be regular, the work of Uttu (= textile production) will proceed smoothly	PH
XII.27	Beef	He will experience loss	BA

Chart: Detailed list of all the prohibited animals according to the hemerologies, linked to the consequences of the infringement of each prohibition (when mentioned). Abbreviations for the sources are as follows: BA = Babylonian Almanac (including the Borsippean version); EH = Eclipse Hemerology; HN = Hemerology of Nazimaruttaš; OBH = Offering Bread Hemerology; PH = Prostration Hemerology.

It is not easy to identify the link between these causes and effects: though in a few non-meat-related cases the connection seems to be quite self-evident – it is no surprise that "his teeth will become loose" or "he will sicken with stomach disease" are listed as consequences for eating dates – literary puns, paronomasia, wordplays, or assonance, which we see often at work in omina,[66] do not work for food prohibitions in hemerologies. The only link that might be found is the one that connects grilled meat and leprosy: this particular food was defined in the text as a "taboo to Sin," and leprosy was described in medical text as being

[66] See, for example, Ermidoro 2016 for omina related to eating and drinking in dreams.

provoked by Sin himself. The god also had demons at his disposal who could be sent as his intermediate, to hit someone with his ailment.[67]

Medical texts provide us with further information with regard to the external appearance of a person who had more or less consciously committed an infringement. The treatise on diagnostic and prognostic omens entitled SA.GIG = *Sakikkû* ("Symptoms"), in fact, states that the "eating" of an *asakku* can be inferred from a constricted windpipe and the subsequent choking,[68] while having eaten an *ikkibu* caused the patient's repeatedly crying "my belly, my belly."[69] In the first case, then, the abominated item got stuck in the throat provoking chocking, while in the second instance it caused a stomach-ache.[70]

Clearly, thus, eating forbidden meat (and food, in general) would cause a state of inability to act, a loss of agency, and the suffering from bodily and mental illness. Luckily enough, should this have occurred, Mesopotamian people could become healthy again and gain back their status of purity by means of specific rituals that were especially devised to adapt to each individual case.[71]

It should not be forgotten that in the Mesopotamian ideological world evil could not be annihilated, especially after it had entered into someone's body: the only way to remove it was to transfer it to another carrier (a substitute living being or also a material object such as a figurine made of clay) and then to distance it, sending it as far away as possible.[72]

Interestingly, the most common use of animals in Mesopotamian religion, apart from being presented to gods as sacrifices and offerings, was precisely that of absorbing pads for evil. According to the first millennium written sources, in fact, dogs, pigs, birds, and fish were often used in rituals symbolically to divert evil. Animals, thus, became precisely those carriers who first assumed the wickedness on themselves (a result which was usually obtained by making them eat a loaf of bread in the shape of the enemy or some other symbolic food, or by having the patient touch them) and then brought this negative force away – to the Netherworld (in these cases animals could be killed and buried) or somewhere else (in these cases, animals were left in some wasteland, birds were released in the sky, or fish were thrown into rivers).[73]

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[67] See the examples given in CAD S, 36–37 s.v. *saḫaršubbû* a. Cf. also Scurlock and Andersen 2005, 232–33.

[68] Labat 1951, 84 l. 28.

[69] Ibid., 124 l. 22.

[70] These lines show the same "contamination appraisals" at work, as discussed also above with regard to the *Šurpu* text. Cf. Feder 2016.

[71] For example, the already mentioned *Šurpu* ritual, or also the *Nambûrbi* (for which see Maul 1994) or, if the person who ate the prohibited meat was the Assyrian king, the *Bīt-rimki* ritual (cf. Ambos 2012).

[72] Cf. Ambos 2012.

[73] See, for example, the already mentioned letter SAA 8, 38 which reports a purification rite involving two doves and a fish (ll. 10–12) to be performed on the first day of the first month of the year, Nisannu. Interestingly, this same ritual is described in a Neo-Assyrian tablet (A 522,

5. Concluding Remarks

In many societies, modern and ancient alike, behavioral and moral laws are needed in order to define proper human behavior, differentiating the seemly from the unfitting, the civilized from the intolerable. Conscious and unconscious food bans and self-regulations build the cultural identity of each human community, creating boundaries with the "other" and instilling in the members of that group a sense of righteousness.[74] Rules linked to the eating of meat are particularly strict because of the ideological and symbolical implications hidden behind the killing and consumption of living creatures.[75] In first-millennium BCE Mesopotamia, such rules seem to have been effective almost exclusively in a religious context, and even more so, for special rites or religious performances.

The observance of rules, including the dietary ones, was crucial for positive maintenance of the mutual relations between worshippers and deities: any act directed towards the Mesopotamian gods had to be done properly. Conversely, by acting according to the rules, human worshippers could create that balanced reciprocal relationship which would ensure the functioning of the basic principle of *do ut des*. Thus, well-defined sets of laws and regulations were absolutely essential in order to avoid any possible failing of rituals.

Ancient Mesopotamian prohibitions related to meat have been explained from a materialistic perspective: certain ingredients would have been banned for reasons related to personal hygiene,[76] and especially due to their effect on human breath. Such concerns were certainly present in the Near Eastern religion because in order to approach a god, humans had to be pure and clean in every sense. Yet, proscriptions directed toward meat seem to have been related more to concerns of etiquette.[77]

In first-millennium BCE Mesopotamia, purity was not an absolute concept, but it depended on the time of the year and the specific circumstance. Pigs might have been considered impure as an animal, but the act of eating them, as well as

ll. r. iv 8–24) that collects various therapeutic and ritual texts connected by shared interest in ensuring a person's happiness, success, and favourable treatment by the gods. The ritual text was edited by Schwemer 2013.

[74] Beer 2010.

[75] For ancient Mesopotamia, see Milano 1998.

[76] On the notion of personal cleanliness and its special connection to the religious practices, see Sallaberger 2007, 2011.

[77] Van der Toorn has been the first to highlight in a strong and consistent way the special link between dietary laws and etiquette. See, for example, van der Toorn 1985, 10: "Detailed descriptions of cultic ceremonies focus on what can be termed the etiquette, the seemingly arbitrary rules of conduct to be observed in the intercourse with the gods. As such the lists of tabooed food, sacred animals and the like are founded on the ethical command to worship the god in a proper manner." Cf. also ibid., 21: "These texts establish rules of conduct, but on a level different from that of the moral code. Their concern is not the choice between right and wrong but between proper and improper, seemly and unseemly, fitting and unfitting."

eating fish, beef, or any other meat was not prohibited *per se,* neither was this act unseemly in itself. It became so, however, whenever it was carried out under the wrong circumstances. It was not a matter of moral code, then, but of etiquette.

None of the ritual, omen, medical, or hemerological texts discussed above declares a specific addressee of the dietary laws or bans: a generic "man" is the subject of the sentences, with the voluntary purpose of conferring a universal validity upon the given rules. Every individual must observe them, regardless of his/her social status: what was important, instead, was his/her intention to maintain a state of cleanliness, in order to be able to approach the gods and stay safe and prosperous.

Meat prohibitions in first-millennium BCE Mesopotamia were a transitory reality. There were no permanent, unchangeable food regulations which remained valid across the Near East but, instead, we see multiple well-defined, temporary prohibitions which targeted different members of the society in different social contexts.

"Food Prohibitions" in Pharaonic Egypt

Discourses and Practices

Youri Volokhine

The topic of dietary prohibitions in ancient Egypt needs to be explored from at least a twofold perspective: 1) the priestly theological view; and 2) actual dietary practices. Articulating these two types of evidence raises a number of issues: as a matter of fact, there is a significant gap between the realities of diet and discourses about food in Egypt.

1. Theoretical Approach

When dealing with prohibitions, the word "taboo" comes to mind. This word belongs to a series of terms gleaned by anthropologists in the nineteenth century from non-Western cultures (such as *totem*, *mana*, *potlatch*, and so on) and functioned as an incantatory vocabulary.[1] The structuralist approach, especially in the wake of Claude Lévi-Strauss's works, has helped improve this conceptual apparatus – one which was informed by evolutionist thinking – first of all by deconstructing the place and meaning of totemism (itself often connected with the concept of taboo) within classification systems.[2] It is also within this renewed theoretical framework that Mary Douglas sought to reevaluate prohibitions, mainly those of a dietary type.[3] Taking as an example the prescriptions of Leviticus, Douglas argues that it is possible to identify a classificatory logic at work, in which some animals are taxonomic aberrations that cannot be classified, and are therefore prohibited for consumption. Moreover, she also develops an emic approach in later works, where she argues that some dietary choices are heavily invested in issues of identity. Later interpretations of food and diet, while impacted by these works, also develop new approaches. Some scholars, like M. Harris,[4]

[1] Mauss 1968, 40–42; Frazer 1875–1889; Radcliffe-Brown 1939; Steiner 1956; Volokhine 2019.
[2] Lévi-Strauss 1962; Descola 2005, 202–40.
[3] Douglas 1966.
[4] Harris 1985.

adopt a materialistic approach, privileging economic and ecological aspects, yet often to the neglect of symbolic or cultural data. Yet those data are particularly significant, as M. Sahlins and S. Tambiah among others have shown.[5]

In contemporary societies, public discussions are regularly fueled by topics like alimentary concerns, ethical issues linked to the industrial production, or the consumption of meat,[6] as well as dietary prohibitions of a religious nature. Among other factors, the new visibility of Islam in Western societies has brought the latter topic back to the center of discussions.[7] In this context, debates surrounding the pig, in particular, usually carry identity issues that have been essentialized, and which are exploited by various political groups that use them to fuel their own discourses.[8] As a matter of fact, the oversignified connection between dietary prohibitions and identity issues has become a defining feature of contemporary discussions. In order to dispel any possible ambiguity, I will propose here that the question of "dietary prohibitions" in ancient Egypt is not essentially linked to matters of identity, whereas this idea instead emerges in the Greek discourse. Additionally, the anthropology of diet shows that one needs to take into account symbolic and religious as well as socio-cultural data, and combine them in the analysis. What one finds in Egypt is a classificatory system that is specific to this civilization, and the primary issue is to understand its construction rather than its *raison d'être*. It is a system that proceeds from priestly norms and that essentially applies to the realm of the temples.

Ancient Egyptian thinking forms classificatory systems that may lead to a given species being removed from an approved diet. Such decisions are based on various grounds. They may originate from a socio-cultural perspective, attributing a favorable or unfavorable position to an animal; moreover, they often proceed from a priestly way of thinking that defines categorical imperatives of purity and tends to eliminate impurity (outside of the temple, the tomb, etc.). The concept of purity is fundamental to Egyptian religious thinking, where it is designated first and foremost by the term *w'b*.[9] The term denotes a quality that applies first of all to issues of access to the temple, to funerary contexts, or to the afterlife. It stands in opposition to the broad category of repugnant things, among which are excrement, filth, worms, spilled blood, or even (this time from the sphere of morality) lies, crimes, etc. The classification of an object in the category of impure things is not, however, definitive: it is more a delineation that is established in relation to a specific time or specific circumstances; and the classification as an "impure thing" is not necessarily determined by the intrinsic features of an object.

[5] Sahlins 1980, 216–25; Tambiah 1969, 1985, 169–211; Poulain 2012.
[6] Ferrières 2002.
[7] Fall et al. 2014.
[8] Birnbaum 2013.
[9] Meeks 1975; Quack 2013.

This fact is crucial for understanding what is at stake within the dietary system. In order to safeguard things that are possibly concerned with the *w'b* purity, Egyptian religious thinking provides certain measures. It defines notions that allow one to conceive of the protection and sheltering of everything that could contaminate purity. The term used to qualify those elements that endanger the preservation of purity is *bwt*. This concept applies to everything that repels and horrifies, and must therefore be removed or put aside from the gods; it is variously translated with "abjection," "abomination," and sometimes "taboo"; however, "aversion," which (from an etymological perspective) involves the idea of diversion, aptly renders its meaning (*AnLex* 77.1237). The notion of *bwt* has been the subject of several studies, especially by P. J. Frandsen.[10] In the priestly world, that which is considered to be *bwt* must be removed from before the god, the temple, or the priest. It is in this context that dietary restrictions may occur. It is important to emphasize that everything known about dietary restrictions must be considered in the context of a specific time (i. e., a fixed period) and/or place (i. e., a specific region and/or temple area). In effect, there is no dietary prohibition in Egypt that has a *general* value, being either collective or permanent.

It is the Greek authors who first conceptualize Egyptian attitudes toward food. They observe the Egyptians' avoidance of animals or of specific animals in specific circumstances. By highlighting these facts, the Greeks contributed to the invention of the debate about Egyptian dietary prohibitions, a debate which was viewed from the start from a comparative perspective.[11] Scholarship is still influenced by these discourses, which, by inventing new issues, have carried over the centuries. One can think here, as a first example, of the pig.[12] It is Herodotus (II, 47) who declares the beast unclean for the Egyptians, from whom the idea proceeds that they tended to avoid it. Herodotus' view, while relying on some evidence, nevertheless stands in tension with the view offered by the Egyptians themselves, who may occasionally be ill inclined towards this animal but usually eat its flesh nonetheless. The idea that the bean would be unclean in Egypt likewise proceeds from Greek ideas, which interpret this plant according to Pythagorean categories (II, 36);[13] yet no evidence can be found in the Egyptian sources to corroborate this assertion. The Greek discourse on Egypt also pays considerable attention to the priest, who is guided by strict prohibitions. For Plutarch, Egyptian priests abstain from leguminous plants, as well as from mutton and pork, because these foods generate abundant excrements or excretions (*Is. Os.*, 352F). This discourse builds on Greek ideas about diet, which are characterized by dietetic concerns that are foreign to Egyptian thinking. Plutarch is particularly concerned with these questions. Everything, or almost everything, becomes the

[10] Frandsen 1986, 1998, 1999, 2000, 2002–2003, 2004, and 2010.
[11] Borgeaud 2004.
[12] Volokhine 2014, 41–57.
[13] Darby et al. 1976, 682; Bras 1999, 2001.

object of temporary prohibitions from his point of view: the water of the Nile, leguminous plants, onion, wine, salt, ewes, pigs, and fish.[14] This Hellenic vision sometimes leads to the conclusion that the Egyptians were especially devout, entirely devoted to the observance of strict dietary rules.[15] When they are repositioned in their Egyptian context, however, each of these data only corresponds to *temporary* configurations, which, in addition, are mainly linked to the rules of priestly purity. The ambiguity of these rules in Egypt even becomes a *topos* in the Greek discourse: this network of imperatives contradicting each other repeatedly leads, according to Greek authors, to fights among neighboring populations that can take the form of small civil wars that were frequently concerned with the status of sacred animals.[16] Here again, such discourses do not directly reflect a particular social reality, although it is possible to observe hostile features in some late inscriptions that may result from this sort of interreligious conflict.[17] Eventually, the Greeks also compare the dietary practices of the Egyptians with those of the Jews. In this context, the conception of Pharaonic-period customs leaves no room for differences between the habits of the priests and those of the rest of the population. Egyptian dietary prohibitions are consistently overvalued, to the point that according to Celsus (quoted by Origen), not only the priests but even all the Egyptians abstain not only from pigs, but also from goats, ewes, oxen, and fish (*Cels.*, 5.41.8).

In short, we can observe that the Greek tradition tends to maximize prohibitions in Egypt; and this may have in turn led some Egyptologists to overestimate this issue.[18] The development of zooarchaeological studies has made it possible, however, to moderate these opinions.[19]

2. Tastes and Distastes, Avoided Aliments, and Substances

For Egyptian religious thinking, some aliments are emblematic of purity, such as bread or beer, while other substances are considered repulsive (filth, excrement). This well-structured, polarized system reflects a dietary ideology, denoting tastes and distastes, compatibilities and aberrations.[20] The ideology itself is predominantly documented in the following sources:

[14] Hani 1976, 311–30.
[15] Volokhine 2014, 39–245.
[16] Ibid., 218–23.
[17] Traunecker 1984.
[18] Montet 1950.
[19] Ikram 1995, 5–39.
[20] Lévi-Strauss 1965.

- Funerary texts (*Coffin Texts*, *Book of the Dead*), which mention aliments that were avoided because of their repulsive character.
- Religious ephemerides from the New Kingdom (*Calendar of Lucky and Unlucky Days*), mentioning aliments whose consumption is prohibited during specific days (P. Sallier IV = p. B. M. EA 10184, Nineteenth Dynasty; P.Cair. CG 86337, Twentieth Dynasty).[21]
- Ptolemaic lists belonging to the genre of religious geography (*Monograph of the Nomes*), which provide a canonical summary of the "sacred matter" of the provinces.
- Occasional enumerations of *bwt*-prohibitions, which are documented in various sources from Greco-Roman times.

The issue of the possible abstention from food in daily life is very difficult to assess: in effect, the religious sources predominantly document the world of temples, gods, ritual times, and so on. In general, we have no information regarding the existence of collective dietary restrictions proceeding from religious instructions. And in any event, such restrictions are in no way permanent. In the ephemerides of the New Kingdom, the species excluded are relatively few. They mainly comprise various sorts of fish, some plants, and sometimes birds, all of which are excluded from the table on a specific day; the dietary prohibitions mentioned are especially concerned with the first month of the *akhet*-season (eleven days in total). From there it becomes possible to hypothesize a link between the season of the water rise – which corresponds to a beneficent renewal – and alimentary restraint. One may suppose that if the fish are specifically avoided during *akhet*, it may not be for their impurity but rather because of their significant link with new waters and the simmering of life.

The so-called *Monograph of the Nomes* (*Edfou* I^2, 329–344)[22] is a canonical summary of the scale of the land that systematically mentions a *bwt*-prohibition for each nome.[23] When an animal is mentioned, one may suppose that the corresponding species – when it is edible – was locally protected and therefore implicitly excluded from the table. Yet no clear dietary prescription is usually given. The only explicit prohibition concerns the fish in the Latopolite nome of Upper Egypt. Still, other documents pertaining to religious geography suggest that the lists of priestly prohibitions were in fact much more developed. The evidence at our disposal is unequal and scattered. This is the case, for instance, in the Jumilhac papyrus, where twenty *bwt*-prohibitions are mentioned in connection with the nome, although only one refers to a single dietary matter: "(it is *bwt*) "to eat the flesh of any torn beast" (XII.20).[24] Honey is mentioned also

[21] Leitz 1994.
[22] Leitz 2014; Waitkus 2014; Osing 1998, 230–47.
[23] Aufrère 1986, 1998.
[24] Wilson 1998, 837; Vandier 1962, 123.

as being prohibited in the sixth nome of Upper Egypt, a fact stated in Dendara and Edfu.[25] This prohibition of honey, which is not mentioned in the *Monograph of the Nomes*, presumably goes back to the consubstantiality of this matter with Hathor, who is herself sometimes qualified as a "bee" (*Dendara* IX, 27.13).[26] In a list of prohibitions from Philae, only "pure" (*w'b* beings can access the sanctuary,[27] and this state requires the abstention from eating all sorts of things, among which are some plants,[28] and to avoid some animals – not all of which, however, have dietary implications. By contrast, in Esna a list specifying the prohibitions related to entry into the temple in cases of impurity does not contain any clause possibly linked to dietary matters.[29]

Another religious source casts some indirect light on this issue. Mentioned in the formulas of imprecation against Seth (p.Louvre 3219) is a series of misdeeds committed by Seth against the gods of Egypt.[30] Mentioned among these infamies are fishing in the Fayum lake, having the intent to "devour Mafdet" before Mut and Bastet, eating fish before the Eastern *bau*, eating ram in the temple of Ammon in Thebes, taking away the *menhep*-lettuce in Mendes, and eating fish in Heliopolis (p.Louvre 3219, C 23–36). One senses here implicitly a series of local religious prohibitions that were trampled upon by this ill-intentioned god.

The Jumilhac papyrus and the list from Philae thus allow for the conjecture of the existence of multiple prohibitions specific to the temples of each region, a point obscured by the list from Edfu. This gap in the documented evidence is regrettable, as it does not permit us to form a general picture on the scale of all Egypt of the prohibitions pertaining to animals and plants. It is difficult to determine precisely in which period this exclusion system was established at the local level. One may surmise, however, that the significant development of the animal cults in the Late Period had some influence on that issue, in virtue of what Vernus and Yoyotte called the "rejaillissement sur les congénères" of the sacred character of an animal valued by the local theology in a province.[31]

There are indisputably some points of convergence between the ephemerides of the New Kingdom, the information derived from late priestly sources, and classical sources. The nature of these documents differs, and the religious landscape they illuminate is not the same: the ephemerides are not particularly concerned with the mythological data that belong to the specifics of each nome (and which are expressed later); the priestly monographic lists never mention dietary prescriptions linked to the calendar; and classical sources are partial and

[25] Frandsen 2006, 197–201; Spieser 2014, 284–86.
[26] Derchain 2008, 302–5; cf. Fissolo 2014.
[27] Junker 1959, 152–53.
[28] Aufrère 1986, 1–32.
[29] Sauneron 1962, 340–49.
[30] Altmann 2010.
[31] Vernus and Yoyotte 2005, 33.

incomplete. It remains useful to compare these sources without deriving generalizations about the dietary evidence, the reality of which escapes us.

3. Some Aliments Occasionally Avoided: Fish, Small Cattle, and Pigs

Ritual concerns sometimes imply avoiding some foods. The symbolic diet of the dead, the diet of the priest, and the royal diet are especially relevant in this regard. I would like to briefly review a few cases here.

3.1. Fish

The explicit mention of a dietary restriction concerning the king is found on the Abydenian stele of Ramses IV (Twentieth Dynasty, Cairo, JdE 48831). The king enumerates a series of emblematic misdeeds that he rejects, specifying: "I have not eaten my *bwt*-aversion" (*KRI* VI 23.11 [l. 16]). There are few sources that can enlighten us regarding the constraints that may have weighted on royal diet, for the king was subjected to specific rules of ritual purity. One of the few cases that explains the palace practices with regard to prohibitions that constrained consumption appears on the stele of Piânkhy (Twenty-Fifth Dynasty, Cairo, JE 48862). According to the text of the stele, Piânkhy, meticulous about the application of rules, appears to use the high regard for prohibitions for the (thinly veiled) purpose of humiliating the vanquished. In effect, it is under this pretext that he refuses them access to the palace:

> They did not enter the Palace, because they were impure (*'m'*) and ate fish: it is a *bwt*-aversion for the Palace. King Nemrod, as for him, entered the Palace, because he was pure and did not eat fish.[32]

The consumption of fish is highlighted here, and it is also the object of a specific prohibition.[33] It induces a state of impurity forbidding entrance into the palace, a protected space that can be compared to the temple.

In funerary contexts, other exigencies of ritual purity lead to the avoidance not only of fish, but also of other animals. The final notice of chapter 148 of the *Book of the Dead* must therefore be recited only while the person is in a state of "being pure and spotless, having not eaten cattle (*'wt*) and fish."[34] Likewise, the prescription in chapter 64 specifies that "this formula be read while being pure (*w'b*) and spotless (*twr*), having not eaten cattle (*'wt*) or fish, and having not had

[32] Grimal 1981, 176–77; § 26, pl. 49, 147, 153.
[33] Gamer-Wallert 1970; Brewer and Friedman 1989, 17–19.
[34] Naville 1886, pl. CLXVII; Barguet 1967, 208.

intercourse with a woman."[35] As in the stele of Piânkhy, the latter formula joins two distinct categories: diet and sexuality. Both pose a risk of compromising a state of ritual purity.

There is, in principle, little doubt that fish were abundantly consumed in Egypt. Although recent studies based on the isotopic examination of mummies from the Musée des Beaux-Arts in Lyon would appear to point to a limited consumption of fish, it is actually difficult to draw general conclusions based on observations made on a relatively small group of individuals (forty-five mummies).[36] On the contrary, written sources show that fish was especially enjoyed in the New Kingdom, for instance in Deir el-Medineh, and even in the palace of Tell el-Amarna.[37]

Fish occasionally appear among the offerings brought to the gods, as is shown for example for the New Kingdom by papyrus Harris I,[38] but they were also susceptible to practices of food avoidance. If scenes depicting fishing and the preparation of fish are well attested, it is also clear that, for some periods – especially the Old Kingdom – and certain contexts, one can observe an absence of fish in representations of offerings: sometimes gods, kings, and the dead do not touch them.[39] Fish can even become emblematic of rejected food: "eating mullet" sometimes occurs as a transgression of a divine prohibition (P. Leiden I 346, III.8).[40] This may be due to several factors. On the one hand, there is the issue of dietary hierarchy: fish – like pigs – are a modest food from everyday life, which does not necessarily fit the dignity of a prestige meal. On the other hand, mythological factors may occasionally denote fish negatively and thus remove them temporarily from the diet. Several mentions in the *Calendar of Lucky and Unlucky Days* link the abstinence of fish with a (unspecified) cause related to the cult of Sobek – a big devourer of fish – and especially with the mythological events associated with the month of Thoth (I *akhet*-season 22) (Cairo Calendar r°VI, 4–8).[41] One of the myths recounted in the *Calendar* mentions that fish and birds are the products of Re's vomiting after he swallowed the gods; having fallen in the water, the divine vomit metamorphoses into fish, whereas the *bau* take the shape of birds. One can observe here that this dietary restriction does not imply the notion of the fundamental impurity of these animals, but rather that of their consubstantiality with divine matter. This sort of relation is one of the main configurations invoked by the Egyptians in order to provide a religious motivation for the local *bwt*. On the twenty-second day of the same month of Thoth, a

[35] Budge 1898, 141–42; Barguet 1967, 105.
[36] Touzeau et al. 2014.
[37] Brewer and Friedman 1989, 15–16.
[38] Grandet 1994, I:250; II:98 (n. 94–97).
[39] Yoyotte 2013, 564–65.
[40] Bommas 1999, 123–35; Volokhine 2014, 161.
[41] Bakir 1966, 11–12; Aufrère 1998, 76.

similar prohibition is expressed, and even enlarged: on that day it is forbidden to eat any birds, or even to use fish oil to light a lamp. The *Calendar* further mentions a prohibition on eating fish on the twenty-eighth day of the fourth month of *akhet*: that day corresponds precisely to a feast for the dolphin goddess Hatmehyt.[42] The same prohibition also concerns the twenty-ninth day of the same season. Still according to the *Calendar*, it is prohibited to eat fish (*rmw*) on the day of the feast of Sobek of Crocodilopolis (I *akhet* 11), or to eat dry bread on that day. It is also forbidden to eat fish on the seventh day of the fourth month of *akhet*.[43] Finally, on the fourteenth day of the first month of the *akhet*-season, it is forbidden to eat of the *siou*-fish.[44] The month of the rise of waters is therefore clearly the one where people abstain from fish, implicitly linked to the new waters.

The idea that fish is suspect because it is linked to the devouring of Osiris' member is Greek, and it is not clearly attested by Egyptian texts. Specific cases of ritual execration where fish (similarly to other hunted animals) play the role of the enemies have no link to dietary prohibitions.[45] Prohibitions concerning fish – whether eating or fishing – occur fairly frequently in the list of Edfu and its parallels.[46] The reasons given are always mythological, sometimes possibly in connection with Osiris, sometimes because the fish refers to the figure of the local god. The overall picture that emerges from this documentation is fairly complex and ambiguous, presumably because of the conceptual richness of fish in the Egyptian imaginary.

3.2. Small Cattle

The explicit avoidance of cattle figures, in particular, in the measures for ritual purity indicated in chapter 64 of the *Book of the Dead*. A prohibition on the *'wt*-cattle is probably mentioned for the ninth nome of Upper Egypt in the papyrus of Tanis.[47] In the list of Edfu, a prohibition concerning the goat (*'r'r*) in the Mendesian nome is mentioned, which can be related with the Greek tradition as well as with the data about the cult of Banebded (since the "ram" Mendes takes the form of a male goat in the Late Period).[48] That being said, an explicit prohibition about sheep is not directly attested. Nonetheless, the animal does not figure on offering plates, and its domestic role is for dietary purposes, so some scholars have suggested the existence of a "taboo" on sheep.[49]

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[42] Leitz 1994, 187.
[43] Ibid., 155–56.
[44] Ibid., 437.
[45] Sauneron 1962, 25; Von Känel 1984, 151–54.
[46] Aufrère 1998, 104.
[47] Petrie and Griffith 1889, pl. X, frag. 11, col. 4; Leitz 2014, 84.
[48] Volokhine 2011 (Edfou I², 334.7; Leitz 2014).
[49] Herodotus 2.42, 37, 81; Plutarch, *Is. Os.* 352F; Darby et al. 1976, 220–21; Vernus and Yoyotte 2005, 553–56.

3.3. The Pig

While the prohibition of the pig is the subject of a Greek discourse, no explicit prohibition against its consumption is attested in the Egyptian sources. Nonetheless, the pig is clearly associated on the mythological level with a *bwt*-aversion as early as the *Coffin Texts* (*CT* II, 343–44; cf. *CT* II, 362c). The myth, which is again attested later in the *Book of the Dead* (ch. 112),[50] asserts that Horus, after being injured by a Sethian black pig, develops an aversion to the animal from this episode, even though the texts affirm that it was previously sacrificed to him. However, it is impossible to draw a prescription to abstain from the pig's flesh from this myth; on the contrary, archaeology has amply demonstrated that it was widely eaten. That said, the pig is generally excluded from offering tables, except for specific ritual circumstances mentioned in some texts since the Twentieth Dynasty and later on in Ptolemaic texts.[51] Evidently, the pig provided meat that was appreciated, although its place among "low level" cattle set it apart from the élite culinary apparatus. The mythological link between the male pig and Seth may also have contributed to the disdain for the animal in the priestly world, at least from the time when the process leading to Seth's identification with the embodiment of a largely evil principle was activated. Still, no prescription on avoiding the animal is attested in the priestly monographs, or elsewhere for that matter. On the contrary, the sacrificial killing of pigs for Sekhmet is mentioned in Ptolemaic texts.[52]

4. Agricultural Hierarchy and Dietary Preference

Another dimension of the issue at hand concerns the demotion of a number of species in the agricultural hierarchy affirmed by the élite on account of their little-valued status. Some animals, like the pig, although they are abundantly eaten, only figure discretely in the funerary iconography. If pigs are not represented in the scenes from the mastabas of the Old Kingdom, it is presumably because these animals are not elements of prestige, contrary to the bovines which dominate symbolically over the herd.[53] The links between this classificatory system and priestly thinking – which from at least the Middle Kingdom seeks to represent male pigs negatively – are not established. This situation does not point to "dietary prohibitions" strictly speaking, but rather to choices, preferences, interest, and disinterest in relation to some animals. Nonetheless, during the Eighteenth Dynasty, especially in the region of Thebes, the depiction of pig in tomb scenes

[50] Cf. Volokhine 2014, 104–26.
[51] Vernus 2012; Volokhine 2014, 192–99.
[52] Vernus 2012; Volokhine 2014, 192–99.
[53] Moreno Garcia 1990, 2001.

is no longer avoided. The agricultural hierarchy places cattle on the top, followed by goats and sheep, while pigs and donkeys come last.[54] The alimentary impact of this system on society as a whole is difficult to evaluate, yet it seems clear that oxen represent the preferred animal in contexts of prestige, in addition to being the sacrificial animal *par excellence*.

Alimentation is based on social hierarchy; the diet of the court and the élite was surely more varied than that of the rest of the people.[55] One must also take into account differences between meats from livestock and from game, the latter symbolizing, for some, the enemy. The case of the animals "eaten in the myth" – such as the hippopotamus, the turtle, etc.[56] – testify to an imaginary of diet that goes beyond the usual categories of edible animals. One should also remark in this context that the process of transforming a live animal into butcher's meat involves several instances of selection and exclusion because the rules observed are related to an ideology of purity. As regards bovines, it is the oxen – i. e., castrated males – which, as long as they do not evince nefarious signs that would prevent them from being slaughtered, provide the meat for the table. On the other hand, this is never the case for the bull. Therefore, only its castration makes it apt to be butchered for its meat.[57] In the case of heifers, their function is different, being more related to calving and the production of milk; they could therefore sometimes be excluded from this dietary chain. If bovines could be excluded from sacrifices, this could also explain the particular status of a local god whose avatar would be a bovine.[58] In the list from Edfu (and its parallels), bovines – especially heifers – are thus mentioned several times among prohibited animals.

5. Conclusion: Toward the Relativity of Prohibitions

In some instances the avoidance of a species is due to an "excess of sacrality"; namely, the specific link of a species or an animal with a deity that protects it from any breach, implicitly from being killed and, therefore, from being eaten. This system belongs to the sacred geography, which is expressed in particular in Ptolemaic texts. Temporary and local prohibitions certainly have an impact on the diet of the populations whenever the species concerned belongs to the category of edible animals, yet the whole issue remains difficult to apprehend. Such prohibitions may legitimately be designated as "priestly" because they seem to concern first and foremost the priests themselves.

[54] Meeks 2012.
[55] Tallet 2003, 20–26.
[56] Bouaniche 2005, 152–53.
[57] Servajean 2011, 2011b; Rouvière 2013, 148–53.
[58] Labrique 2014.

In parallel to this, one should consider more broadly the question of cultural prohibitions that remain implicit or, more exactly, of dietary exclusions that are related to categories of edibility. The evidence regarding sheep raises several difficult problems in this regard. If goats are frequently enjoyed as meals, on the one hand, a certain degree of reluctance seems to characterize the consumption of sheep, on the other hand, although one should note that no clear prohibition is attached to them. Sheep do not figure in the lists of choice foods, and they are curiously absent from the animals butchered for meat. Like the pig, which was, however, frequently eaten, the sheep is never depicted in scenes showing the culling and cutting of animals. Greek authors consider it obvious that sheep were prohibited as food for the Egyptians, and that the priests even loathe touching their wool.[59] Everything happens as if the theological validation of the ram had contributed to the avoidance of the whole species. Nevertheless, one would be mistaken to think that the status of "sacred animal" granted to one member of a species would systematically protect all fellow creatures; as F. Labrique reminds us concerning bulls, the distance between the animal that can be sacrificed and the animal considered sacred (and therefore untouchable) was, in fact, quite short ("la distance semble bien courte entre l'animal sacrificiable et l'animal sacré et donc intouchable").[60]

I will not deal here with the question of occasional dietary restrictions: mourning or certain feasts may involve the avoidance of various aliments. Thus, one must not eat bread or drink beer, two types of food that are emblematic of Egyptian diet, on the nineteenth day of the fourth month of *akhet*.[61] Yet other feasts, especially in connection with Hathor, were associated with abundant drinking.

In the end, explicit references to dietary prohibitions are infrequent. It is therefore possible that the issue of diet was neither decisive nor central for achieving ritual purity. It could certainly contribute to it, but it may not have been the object of scrupulous attention. The notion that Egyptian dietary prohibitions would be emblematic results fundamentally from the Greek outlook on Egypt. Except for the case of the priests, who were compelled to observe a set of rules, and perhaps also in the case of other ritual participants who could access certain parts of the temple in specific circumstances (festivals, processions, etc.), it remains difficult to evaluate the dietary consequences of priestly prescriptions for everyday life. The idea that the entire population would have devoutly followed these rules is certainly excessive, and it is probably more realistic to assume that individual observance of dietary prohibitions and restrictions was dependent on a number of factors, according to social rank and the degree of implication in the religious life. One must, additionally, take chronology into account. The sources

[59] Plutarch, *Is. Os.* 352C–D.
[60] Labrique 2014, 66.
[61] Leitz 1994, 170–71; also IV Shemu, 23, Leitz 1994, 411.

available suggest that the development of theologies specific to each nome in the course of the first millennium BCE, in connection with the success of the animal cults and the development of the cult of Osiris, generated a new religious approach that may have directly impacted alimentation. In this process, local particularities were highlighted, reflecting a network of multiple priestly prohibitions that made for a highly complex and contradictory landscape owing to the variability of the prohibitions within the provinces.

The sociological reality of diet, which is largely determined by mythical thinking and alimentary ideology (in terms of validation and invalidation of species), is more difficult to interpret. Explicit sources are rare. Archaeozoology provides some results that can be linked with textual data. As regards pigs, for example, the study of multiple food remains has made it possible to confirm this animal's popularity.[62] In the case of goats, however, the identification of bone remains does not always provide a secure basis, insofar as small fragments of sheep and goats are difficult to distinguish one from the other.[63] Archaeozoology presents us with a partial, yet nonetheless useful perspective because it illuminates specific contexts.

The system of prohibitions characteristic of the Pharaonic culture offers fertile ground for research of the anthropology of diet. The articulation between normative discourses and actual practices in Egypt can contribute to the study of dietary selections (and deselections) and their relationship to identity definitions. One may think here, in particular, of the studies on dietary norms in the biblical world. The system of prohibitions reflected in the Egyptian documentation is predominantly linked to priestly concerns; it involves first and foremost temporary constraints, limited in time and/or in space, and even possibly according to social status. No evidence indicates (or implies) that a given food was the subject of a general, permanent prohibition.

[62] Hecker 1982.
[63] Monchot 2012.

Identifying the Biblical Food Prohibitions Using Zooarchaeological Methods

Abra Spiciarich

1. Introduction

Prohibition, as defined by *Oxford English Dictionary*, is "the action of forbidding something, especially by law." In the Hebrew Bible, it is assumed that food prohibitions, or sumptuary laws, are dictated by the authority of Yahweh. In reality, the probable authority was the priestly scribes, dictating social and possibly elitist norms. It is these norms that are the basis for the development of the food prohibitions in the biblical texts. Biblical scholarship's dialogue regarding the food prohibitions originates in their ambition to date and comprehend the lists of animals in Lev 11 and Deut 14. Archaeological theory has entered the conversation using zooarchaeological methods as a mean to connect the physical remains to the textual sources. The application of zooarchaeological principles and theories may be able to shed light on the extant that these laws were incorporated into ancient daily life.

There are four key statutes or categories of biblical food laws to which zooarchaeological methodologies may be applied. The first is *kashrut*, which dictates which animals are acceptable or prohibited to be eaten. In archaeological terms, it may be evident in the presence or absence of certain species in a given context. *Kashrut* is based on the list of animals in Lev 11 and Deut 14. The second category is religious butchery practices of *Shechita* and *Nikur,* which regulates food preparation (i. e., slaughtering and butchering) of sacrificial offerings, as dictated in Gen 32:33; Lev 7:26; and Deut 12:16. The Priestly tithe in Lev 7:28–37 is the third statute as it is closely related to the system of religious butchery. The tithe dictates the redistribution of the right limb of sacrificial offerings to the priests or priestly class. The final category of laws relates to the sourcing of sacrificial offerings, specifically referencing the species that were sacrificed and their origin. Understanding these prohibitions and laws through zooarchaeological methodologies is varied and intricate; however, if conciliated we may be able explore the introduction and development of these biblical customs.

The objective of zooarchaeological research is to understand the relationship between humans, animals, and their environment. Humans pass through a series

of stages when they interact with food; in terms of animals, they produce or gather them, either by hunting them, raising them, or trading for them. They process them through slaughtering, butchering, and then cooking them. They consume the meat and marrow. And finally, they discard the remains.[1] The remains of this process, namely bones, horns, and teeth, can be used to reconstruct culturally specific social structures and ideologies of past cultures.[2]

Social zooarchaeology is based on how animals functioned in various realms and at different levels to provide sustenance, to create commodities that denote status, and to serve as ideological symbols.[3] Identifying patterns in archaeofaunal collections is based on differential access to meat, distribution mechanisms, trade, and when applicable, literary sources.[4] Paradigms of social zooarchaeology have their roots in Durkheimian principles. In that it tries to interpret or apply social facts, based on patterns found in data, to culture, and further deems these patterns rational and inarguable. The essence of these principles naturally leads to varying opinions of methodological applications, which this paper will attempt to mediate and reconcile.

2. The Statutes

2.1. Kashrut and the Lists of Prohibited and Permissible Animals

Similar lists of consumable species in Leviticus and Deuteronomy gain the most attention by scholars.[5] The context of the list in Leviticus primarily focuses on the priests, specifically the priestly laws.[6] However, what makes Lev 11:3–47 unique is that it is one of the few series of laws in Leviticus that is not just for the priest but also for the entire nation. The verses are a part of instructions to Aaron, his sons, and their decedents to teach them how to distinguish between the sacred and profane.[7]

The verses contain a summary of dietary laws that are concerned with which animals are pure or impure to consume. The criteria for all animals mentioned in this chapter are so worded as to emphasize means of locomotion:[8] The determination of pureness is based on the assumption that those animals which are permitted to consume, move in a way that is natural to their environment, such

[1] Twiss 2012.
[2] Dietler 2007; Twiss 2008.
[3] deFrance 2009, 106.
[4] Ibid.; Russell 2011; Twiss 2012.
[5] Wood 1869; Aharoni 1943–1946, 103, 239–55; Bilik 1961; Felixs 1984; Houston 1993; Borowski 1998; Kislev 2000; Amar et al. 2010; Nihan 2011.
[6] Milgrom 1991, 1.
[7] Carmichael 2006, 14.
[8] Ibid., 619.

as land animals walk, water animals swim, and air animals fly.[9] However, one should keep in mind, this determination or explanation of pure and impure is not universally agreed upon.[10]

Whereas, the context for the list in Deuteronomy is less constitutional, the instruction comes after the covenant at Horeb (Deut 5–11). There Moses dictates who the Israelite people are going to be with the Deuteronomic Code (Deut 12–26), what follows are the dietary laws, which will set them apart from their neighbors.[11]

Interestingly, it is in Deuteronomy that the list of consumable, pure, species is dictated. The importance of these verses is not the social law or taboo that is created, but rather these verses are the most complete list of mammals known by the people of the Southern Levant. The first three species listed are domestic livestock: the ox (*Bos taurus)*, the sheep (*Ovis aries)*, and the goat (*Capra hircus*); their identification is unquestionable.[12] The identification of these remaining seven, as well as the prohibited birds, are ambiguous. Scholars have battled over the identification of these species though no consensus has been made.[13]

2.1.1. Kashrut and the Pig Taboo

Prohibition of the pig garners the most attention by scholars because it is one of the few animals specifically declared impure by the biblical texts (Lev 11:7; Deut 14:8). Leviticus states that a pure ungulate is determined as one that has cloven hoofs and chews its cud (Lev 11:4). The pig is the only one of the four quadrupeds listed that has cloven hoofs and does not chews its cud. The chapter could have stipulated only one criterion, cloven hoofs, and it would have eliminated the other three quadrupeds (i. e., camel, rock badger, and hare). Therefore, scholars assume the scribes must have added cud chewing as a second criterion for the sole purpose of eliminating the pig.[14]

Biblical and anthropological scholarship on the pig prohibition influenced archaeology to propose and debate the hypothesis that the presence or absence of pig remains in archaeological contexts could determine cultural identity.[15] Brian Hesse was the first to look at pig frequencies at sites in the Southern Levant.[16]

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[9] Ibid., 655.

[10] See Douglas 1966, 1993; Houston 1993.

[11] Lundbom 2013, 477.

[12] Amar et al. 2010, 3.

[13] Wood 1869; Aharoni, 1943–1946, 103, 239–55; Bilik 1961; Felixs 1984; Houston 1993; Kislev 2000; Amar et al. 2010.

[14] Milgrom 1991, 649.

[15] Douglas 1966, 2003; Hübner 1989; Hesse 1990; Milgrom 1991, 649; Finkelstein 1996; Harris 1997; Hesse and Wapnish 1997, 1998; Horwitz and Studer 2005; Grigson 2007; Bunimovitz and Lederman 2011.

[16] Hesse 1990.

He demonstrated that pig frequencies were low in the Iron Age (1130–586 BCE), except in Philistine sites.[17] The use of pig as an ethnic border was established. Its application was suggested with an air of caution, as other factors influence pig raising, such as economic and political factors, ecological aspects, and site function. Further inquiry into Philistine pig consumption showed an increased consumption during the early Iron Age and a recession of consumption later into the Iron Age, which probably related to the Philistines arrival and subsistence practices of newcomer societies.[18] This conclusion was further supported by ancient DNA of pig haplotypes indicating that Philistines brought with them local pigs from their countries of origin.[19]

The capstone to the pig taboo debate is Sapir-Hen et al.'s results from their research in to the dichotomies of pig frequencies in the Southern Levant.[20] They found that there was a dichotomy of pig consumption between Philistine urban and rural settlements, where pig remains were more prevalent in Philistine urban centers. Their research suggests that pig consumption was a convention of urban populations rather than an ethnic trait. Further, Sapir-Hen found there was also a dichotomy of pig remains in the Iron IIB (780–680 BCE) between the Northern Kingdom of Israel, where pigs are present in significant numbers, and the Southern Kingdom of Judah, where pigs are largely absent.[21] Israelite pork consumption most likely then related to the need for a quickly maturating meat source in order to feed a growing population, during a period of peak prosperity. After Sennacherib's campaign of the Northern Kingdom in 720 BCE, Judah continued to avoid pork consumption, suggesting that the pig taboo may have originated as a reaction to Israelite refugees, as pig consumption was already on the decline in Philistia.[22]

2.1.2. Kashrut and the Debate of Presence versus Absence

The methodology behind the pig taboo debate, as well as for all species named in the prohibited lists, rests entirely on their presence or absence within a given context. Determining presence of a species in a zooarchaeological assemblage is based on identifying remains to the lowest taxonomic level as possible based on a comparative collection. The methodological problem with using presence or absence to determine the adherence to the biblical laws is the possibility for a number of biases. In the case of pigs, their presence or absence at sites can be related to a variety of factors such as the environment, demographics, and sedentism.[23]

[17] Ibid.
[18] Sapir-Hen et al. 2013.
[19] Meiri et al. 2013.
[20] Sapir-Hen et al. 2013.
[21] Ibid.
[22] Ibid.
[23] Horwitz and Studer 2005.

Important biases to consider when interpreting pig frequencies are that pigs thrive in moist environments, maturate quickly, survive as an urban commensal species, and cannot traverse over great distances.

Another prevalent and notably prohibited species found at many sites in the Southern Levant is catfish (Lev 11:9–12; Deut 14:9–10). Following the further classification of kosher fish according to the Talmudic law, catfish are deemed un-kosher because their scales are not visible to the naked eye (*Levush, YD* 83:2, *SA, YD* 83:2). Catfish consumption is surprisingly common throughout the Southern Levant. Presence of catfish has even been noted in Jerusalem during the first and second temple periods.[24] Similar to presence versus absence of pig, the presence of catfish at a site can relate to variety of factors such as the site's proximity to a source, trade relations, and archaeological retrieval strategies of the excavation. By happenstance, ichthyological remain are usually overlooked during archaeological excavations. Due to their small size, they are rarely collected by hand and only retrieved when an excavation has implemented wet and dry sieving protocols. The frequency of catfish consumption, and fish consumption as a whole in the Southern Levant, is drastically under-represented in modern scholarship and further studies are needed in order to fully understand their role.

2.2. Shechita and Sacrificial Butchering Practices

Additional biblical regulations for the consumption of animals can be seen in Gen 32:33; Lev 7:26; and Deut 12:16. It is from these verses that the *Shechita* or *kosher* style of butchering originates. Further literary evidence of religious butchering practices are prescribed in the Mishnah, which was written in second century CE, and the Gemara, which was written centuries later in the fourth to fifth centuries CE.[25] It is unknown to what degree the laws and regulations of the Mishnah and Gemara were followed during the periods of the biblical transcription and redaction.

The practice of removing the sciatic nerve (*Gid HaNashe*) stems from the commandment not to consume the hipbone muscle of animals, following Jacob becoming injuring after a struggle in Gen 32:25–33. An additional reason to avoid consuming the sciatic nerve is that this nerve contains an abundance of blood vessels that if pierced would go against the prohibition of consuming blood (Lev 7:26).[26] Deuteronomy 12:16 is another verse that prohibits the consumption of blood, but it is in reference to the initial slaughtering of animals and the need to drain the blood (*Nikur*) of the animal in an efficient manner for meat

[24] Lernau and Lernau 1989; Van Neer et al. 2004.
[25] Levine 2002, 157; Halivni 2009; Greenfield and Bouchnick 2010, 7.
[26] Greenfield and Bouchnick 2010, 7.

preservation.[27] The modes and methods of biblical religious butchery all relate to the prohibition of consuming blood, as stated in a multitude of verses (Gen 9:4; Lev 3:17; 7:26; 17:10–14; 19:26; Deut 12:16, 12–25; and 15:23).

The biblical abhorrence or aversion to blood has logical origins. Draining an animal of blood as prescribed in Deut 12:16 minimizes the passage of intrinsic bacteria into the flesh of the meat. A common bacteria found in animals is *Clostridum perfringens,* which is the organism that causes the gas gangrene in necrotic wounds. When *Cl. perfrigens* is consumed, it can cause a mild form of poisoning.[28] Putrefaction or spoilage of meat can be avoided if the carcass is divided into smaller pieces and either dried or salted. Drying and salting of meat allows the good bacteria to break down the muscle tissue, causing it to ferment and produce lactic acid, which lowers the pH and kills off harmful bacteria.[29] Modern *halal* and *kosher* practices require meat to be soaked salted within 72 hours of initial slaughtering in order to drain the remaining blood from the meat.[30]

Drying and salting of meat and fish is well known from Greek and Roman gastronomic literature (see Pollux, Apicius, Columella, and Palladius). Traditional forms of preservation included salting, pickling, potassium nitrate, commonly known as saltpeter, and even immersing the meat in honey.[31] The degree of change of meat preservation strategies in the region is minimal, as ethnographic studies of Levantine Bedouins support *Shechita* butchery as a practical form of preservation for the region.[32]

2.2.1. Identifying Biblical Butchery in a Zooarchaeological Assemblage

According to ethnological and anthropological literature, the social identity of a group can be expressed in the manner they produce their food.[33] The taboos, customs, and rituals specific to individual groups or societies influence the butchery practices performed, which translates into specific food-processing activities.[34] By reconstructing the processes of the butcher, it is possible to retrace the intentions and technical skills of the butcher.[35]

Identification of cutmarks is commonly based on Lewis Binford's ethnological study of Inuit animal processing.[36] He codified each cutmark and categorized

[27] Cope 2004, 27; 2016; Greenfield and Bouchnick 2010, 7.
[28] Ingram 1972, 121.
[29] Frost 1999, 250.
[30] Regenstein et al. 2003.
[31] Frost 1999, 250.
[32] Cope 2004.
[33] E.g., Fischler 1988; Simoons 1994; Lalhou 1998; Politis and Saunders 2002; D'Iatchenko et al. 2007; Serra Mallol 2010.
[34] Soulier and Costamagno 2017
[35] Vigne et al. 1987.
[36] Binford 1981.

them into three categories: dismemberment/disarticulation, filleting, and skinning.[37] Cope was the first to put forth a method for analyzing religious butchering marks, based on her research from Gamla and Yodefat, known Jewish settlements, during the classical periods.[38] Her work was followed by a historical and zooarchaeological approach by Greenfield and Bouchnick.[39] Cope readdressed her methodology with clearer descriptions of each cut mark.[40]

Bone elements that would typically show signs of biblical butchery patterns are the neck vertebrae's atlas and axis, the pelvis, and the femur. It is debated whether presence or absence of cut marks on the ventral side of neck vertebrae should be considered an indicator of *Shechita* or *Nikur*.[41] Marks on the pelvis relate to the removal of the sciatic nerve. Indication of sciatic nerve removal can be seen with cut marks around the acetabulum on the arms of the ischium and ilium, as well as the pubis symphasis being entirely cut through. Marks on the femur relate to the stripping of the gluteus medius in order to expose the sciatic nerve. Femoral indicators can be found on the trochanter major, trochanter minor, beneath the femoral head, and on the posterior distal just above the condyle;[42] as many of these markings also correlate to disarticulation; their identification as *Kashrut* butchery is arguable. The humerus, radius, scapula, and tibia have also been found to have marks relating to biblical butchery practices.[43]

Application of Cope's methodology is limited, as she describes the markings in depth but does not create a usable atlas in order to identify similar cutmarks. In order to apply Cope's methodology to my own research, I have paired her cutmark descriptions to the typology of cutmarks suggested by Binford.[44] There are four markings described by Cope that did not correlate to any of Binford typology codes. These markings were given ordinal codes following those of Binford.[45] Following Cope's descriptions new ordinal codes were given to the markings on the tibia's posterior proximal shaft (Tp-6) and the posterior distal end (Td-5), the scapula's medial surface marks along the neck (S-5), and transverse marks along the distal base of the lateral surface (S-6). The methodology created by correlating the cutmark identification methodologies of Cope and Binford allows us to standardize identifying biblical religious butchery markings in archaeofaunal collections.[46]

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[37] Binford 1984.
[38] Cope 2004.
[39] Greenfield and Bouchnick 2010.
[40] Cope 2016.
[41] Cope 2004, 26–27; Greenfield and Bouchnick 2010, 7.
[42] Cope 2004, 30–31.
[43] Cope 2016.
[44] Binford 1981, 1984, see Table 1.
[45] Binford 1984, Table 1.
[46] Cope 2016; Binford 1981, 1984.

2.3. Priestly Tithe

Butchering animals in a sacrificial manner typically included the separation of the priestly tithe. The priestly tithe is dictated in Lev 7:28–37, when Yahweh describes to Moses the procedure for ritual sacrifices. Depending on the translation of the word *shôk*, as thigh, hip, leg, and/or shoulder thigh, the priestly tithe has been specified as either the right hindlimb or the right forelimb. Opposing translations complicate zooarchaeologists' ability to clearly identify the priestly tithe. Semantics of the butchering system of *Shechita* would justify that the forelimb was the priestly offering, as this portion of the animal does not contain the sciatic nerve, which, as noted above, was prohibited.

The zooarchaeological method used to identify the priestly tithe is based on statistically-testing Sided NISP. NISP, or Number of Identified Specimens, is calculated by counting the number of fragments per taxa.[47] Sided NISP separates the right and left side of the forelimb's humerus, radius, ulna, and metacarpal and the hindlimb's femur, tibia, and metatarsal, and then tests them statistically to see if the frequency is significant.

NISP frequencies have been employed at the site of Tel Qiri, where Ben-Tor reported a high frequency of right forelimbs of goats (*Capra hircus*) associated with cultic vessels in a dwelling dated to twelfth–eleventh centuries BCE.[48] He uses the biblical edict to explain the frequency of right forelimbs in the dwelling.[49] Mount Ebal is another site that has used NISP frequencies as a method for explaining the dominance of forelimbs elements in an Iron I cultic context.[50] Tel Qiri and Mount Ebal are both dated to a time before the transcription of Leviticus, suggesting the priestly tithe was a cultic habit prior the composition of Leviticus.

Parallels to the priestly tithe can be seen in other Mediterranean cultures. Notably, there are epigraphic parallels from Greece on red and black Attic vessels dating to the sixth–fifth centuries BCE, which depict the sacrificial honorary offering of the right thigh or leg portion given to the priests or honored guests.[51] Greek Attic vessels depicted with honorary offerings indicate that the practice of allocating choice cuts of meat to religious officials and dignitaries was a known practice throughout antiquity.

2.4. Sourcing of Sacrificial Offerings

Deuteronomy 14:24–26 states that if the distance to the temple is too great, one may convert their offering into money or coin and spend it at the cultic location,

[47] Lyman 1994, 100–1.
[48] Ben-Tor 1980.
[49] Ibid.
[50] Horwitz 1987.
[51] Tsoukala 2009.

traditionally interpreted as within the walls of the cultic city. This statute is relevant in studying the roles of animals, trade, and pilgrims in temple-based economies. The economic foundation of the Jerusalem Temple, as well as the other local cultic centers, was the biblical commandments in Exod 23:17 and Deut 16:16 to visit and give tithes during the three major festivals: Sukkot, Pesach, and Shavuot.[52]

Elites controlled the traffic of luxury goods into and within Jerusalem, and possibly other cultic centers because sumptuary laws restricted the use of food a status symbols, even within the context of feasting.[53] Control by the elites over the goods brought into a city by pilgrims or traders is an aspect of 'redistributive economy,' in that goods channeled through the redistributive hierarchy were used primarily to finance activities directed by the elites.[54] In cultic centers, the tithes brought into temple by pilgrims were used primarily to finance cultic activities.

The trade and commerce developed by pilgrims is typically studied under the umbrella of religious tourism, which estimates the general expenditures of pilgrims including transportation, accommodation, meals, tours, souvenirs, and provisions for ritual activities.[55] Religious tourism of pilgrims can be seen as early as the third millennium BCE in the land of Sumer[56] and has continued into present day throughout the world and is significant in many world religions, with the most notable being the pilgrimage to Mecca in Saudi Arabia.

2.4.1. Metrical Analysis for Identifying the Source of Sacrificial Offerings

Commonly used zooarchaeological method for understanding regional variance, meaning the range of herding and transporting of livestock (i.e., sheep, goat, and cattle) is through metrical analysis. Metrical analysis is the measurement of bone elements. Animals raised in the same regional environment are likely to be similar in size. By comparing the measurements of bone elements from a site in question to a site with known local herding, we can examine the range of herding and transport of animals. Simply stated, this method allows zooarchaeologists to test if the animals in an assemblage were locally raised or imported into the site. Typical elements used for testing regional variance are the fore and hindlimbs, although one has to be cautious as sizes of these elements are also impacted by sexual dimorphism.[57] Metrical data is calculated by applying calipers to certain areas of elements, based on von den Driesch.[58]

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[52] Goodman 1999, 60; Hartman et al. 2013, 4369.
[53] Blanton and Feinman 1984, 676; Kipp and Schortman 1989, 374.
[54] Earle 1977, 227.
[55] Saayman et al. 2013, 407.
[56] Elsner and Rutherford 2010, 11.
[57] Zeder 2001.
[58] von den Driesch 1976.

Horwitz and Tchernov employed metrical analysis to study the size variance of caprines (sheep and goat) from the Iron Age levels of the Ophel in Jerusalem.[59] Comparing the measurements of the elements, humerii, astragalii, and phalanges between the caprines of the Ophel to Beer-Sheba, they conclude that caprine sizes are similar for the entire region.[60] However, another view, if we take a closer examination of the Ophel and Beer-Sheba caprine measurements, may suggest that the caprines were raised or herded in Beer-Sheba and then imported into Jerusalem, as was common in later periods.

2.4.2. Stable Isotopic Analysis to Identify the Source of Sacrificial Offerings

Another venue to identify the source of animals found in refuse is based on the application of stable isotope biogeochemistry. Stable isotope analysis involves the study of environmental physiological and dietary changes through the measurement of carbon, nitrogen, oxygen, and strontium isotope ratios obtained from sediments, water, plants, and animal tissues.[61] The aim of zooarchaeological and anthropologically orientated isotopic studies is geared towards understanding human subsistence, social organization, ritual activity, and political complexity. The isotopic case studies discussed below use carbon, nitrogen, and strontium isotopes to locate the grazing areas of caprines in order to examine the origin of cultic sacrifices and the sites livestock.

Two sites have put forth isotopic studies with Deut 14:24–26 as their economic support: Tel Dan and Jerusalem. Tel Dan's analysis was based on sheep and goat remains from the Iron Age II levels of domestic Area M and cultic Area T.[62] The isotopic results suggest that there was minimal diversity amongst the sheep and goat brought into the city, and that they all originated within ca. twenty kilometers of Dan. The results suggested that the cult was most likely raising their own sacrifices, as Dan was a multi-ethnic city, and the cult likely wanted to ensure ritually pure sacrifices.[63]

In contrast, isotopic results from Early Roman Jerusalem reinforces Martin Goodman's theory that Jerusalem's economy was entirely based on the city's cultic nature and dependence on pilgrims.[64] Mass international pilgrimage to Jerusalem did not start until the Hellenistic period and peaked in the Early Roman period. Goodman states that it was probably Herod's entrepreneurship that helped develop Jerusalem's pilgrimage economy.[65] Philo claims that Jews came

[59] Horwitz and Tchernov 1989, 152, Table 4.
[60] Ibid., 152.
[61] Makarewicz 2016, 190.
[62] Arnold et al. 2015
[63] Ibid.
[64] Goodman 1999.
[65] Ibid., 73.

from everywhere to give tithes to the Temple,[66] including himself when he visited once.[67] The financial influence of diaspora Jews can be seen in requirement of the second tithes and other donations.[68] From literary sources we know that pilgrims in the Early Roman period brought with them tents (Josephus, *A. J.* 17.213–17), or used accommodations within the city (Mark 11:11) for housing. Archaeological evidence shows that the northern area of Jerusalem was quickly built-up during the Early Roman period, to help accommodate the surge in population and possibly semi-permanent pilgrimage dwellings.[69]

The isotopic analysis was based on material from Jerusalem's Early Roman landfill, located on the western slope of the Kidron Valley.[70] The remains tested were collected from Area's C and L, which are located just southeast of the Temple Mount. The results suggest that sheep and goat were imported from the Galilee in the north, the Judean Desert in the south, and from hinterlands of Jerusalem.[71] Isotopic analysis of the material also suggests that there was an animal trade from the Galilee to the Jerusalem hinterland and then brought to the Jerusalem markets. As Jerusalem was the largest urban center in the region, it is understandable that the city worked as major location for the dispersal of imported and regional goods.

The case studies of Tel Dan and Jerusalem are examples of the complexity of applying biblical statutes to archaeological remains. An argument can be made to suggest that these two case studies depict the development and incorporation of Deut 14 throughout the first millennium. However, they also reflect two different economic strategies of two different calibers of cults with vastly different demographics. Conclusions from these studies have methodological and historiographical issues, and applying the biblical statutes as an explanatory method is problematic.

3. Discussion

The dietary laws are organized in the Hebrew Bible in such a manner that they build upon each other, enabling the reader to accrue knowledge as they progress through the statutes.[72] The implied practical wisdom of each statute leads to a vagueness that complicates our ability to reconstruct the laws from material

[66] Philo, *Spec.* 1.69.
[67] Philo, *Prov.* 2.64, 2.216.
[68] Levine 2002, 389; Deut 14:22–29; 26:12.
[69] Amit 2009, 28
[70] Bar-Oz et al. 2007
[71] Hartman et al. 2013.
[72] Burnside 2016.

culture. The potential biases that can belie proof of the dietary laws can be resolved by a set of parameters.

Standardized parameters for the dietary statues can help to rectify the dilemma of presence versus absence by being selective about which archaeofaunal assemblages can be studied. Parameters required for the study of the biblical food laws in archaeofaunal assemblages include: (a) studying material that is dated after the transcription and/or redaction of the Hebrew Bible (ca. seventh–fourth centuries BCE). Studying material from after the destruction of the Second Temple (70 CE) requires the dietary prescriptions described in the Talmud and Mishnah be applied. Rabbinical Judaism changed how the layperson interacted with the concept of sacrifices and tithing. Furthermore, it is unknown to what degree the Talmudic dietary prescriptions were practice in the periods prior.

(b) Acceptable assemblages to be studied should derive from cultic contexts and/or higher socioeconomic zones of a known cultic site (e. g., Tel Dan, Tel Moza, Bethel, and Jerusalem). The remains from cultic contexts are a secure source of animals exploited for religious use and possibly consumption. Higher socioeconomic contexts can be analyzed for the dietary laws due to understanding that voluntary food restrictions are largely a luxury. Those living at basic subsistence levels, such as those living in the hinterland or lower cities, would eat what they have or could afford, regardless of religious restrictions. Furthermore, it is probable that the scribes dictating the food laws were themselves of a higher social class or priests.

(c) One should statistically test the results for significance. Results for the frequency of specific species and body parts, such as with the priestly tithe, need to be tested statistically. The reasoning behind this parameter is that although one may observe a high percentage of one species over another or there are more right limbs than left in an assemblage, there must be mathematical proof. Applicable statistical test depends on the question and size of the dataset.

The parameters detailed above are acceptable for the study of *Kashrut*, the priestly tithe, and sourcing of sacrificial offering. However, the study of ancient *Shechita* and biblical butchery practices and procedure requires further exploration. Current scholarship on biblical butchery identification is equivocal. The study of *Shechita* and *Nikur* needs further analysis of cultic assemblages and/or experimental ethnographic study of religious butchery (e. g., the Samaritan Passover). Until there is more research available, the combined methodology of Cope's descriptions with Binford's typology codes described here must suffice.[73]

[73] Cope 2016; Binford 1981, 1984.

4. Conclusions

Overall, this discussion demonstrated the complex nature of studying the biblical food laws through zooarchaeology. Previous archaeological, biblical, and historical scholarship on the food laws aids in creating a standardize set of parameters needed for the analysis of faunal remains. Assemblages suitable for the exploration of the biblical dietary laws must be within the appropriate timeframe and context, as well as being tested statically. Traditional methods of calculating zooarchaeological data, such as Number of Identified Specimens (NISP), Minimum Number of Elements (MNE), and Minimal Animal Units (MAU), can be utilized to understand the biblical dietary laws (Table 2). Albeit the conversation over presence and absence of prohibited species is a popular and interesting topic, other alternatives for studying the dietary laws can and should be used to understand the development of the biblical food prescriptions fully.

Appendix

Table 1: Correlated Butchery Descriptions for *Shechita* following Cope (2004; 2016) and Binford (1981; 1984).

Code Number/ Element	Cope 2004; 2016	Binford 1981; 1984	Activity Producing Mark
Femur			
Fp-1	Cuts on the trochanter major	Marks on the neck of the femur	Dismembering
Fp-3	Cuts beneath the femoral head	Marks circling the margin of the femur head	Dismembering
Fp-4	Major arteries may be stripped along with the muscle that inserts on the trochanter minor of the femur, with marks on the posterior distal just above the condyle	Transverse mark on the lesser trochanter	Filleting
Pelvis			
PS-5	Pubic symphasis is cut through	Cut or Chop through the pubic symphasis	Dismembering
PS-7	Cuts along the ilium in front of the rectus depression	Marks above the acetabulum on arm of ilium	Dismembering

Code Number/ Element	Cope 2004; 2016	Binford 1981; 1984	Activity Producing Mark
PS-8	Cuts over the ischiatic spine of the innominate in front of the acetabular notch	Marks below the acetabulum on arm of ischium	Dismembering
PS-10	Marks along the pubic tubercle	Marks below acetabulum on arm of pelvis	Dismembering
Scapula			
S-1	On the tuber of the scapula for the origin of the coracobrachialis and the deep pectoral	Marks along inferior border of condyle and/ or at origin of triceps brachia	Dismembering
S-2	Coastal neck of scapula. These cuts are associated with the junction of the brachial artery, subscapular artery and the brachial vein	Marks along the neck of the scapula	Dismembering
S-5	Beneath the scapular spine	X	Filleting
S-6	Posterior border of the scapula, cuts here would sever the origin of the long head of the triceps	X	Dismembering
Humerus			
Hp-3	Cuts on the neck of the humerus correspond to the origin of the medial head of the triceps	Marks on the lateral face of the neck just below the lateral tuberosity	Dismembering
Hp-4	Cuts on the upper deltoid tuberosity	Short "chevron" marks obliquely orientated along crest below the external tuberosity at insertion of teres minor	Dismembering
Hd-1	Single cut just above the coronoid fossa on the anterior distal humerus (but only for caprines)	Transverse mark across anterior articular face	Dismembering

Code Number/ Element	Cope 2004; 2016	Binford 1981; 1984	Activity Producing Mark
Radius			
RCp-5	A short cut severing the flexor carpi radialis, with marks on the proximal medial radius	Transverse marks on anterior margin of radial tuberosities	Dismembering
Tibia			
Tp-6	Cuts on the proximal posterior, maybe related to the muscle Tibialis posterior	X	Dismembering
Td-5	Cut on the Medial malleolus of the distal Tibia, which corresponds to the insertion of the gastrocnemius	X	Dismembering

Table 2: List of Dietary Law, Textual Source, Date of Transcription, and Zooarchaeological Methods Applicable.

Food Laws	Text	Date (approx.)	Zooarchaeological Method
Prohibited and permissible animals to consume, including pig taboo	Lev 11:1–47 Deut 14:3–21	7th to 4th centuries BCE	Frequency of Species (NISP, NISP%)
Removal of Sciatic Nerve (*Gid HaNashe*).	Gen 32:33	10th to 7th centurie BCE	Body Part Frequency (MNE, MAU, MAU%), Cut-mark analysis
Prohibition of consuming and porging blood (*Nikur).*	Lev 7:26 Deut 12:16	7th to 4th centuries BCE	Cut-mark analysis
Ritual Slaughtering (*Shechita*)	Talmud Bavli, Hullin 2	2nd century CE	Body Part Frequency (MNE, MAU, MAU%), Cut-mark analysis
Imported offerings (Tithes)	Deut 14:24–26	7th to 4th centuries BCE	Metrical analysis and Isotopic Analysis
Priestly Tithe	Lev 7:28–37	7th to 4th centuries BCE	Statistical X^2 test of the right and left side of fore and hind limbs (sided-NISP)

Prohibited Pigs and Prescribed Priestly Portions

Zooarchaeological Remains from Tel Dan and Questions Concerning Ethnicity and Priestly Traditions in the Hebrew Bible

Jonathan S. Greer

As anthropologists have long pointed out, "the meal" is not merely an opportunity to consume plants and animals for survival. It also represents an event imbued with thick layers of meaning that are marked by various rituals across diverse cultures throughout the ages of human existence. As such, these realms of meaning intersect with expressions of religion and, thus, the rituals of the meal and larger feasts are often described and maintained within those prescriptive systems for a variety of purposes.[1]

Chief among distinctive meal practices in a number of religious systems is that of the *prohibition* of certain foods, often meats. The most (in)famous example in the case of the religion of ancient Israel described in the Hebrew Bible is the prohibition of pork (e. g., Lev 11:7; Deut 14:8).[2] On the other extreme, the *prescription* of certain foods or food portions for certain individuals and/or for certain meal-based events may also serve as a distinctive marker, such as the biblical prescription for the right hind limb portion from the fellowship offerings assigned to the priests (Exod 29:27–28; Lev 7:32–33).[3]

Thus, prohibition lies at one end of a spectrum of specialized food status and prescription at the other. While both, indeed, are encoded with different meanings, they share a notion of separation, be it "Israel" from "others," or priests from people. The further a practice drifts toward either end of the spectrum, the more particularized it becomes to that specific religious system.

Where this becomes important for the purposes of this volume, in general, and for the topic of this essay, in particular, concerns a methodology for building archaeological evidence of "prohibition"; I suggest that arguments for the distinctiveness of any evidence of "prohibition" may be strengthened where there

[1] Dietler and Hayden 2001; Altmann and Fu 2014.

[2] See Harris 1985; Grigson 1987, 1995; Zeder 1996, 1998; Hesse 1990; Hesse and Wapnish 1997, 1998; Lev-Tov 2000; Faust and Lev-Tov 2011; Sapir-Hen et al. 2013.

[3] The texts and traditions behind these prescriptions are varied and complex; for a preliminary treatment see Greer 2013, 100–6, and for a more detailed treatment, see Greer 2019.

is also evidence of "prescription." As a case-study, I will here present some of the preliminary results of the ongoing analysis of the faunal remains from Tel Dan in northern Israel that may be congruent with notions of *prohibition* as it relates to pork, as well as summarize previous publications congruent with notions of *prescription* as it relates to priestly portions. Together, evidence from both ends of the spectrum of specialized food status are considered to strengthen the case for an Israelite association of at least some of the Danites and invite questions concerning the development of priestly traditions in the Hebrew Bible as they may each be correlated to particular instructions.

1. Evidence of "Prohibition" in the Lack of Pig Remains at Tel Dan?

As many essays in this volume highlight, the issue of associating any religious or ethnic identity with the presence or absence of pig bones at sites in the southern Levant is complicated,[4] and increasing nuance has been added to earlier studies.[5] First, there are recovery issues, those related to the selectivity in excavation location in comparison to the locations of butchery and deposition. For example, what if most pigs were hunted as wild game and butchered in the field?[6] Second are taphonomic issues (what if pig bones were better preserved due to the density of the bone and the soil type?).[7] Further are biases in identification where remains were handpicked rather than screened (what if a large pig astragalus looked more interesting – or more recognizable as a bone – to a volunteer digger, than say a small goat astragalus? cf. problems with collection bias), among others questions.

These issues aside, even when a relative abundance of pig bones may be established, this presence and any corresponding absence must be considered through a variety of lenses. As Brian Hesse and Paula Wapnish have argued, no less than nine "pig principles" must be considered when assessing whether or not presence or absence of pig remains may be tied to any sort of ethnic distinction.[8] Such principles include those related to environmental conditions (whether or not the environment at a particular site was suitable for raising pigs, especially as it pertains to water), social settings (whether or not the social setting provided a practical context, in that pig populations usually correlate with a certain degree of sedentism since pigs do not herd well over long distances), economic factors

[4] Hesse 1990; Hesse and Wapnish 1997; 1998.
[5] Sapir-Hen et al. 2013; Sapir-Hen et al. 2015; Horwitz et al. 2017.
[6] Binford 1978; Bunn, Bartram, and Kroll 1988.
[7] Cf. Shipman 1981.
[8] Hesse 1990; Hesse and Wapnish 1998; cf. also Zeder 1996.

and social class (pork as a high-calorie, fast producing meat served different roles at different times), among others.

1.1. The Data

With such criteria in mind, I turn to the combined data from several published works[9] and forthcoming reports[10] of faunal remains from the Biran excavations, analyzed primarily at The Pennsylvania State University from 2005–2011 and at the Hesse Memorial Archaeological Laboratory at Grand Rapids Theological Seminary/Cornerstone University from 2012–2017, as well as samples that we have analyzed in the field during the current excavations of 2006–2016, primarily from Areas T, L, M, and B. Samples were isolated from the larger collection based on the identification of relatively secure loci – i.e., those with chronologically homogenous ceramic assemblages, clear site matrix relationships, and sharply defined architectural or stratigraphic features. The bulk of the material, which is yet to be published, provides a total sample size of over 25,000 bones (*fig. 1*).

What is immediately noticeable at the macro level, even in the preliminary reports, is the dearth of pig bones in any period, with the exception of small percentages in the Early Bronze Age and a peak reaching just over 8 % in the Late Bronze Age. Even in these cases, however, the subsample from Late Bronze Age loci is small, with a much larger sample that is in the process of analysis yet to be published.[11] Further, the pig remains that have been recovered are likely assigned to wild boar rather than to domestic pigs,[12] so it does not seem that pigs were raised domestically for meat during any period other than possibly during the Early Bronze Age and the Late Bronze Age, but they may have been occasionally hunted as game.

At the micro level, there is some preliminary evidence for the complete absence (or nearly complete absence) of pig bones in some sub-phases, and small "spikes" in pig remains in others. For example, initial analyses from the Iron II phases suggest an overall lack of pig remains, with an exception in one of the

[9] Wapnish, Hesse, and Ogilvy 1977; Wapnish and Hesse 1991; Greer 2013.

[10] Greer and Hesse, forthcoming; Greer, Fulton, and Wapnish, forthcoming; and Greer et al., forthcoming.

[11] My preliminary assessment is that a significant number of pig bones have been recorded, but a complete analysis is forthcoming (Greer and Hesse, forthcoming).

[12] The *sus* remains analyzed in earlier studies (Wapnish, Hesse, and Ogilvy 1977; Wapnish and Hesse 1991) as well as in the later analyses (Greer et al., forthcoming) were identified as wild boar based on: (1) biometrical analysis (cf. Payne and Bull 1998; Albarella et al. 2006; Sapir-Hen 2013) and primarily on the measurement of the mandibular M3 when extant, but note that there may be some overlap between measurements for wild boar and domestic pig (Evin et al. 2013); and (2) the fact that very few if any juvenile pig bones have been confirmed in the analysis thus far, but note that such small sample sizes do not allow reliable mortality profiles to be constructed.

		Wapnish and Hesse 1991	Dan III sup, forth-coming	Dan IV, forthcom-ing,	Greer 2013	Area M (Greer et al., forth-coming)	Area K (Greer et al., forth-coming)	Area T1 (Greer et al., forthcom-ing.)	Area T1 2016 (Greer et al., forth-coming)	Area L 2009 (Greer et al., forth-coming)	Area B 2016 (Greer et al., forth-coming)
sample size (NISP)		2549	TBD	2636	3434	3731	134	4989	510	2495	3105
Dan stratum	*Period*										
XV	EBII	3 %									
	EBII/III	3 %									
XIV	EBIII	5 %									
	EB/MB	5 %									
XIII	MBI	0 %									
XII	MBIIA	0 %									
XI	MBIIA-B	0 %									
X	MBIIB	0 %									
IX	MBIIC	0 %									
VIII/VII	LBI/II	8 %	TBD								
VIIA1/VI	Iron I	0 %		<1 %							

		Wapnish and Hesse 1991	Dan III sup, forth-coming	Dan IV, forthcom-ing,	Greer 2013	Area M (Greer et al., forth-coming)	Area K (Greer et al., forth-coming)	Area T1 (Greer et al., forthcom-ing.)	Area T1 2016 (Greer et al., forth-coming)	Area L 2009 (Greer et al., forth-coming)	Area B 2016 (Greer et al., forth-coming)
V	Iron I	0 %		<1 %							
IVB	Iron I/II	0 %		0 %							<1 %
IVA	Iron IIa	0 %			0 %						<1 %
III	Iron IIb	<1 %			0 %	<1 %	0 %			<1 %	0 %
II	Iron IIc	0 %				<1 %	0 %	<1 %	0 %	<1 %	0 %
I	Persian	NA									

Fig. 1: Relative Abundance of Pig Bone Remains from Tel Dan (% of Assemblage).

sub-phases of the Iron IIA (*fig. 2*).[13] Again, the broader context of this "spike" is still being determined, and even if it is confirmed, it would not be deemed statistically valid based on the small sample size.

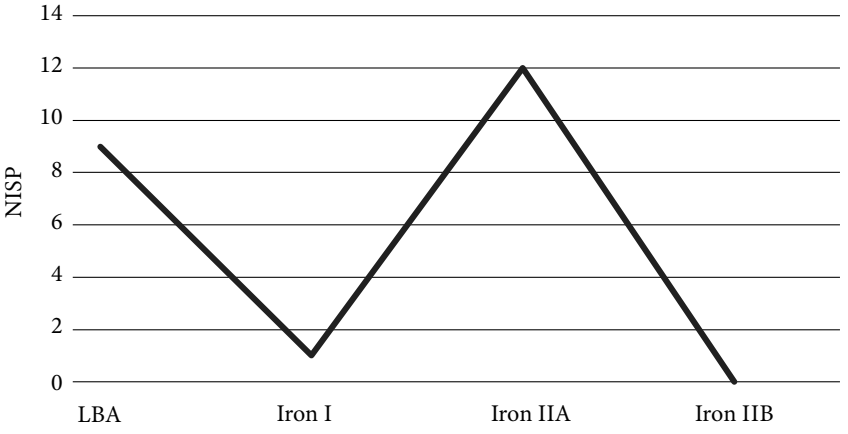

Fig. 2: Relative Abundance of Pig Bone Remains from Tel Dan (NISP).

1.2. Environmental Considerations

This scarcity of pig remains is odd when considered via an environmental lens, in that the region of Tel Dan is in many ways ideal for pig husbandry.[14] It is rich in water and natural vegetation, with lowlands and highlands, and even today sustains a feral pig population. Additionally, there is apparently some evidence of desiccation and deforestation in the Iron II that paralleled the population growth in the region.[15] Still, other northern sites, such as Hazor and Megiddo, maintained significant pig numbers during this same time period.[16]

1.3. Socio-Economic Considerations

Through a socio-economic lens, the apparent absence of pig remains in the Late Bronze/Iron I transition and the early Iron I following the collapse of the Late Bronze Age may accord well with the collapse of the Late Bronze urban centers throughout the region and the return to pastoralism. Because pigs are animals

[13] Note, however, that this chart is based on data through January 2017. Since then, we have identified some pig remains in the Iron IIB, though the total is still under 1 % of the assemblage.
[14] Wapnish and Hesse 1991; Grigson 1987, 1995.
[15] So Sapir-Hen et al. 2013, citing Langgut et al. 2014.
[16] Sapir-Hen et al. 2013.

that do not herd well, one may not be surprised to see that pigs are not significantly represented in the faunal assemblages from these time periods.

What may be more surprising, however, is the lack of pig remains at the advent of the intense urbanization that follows. With the exception of the potential spike in the late Iron IIA (ninth century BCE), the dearth of pig bones stands out at a time when the faunal record bears all the other signs of increasing sedentism, most noticeable in the steep rise in cattle percentages among the faunal assemblage.[17] Such an absence stands in contrast to other sites in the region that include major urban centers with significant percentages of pig remains, such as Hazor and Megiddo.[18]

1.4. Ethnic Considerations

Through an ethnic lens, the general absence is again not all that surprising, as people of the southern Levant apparently did not share the predilection for pork that others did, such as the early Iron I dwellers on the Philistine plain and the Greek mainland,[19] or, in certain periods, Egyptians.[20] That said, complicating the picture at Dan is our current understanding of the multiethnic character of the site at each phase,[21] let alone problems with defining "ethnicity."[22] The site's location along the Dan spring, one of the headwaters of the Jordan and the largest in the region, and at the crossroads of ancient routes determined by natural features of the land, has resulted in its long settlement history boasting diverse populations already at the end of the second millennium. Evidence for ethnic diversity in the Iron I may be suggested on the basis of material evidence associated with Egyptian, Canaanite, Aramean, and Sea Peoples cultures.[23] In the Iron IIB, there is evidence for Aramean, Phoenician, and Israelite inhabitants.[24] Their presence may be remembered in biblical texts that speak of the changing dominance of Dan by Israel and Aram (1 Kgs 12:29–32; 15:20; 2 Kgs 10:32–33; 14:25–27) and

[17] Rosen 1986.

[18] Sapir-Hen et al. 2013; Sapir-Hen 2016; Horwitz et al. 2017. That said, as Abra Spiciarich has pointed out to me in communication, the Iron I/early Iron IIA evidence from Hazor may not represent the economy of the site as a whole in that the remains come from a courtyard and cult installation; likewise, the evidence from Megiddo may only be representative of a lower class population (cf. Zeder 1996). Still, in both cases, the significant representation of pig remains contrasts with the findings at Dan.

[19] Cf. Hesse 1990; Lev-Tov 2000; Horwitz et al. 2017. But note that the presence or absence of pig bones did not necessarily serve as an ethnic marker in the Aegean (Lev-Tov 2006, 212).

[20] Cf. Hecker 1982; Redding 1991.

[21] Ilan 1999; Thareani 2016.

[22] Cf. Barth 1969; Jones 1997; Sparks 1998; Killebrew 2005; Miller 2008; Faust 2010; McInerney 2014; among others, and see discussions in Ilan 1999; Thareani 2016; and Greer 2017 for Tel Dan.

[23] Ilan 1999, forthcoming.

[24] Thareani 2016.

mention of the apparent marriage alliance between Israel and Phoenicia under the Omrides (1 Kgs 16:31).

Notwithstanding this complexity, anomalies may be noted in the Iron I and Iron II periods. In the Iron I, the almost total absence of pig remains is surprising considering material culture consistent with ethnic populations from Egypt, and even more so in light of elements of Sea Peoples culture, such as bichrome pottery, "Philistine" cult items (several "Ashdoda"-type figurines), and even what may be a small Aegean style sanctuary.[25] At other urban sites associated with Philistines in the southern coastal plain (at Ekron and Safi, for example), a sharp increase in pig bones associated with such assemblages has been noted,[26] notably with recent DNA evidence suggesting that European pigs were introduced to the region at that time.[27]

The continued ethnic diversity at Dan in the Iron II could easily explain the presence of the small amount of pig remains, or the "spike" in the late Iron IIA, but one might expect to find more evidence – indeed, the absence in the Iron IIB is even more telling. For example, if the site were predominantly populated by Aramean peoples as some have suggested,[28] the absence of pig remains would stand in contrast to the Aramean site of Bethsaida with significant pig remains associated with the *Bit Hilani* style palace at the same time.[29]

1.5. A "Pork Prohibition" in Light of a Synthesis of the Evidence?

So, is there evidence of a "pork prohibition" in effect at Tel Dan? Considered within the context of the discussion above, potential scenarios conducive to such a prohibition may be explored within the contexts of the Iron I, as well as in the Iron II.

In the Iron I, one could suggest that the absence of pig remains in light of the ethnic diversity that included Sea Peoples culture might be significant. Here, too, it is curious that biblical texts may suggest an association of Danites with Sea Peoples. One example appears in the Song of Deborah, where they are described as "lingering among the ships" (Judg 5:17).[30] Another more specific example may be found in biblical memories of integration with the Philistines through marriage and shared cultural customs in the Samson stories. Were "Danites" an ethnic conglomeration of Sea Peoples[31] and dwellers of the coastal plain who worshiped Yahweh and migrated north (cf. Judg 17)? If so, was one of the markers of their religion an avoidance of pork?

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[25] Ilan, forthcoming.
[26] Hesse 1990; Lev-Tov 2000; Faust and Lev-Tov 2011; Horwitz et al. 2017.
[27] Cf. Meiri et al. 2013; Sapir-Hen et al. 2015.
[28] E. g., Noll 1998; Athas 2003, 255–57; Arie 2008.
[29] Fisher 2005; yet notably, no pig remains were found in the area of the cult installation.
[30] Stager 1989.
[31] Cf. discussion in Ilan, forthcoming.

In the Iron II, the absence may even be more significant in light of the recent study by Lidar Sapir-Hen et al.[32] In their comprehensive survey of published remains from the region, they identify several patterns including differences between the major urban centers associated with the Northern Kingdom of Israel, such as Hazor, Megiddo, Yoqneam, and Beit Shean, and those of the Southern Kingdom of Judah, such as Jerusalem, Motza, Halif, and Lachish. They suggest that such a difference stands out in spite of environmental and socio-political factors, finding a possible explanation in the population explosion that may have limited grazing lands suitable for sheep, goats, and cattle; thus, pig husbandry increased so that more meat (and, though not mentioned in their study, more calories per pound of meat) could be produced on less land. They further suggest that the taboo of pork consumption, with possible origins in the Israelite-Philistine distinction of the Iron I,[33] may have been promoted by southern Judahites in the composition of biblical texts in the seventh century BCE as polemic against northern Israelites in their midst resulting from the Assyrian conquest of the north.

The lack of pig bones at Dan in the Iron IIB, however, may complicate the picture.[34] Like the other sites surveyed, Tel Dan is a major urban center in the region, apparently part of the Northern Kingdom, but without evidence of pig husbandry and only very sparse evidence for occasional hunting of wild boar. One may suggest that Dan might be an Aramean site, as some have argued,[35] or point out the mixed ethnicity of the inhabitants that would have included former pork-lovers, but such would then suggest that we might find *more* evidence of pig consumption, such as one has at the nearby Aramean (Geshurite) center at Bethsaida mentioned above.[36]

Might a more plausible scenario be that at least some of the inhabitants at Tel Dan maintained a prohibition of pork? While one cannot clearly identify this prohibition with Israelites, they would seem to be the most likely candidates in light of the biblical memories (Judg 17; 1 Kgs 12) and the numerous markers of Israelite culture at the site during the Iron IIB. The strongest markers include

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[32] Saper-Hen et al. 2013; see also Sapir-Hen et al. 2015; Horwitz et al. 2017.

[33] Though they are careful to note that even here the situation is more complicated. While there is indeed a contrast between the major Philistine urban centers and Judahite settlements in the Shephelah and hill country, the small villages within Philistia are also lacking in pig remains (see the summary in Sapir-Hen, 2016).

[34] Further, the few pig bones that have been recovered are likely associated with wild boar (see n. 3, above), in contrast to the other northern sites for which Sapir-Hen et al. 2013 suggest the remains are all from domestic pigs based on the reports and the authors' own analysis.

[35] See, e.g., Noll 1998, 2013, 286–96; Athas 2003, 255–57; Arie 2008; and following Arie: Na'aman 2012, 95; Hasegawa 2012, 84–85, 140–41; and Finkelstein 2013, 127–28; cf. Berlejung 2009, 21 – for arguments in favor of the Yahwistic association of the temple complex, see Greer 2017.

[36] Fisher 2005; Arav 2013.

the epigraphic evidence, highlighted by several seal impressions with Yahwistic names,[37] as well as the cultic associations with Yahwism in the temple complex.[38] The distinction, then, might not have been a simple dichotomy between north and south, but a more complicated situation in which various groups – perhaps limited to priests or other cultic personnel – within the north and possibly the south held different views on the prohibition of pork.

In sum, arguments can be made for the avoidance of pork at Tel Dan in the Iron I and the Iron II, but the variables discussed above render any conclusions tentative. Potential support, however, for a prohibition in the Iron II may be found in evidence from the other end of the spectrum of specialized food status – that of "prescription."

2. Evidence of "Prescription" in Priestly Portions at Tel Dan?

As with assessing evidence for "prohibition," garnering evidence for "prescription" is complicated, especially when it involves the study of biblical texts and their relationship to the archaeological record. In the case of Tel Dan, I have argued elsewhere that a number of non-random patterns observed among specific deposits of faunal remains within the cultic precinct in two separate areas (the western chambers and the courtyard; see *fig. 3*) are congruent with Israelite practice in general, and with prescriptions for priestly portions, in particular.[39] Two will be highlighted here.

[37] These include two seal impressions bearing the name '*Immadiyaw* ("Yahweh is with me"; eighth c. BCE; see Biran 1994a, 15, 199–201; Brandl 2009); one with the name *Zakariyaw*, ("Yahweh remembers"; Biran 1994b, 15; see, too, Brandl 2009 for an identical impression found at Bethsaida – apparently both with petrographic signatures linking them to clay from Samaria; see, further discussion in Greer 2017), and one with the name *Amoz* (perhaps short for *Amaziyaw*? Biran 1994a, 255). It is further notable that the first two examples feature the spelling with the theophoric element "*-yw*" (/yaw/), typical of the north (cf. Hackett 2002, 142). While two examples of the name *Baalpelet*, a Baal theophoric appellation, have also been discovered, they postdate the mid- eighth c. BCE destruction layer that seals Stratum II, and thus the final stratum associated with Israelite occupation in Biran's scheme (Biran 1994a, 262–64).

[38] So Greer 2013, 2017.

[39] See Greer 2012, 2013, 2014, 2017.

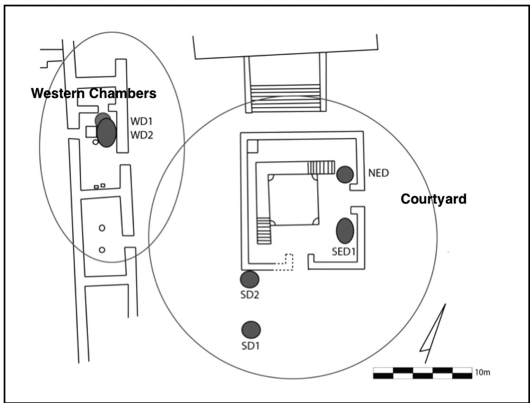

Fig. 3. The Temple Complex at Tel Dan Highlighting Spheres of Contrast.

First, a prescription detailing that right-sided portions must be given to the priests (cf. Exod 29:27–28; Lev 7:32–33) may be correlated with the difference between the assemblages of the western chambers, an area associated with priests,[40] and those of the courtyard feasting deposits, an area associated with worshipers.[41] The disproportionate distribution (*fig. 4*) of right hindlimbs and forelimbs of sheep and goats in the area assigned to priests (67 % rights : 33 % lefts) compared to the courtyard (63 % lefts : 37 % rights) would be congruent with priests receiving their due, i. e., the right-sided meaty portion, then consuming it within the western chambers and depositing the remains in specialized ways.[42]

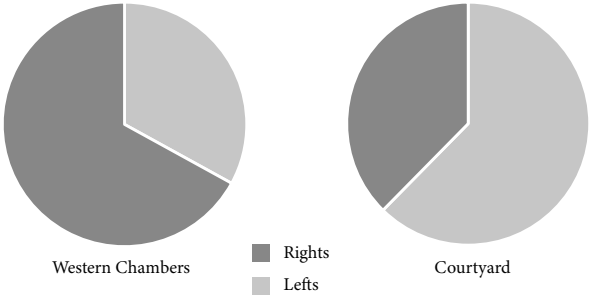

Fig. 4. Distribution of Right and Left Limb Portions by Area.

[40] Biran 1994a; Greer 2013; Davis 2013.

[41] Greer 2013.

[42] Bones associated with forelimb portions include scapulae, humeri, radii, and ulnae and those associated with the hind limb include femora and tibiae. For further details, see Greer 2013, 66–67.

Second, a prescription detailing that the skin of the burnt offering must be given to the priests (Lev 7:8) may be correlated with the much higher percentage of sheep and goat phalanges (or "toes bones"; i. e., any one of three small bones that extend into the hoof: PH1, PH2, or PH3) in these same priestly chambers where the combined totals comprised 33 % of the assemblage compared to other meat-bearing portions, and in contrast to the courtyard deposits that contained only 12 % phalanges (see *fig. 5*). Again, such a distribution would be congruent with priests receiving their due – i. e., the skin with the hooves left intact[43] – and then processing their allotment before depositing the phalanges in a specialized manner within the chambers.

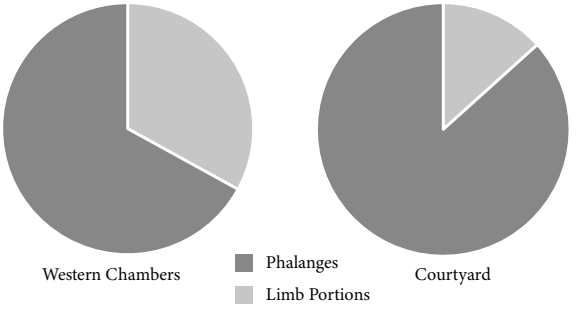

Fig. 5. Distribution of Phalanges by Area.

This high degree of correlation between the animal bone remains and the Priestly prescriptions, alongside other evidence from the temple complex at Tel Dan including architecture designed with particular understandings of sacred space,[44] artistic motifs,[45] and cultic paraphernalia[46] that may be correlated to Israelite worship practices, add further weight to the possibility that a pork prohibition was in effect at Tel Dan, if these may be considered "Israelite" features.[47]

3. Conclusions and Further Questions

Thus, when the absence of pig bones at Tel Dan is considered in light of the evidence for "prescription," a case for "prohibition" gains some strength, yet admittedly the numerous variables and the preliminary nature of much of the data preclude any solid conclusions. Still, if some degree of plausibility may be granted

[43] See Wapnish and Hesse 1991, 45–47.
[44] Davis 2013.
[45] Ackerman 2013.
[46] Greer 2010.
[47] On the further complexity of this matter, see Greer 2017.

for the sake of argument that both "prohibition" and "prescription" may be present at Tel Dan, and such is considered within the broader context of a thriving Yahwistic cult among at least some of the Israelite inhabitants in the Iron II at this site, a host of new questions arises concerning the relationship between the concurrent northern and southern expressions of the Yahwistic cult in the Iron IIB prior to the annexation of the north by the Assyrians. What was the nature of the relationship between the northern centers of Dan and Bethel with the southern center of Jerusalem: one of conflict, or cooperation, or both? How might this relationship affect our understanding of the composition of Priestly literature in the Hebrew Bible? Are northern traditions – such as a meaningful pork prohibition – intertwined with southern traditions in the present form of the Hebrew Bible? And if so, when were they combined, considering that the data here date to the ninth and eighth centuries BCE? These questions highlight the complexity of the issues involved, but also the potential significance of certain conclusions.

Distinguishing Judah and Philistia

A Zooarchaeological View from Ramat Raḥel and Ashkelon*

Deirdre N. Fulton

1. Introduction

The late Iron Age is at the center of increasing scholarly attention regarding the many facets of ancient Levantine economy and identity.[1] Within the scholarly discourse, two sites have emerged as prominent case studies for the different expressions of economic and cultural activity at this time. In the hills just south of Jerusalem, Ramat Raḥel was a governmental center overseeing agricultural production and collecting taxes in kind.[2] Meanwhile on the coast, Ashkelon was an international port city that functioned as an important node of the Mediterranean economy in the late Iron Age.[3] In addition to differences in their roles in the Levantine economy, Ramat Raḥel and Ashkelon were in different political and cultural zones; Ramat Raḥel was an economic center of control in Judah and Ashkelon was a city-state in Philistia. While there is an ongoing debate over the significance of the presence or absence of specific species in Judah and Philistia and whether these differences correlate to cultural differences (namely the presence or absence of pig), less attention is devoted to the general dietary practices, economic strategies, and specific cultic deposits that characterize these two different economic zones.

Moving away from the traditional binary model based on the presence or absence of certain species, this study explores the differences in cultural and economic identity between Judah and Philistia by examining the animal economies of Ramat Raḥel and Ashkelon with specific attention on the specialized bone

* My thanks to Peter Altmann, Anna Angelini, and Abra Spiciarich for organizing the conference "The Larger Context of the Biblical Dietary Laws" (Lausanne, 2017) and subsequent volume. Also, thanks to Eric Welch and Paula Hesse for helpful feedback on the paper.

[1] Faust 2000; Master 2003; Lipschits 2005; Faust and Weiss 2005; Freud 2011b; Lipschits et al. 2011; Gadot 2015; Younger 2015; Walton 2015.

[2] Lipschits et al. 2011.

[3] Master 2003; Stager 2011; Master and Stager 2014.

deposits found at each site.[4] In order to highlight the unique characteristics as well as the overlapping characteristics of each site, it is necessary to examine the faunal remains from Ramat Raḥel, and then Ashkelon. Although Ramat Raḥel and Ashkelon represent different economic zones in the southern Levant, their animal remains from the late Iron Age II period reveal similar dietary habits. Thus, while these sites are very different in nature (coastal versus inland, city-state versus kingdom), their faunal remains reveal similarities that fit into the larger Southern Levantine patterns of the late Iron II period.

2. Ramat Raḥel in the Iron II

Ramat Raḥel is located near the road connecting Hebron and Beer-Sheba to Jerusalem from the south and the junction with the road connecting Beth-Shemesh to the capital from the west. It is also strategically located within the Repha'im Valley and is very visible from the valley below.[5] The site is also located equidistant from Jerusalem and Bethlehem – approximately 4 kilometers from each. Ramat Raḥel's close proximity to Jerusalem and its strategic location in the Repha'im Valley may explain why it grew into an important administrative center during the late Iron II through Persian periods. Several prominent excavations have taken place at Ramat Raḥel, most notably Yohanan Aharoni in 1954 and 1959–1962, and more recently the renewed excavations under the direction of Oded Lipschits, Yuval Gadot, and Manfred Oeming from 2005 through 2010. Aharoni's work first uncovered, and Lipschits, Gadot, and Oeming clarified that Ramat Raḥel was an important administrative and ceremonial center at the end of the Iron Age II period through the Persian period.[6] Hundreds of incised jar handles and stamp impressions point to its function as an administrative center, collecting taxes throughout the region.

During the late Iron II through Persian period, the site of Ramat Raḥel was dominated by a large, administrative structure. Construction occurred in three phases: Building Phase 1 spanned a period from the late-eighth or early-seventh century to the mid-seventh century BCE; Building Phase 2 is dated to the late-seventh and sixth centuries BCE; and Building Phase 3 marked further developments taking place in the fifth century until the late-fourth century BCE. During Building Phase 1, a "tower-fortress" was constructed so that movement in the valley below could be monitored.[7] To the east of the tower, there were other

[4] See also Maeir and Hitchcock (2016, 209–26) for a discussion of past scholarly models, particularly what may be classified as binary models, for viewing the Philistines based on textual evidence and material culture.

[5] Lipschits et al. 2011, 2–3.

[6] Aharoni 1956, 1962, 1964, 1967, 1993; Lipschits, Gadot, and Freud 2011.

[7] Lipschits and Gadot 2008; Lipschits et al. 2011, 10–20.

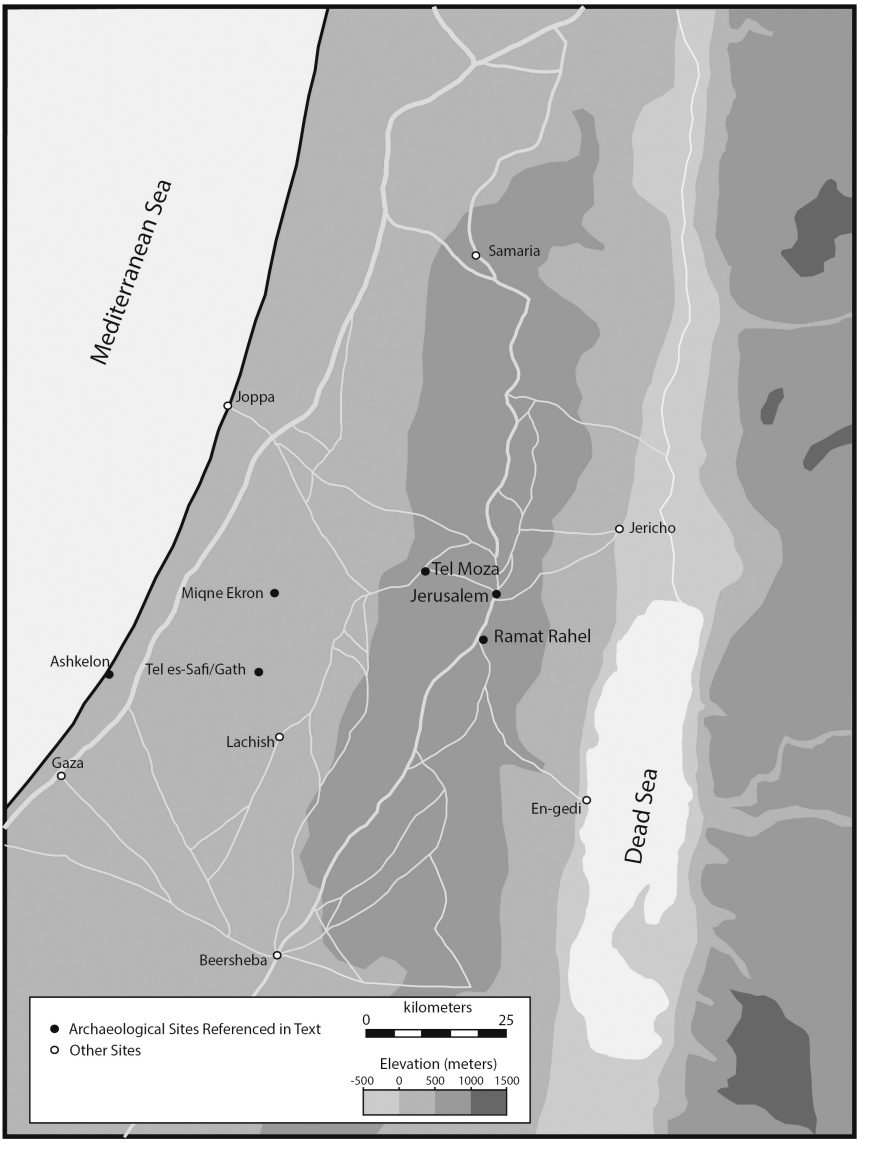
Mediterranean Sea
Samaria
Joppa
Jericho
Tel Moza
Jerusalem
Miqne Ekron
Ramat Rahel
Ashkelon
Tel es-Safi/Gath
Lachish
Gaza
En-gedi
Dead Sea
Beersheba
kilometers
0
25
Archaeological Sites Referenced in Text
Other Sites
Elevation (meters)
-500
0
500
1000
1500

Fig. 1: Map.

buildings that served various administrative needs, as the hundreds of LMLK and 'private' stamp impressions, as well as jar handles incised with concentric circles found at the site indicate.[8]

During Building Phase 2, the administrative center/tower-fortress of Ramat Raḥel was transformed into a magnificent palatial compound. The Phase 1 buildings were now integrated into the compound, and royal gardens were added at the same time. The addition of the royal gardens was a substantial building project. Daphna Langgut et al.'s botanical study reveals that by the seventh century BCE Ramat Raḥel was transformed into a lush garden with water features and diverse flora.[9] Additionally, as Lipschits et al. have argued, this is the earliest known example of a garden in the Levant connected to a palatial residence.[10]

The late Iron II at Ramat Raḥel is contemporary with building Phases 1 and 2. During this period of time, Judah was under the control of much larger empires, namely Assyria and later Babylonia and Egypt.[11] The administrative structure at Ramat Raḥel was probably first constructed under the support of Assyria, although which king supported this building project is still unknown. After the fall of Assyria, Babylon (and, at times, Egypt) continued to use Ramat Raḥel as a place for the collection and administration of taxes. In Phase 3, the Persian government also made use of the structure for administrative purposes.[12]

2.1. The Faunal Collection

The faunal remains from the periods contemporary to the administrative structure are from four different contexts: The Phase 1 Iron II material, the Phase 2 Iron II material, the Phase 2 Iron II feasting pit material (hereafter referred to as Locus 14109), and the Phase 3 Persian period pit material. The uniqueness of the bone assemblage from Locus 14109 is noteworthy when compared to the faunal evidence from Building Phases 1 and 2, but also reveals a great deal of overlap as well. The Phase 3 material mostly follows the patterns in Phase 1 and 2, but has its own divergences as well. It should be noted that the entire animal bone assemblage analyzed from the 2005–2010 excavation seasons dating from the Iron Age II through Persian Period was modest, with approximately 1200 bones and bone fragments.

The animal bone assemblage dating to Phase 1 (eighth–seventh centuries) consists of a typical Iron Age II Judean highland diet, including sheep, goat, and

[8] Lipschits, Sergi, and Koch 2010, 2011; Koch 2011; Sergi 2011.

[9] Langgut et al. 2013.

[10] Lipschits et al. 2011.

[11] The biblical texts make clear that Egypt also had a hand in controlling Judah, particularly during the final years of the Assyrian empire. See, for example, the ongoing negotiations with Egypt in 2 Kings. For a detailed discussion of Judean and Egyptian interactions, see Na'aman 1991 and Schipper 2010.

[12] Lipschits, Sergi, and Koch 2011.

cattle. No bird or fish bones were recovered.[13] The majority (78 %) of sheep and goat bones are mature. In the Phase 1 Iron II assemblage, the majority of the collection are sheep and goat (88 %) and the rest of the collection consisted of cattle (11 %).[14] The Phase 2 collection is separated into two contexts: the bones found throughout the site from this phase and bones uncovered specifically from Locus 14109. In Phase 2, the animal bone assemblage from several different contexts again mirrors the typical southern Levantine diet of sheep, goat, and cattle, but with a significant percentage of birds. The relative abundance of sheep/goat bones compared with cattle bones continues to be greater. Sheep/goat represent 78 % of the total collection and bird bones in Phase 2 are as numerous as cattle (11 %).

2.2. Locus 14109: The Iron II Feasting Pit

In the 2008 season, the excavation team uncovered a pit that measured 150 cm in diameter by 40 cm deep. It was sealed underneath a limestone floor of the central courtyard of the palace.[15] Within the pit, 75 complete and restorable pottery vessels dating to the Iron IIC period, six clay figurines, and 540 bones were uncovered. As Lipschits, Gadot, and Oeming argue, the pit was clearly cut into the foundation fill of the courtyard and then covered up with the crushed limestone floor of the central courtyard.[16]

Mixed in with the remarkable assemblage of pottery vessels from Locus 14109 were also bones of mammals, birds, and fish. The Medium Mammal (MM) bones are from sheep or goats, and when species identification based on the morphological criteria of diagnostic bones was possible, they were from sheep.[17] The Large Mammal (LM) bones are from cattle.

The sheep remains are all from immature animals aged three to six months.[18] It was possible to lay out the bones of the sheep, and there were fragmentary remains from two immature sheep. Indeed, the assemblage of sheep bones includes portions from most skeletal elements. Light butchering marks were preserved on one long bone. For Large Mammal (LM) and cattle remains (11 bones), the NISP indicates that the discarded remains of at least one cow were preserved in the Iron II pit. The lack of burning evidence on the sheep and cow remains is what one would expect from meat that was stewed rather than cooked over an open

[13] According to the excavators, 1 in 5 buckets were dry sieved during the excavation of Phases 1–3.

[14] All of the percentages are based on the Number of Individual Specimens (NISP).

[15] All of the contents from the pit were dry sifted with 1 cm mesh. Some of the pit contents was also wet-sifted with .5 mm mesh.

[16] Lipschits, Gadot, and Oeming 2011; See also Fulton et al. 2015.

[17] Boessneck 1969; Zeder and Lapham 2010.

[18] Following Silver 1969; Payne 1973.

fire. As is commonly argued, stewing was the most common meat preparation method in Judah during the Iron II period.[19]

There were also a significant number of bird bones (42 total) found within the pit assemblage derived from at least nine birds. Thirty-eight bones were from partridge, one bone was from a goose, and three bones were from one very small bird, probably in the Passeriformes (or songbird) category.

In Omri Lernau's analysis of the fish bones, he identified approximately 65 % of the remains belonging to three families of freshwater fish and two families of marine fish. He maintains that nearly half of the fish bones that were identified were from the Nile Catfish and states, "This is the largest freshwater fish in Israel, and it may attain a maximum size of about 150 cm and a weight of 20 kg. Catfish inhabit the Jordan River system and the coastal rivers along the Mediterranean, as well as poorly oxygenated waters and swamps."[20] Lernau also identified 17 bones from porgies – a rather small fish – twelve bones from the gilthead seabream, mullet, and also Cyprinid, which is found in the Lake of Galilee. Finally, he identified "two dorsal spines of another freshwater fish … probably a Tilapia, either from the Jordan River system or from coastal rivers along the Mediterranean."[21] In sum, at least 7 Nile Catfish and other freshwater and saltwater fish were part of the feast.

2.3. Locus 477: Aharoni's Pit

An evaluation of earlier excavations at Ramat Raḥel, namely Aharoni's excavations, revealed important parallels to Locus 14109. Aharoni had interpreted an area he uncovered – Locus 477 – as a simple destruction layer on the floor of a building.[22] According to the further analysis of the renewed excavations, however, this is another example of a ritual pit. Many pottery vessels with similar functions to the feasting pit assemblage were part of the Locus 477 assemblage, as well as figurines.[23] Unfortunately, there is no mention of animal bones in the excavation reports from Locus 477.[24]

The most intriguing find from Locus 477 is a sherd of pottery of what may be part of a larger scene of a seated male figure on a throne with his hand extended. Unfortunately, the sherd is broken. From other ancient Near Eastern examples, we find many seated male figures on thrones. In many of these examples, the seated figure is depicted with his hand extended and holding a cup.[25] Other

[19] Cf. Magness 2014, 47.
[20] Fulton et al. 2015, 36–37.
[21] Ibid., 37.
[22] Aharoni 1964, 29–31, figs. 16–19, pl. 30.
[23] Fulton et al. 2015
[24] The excavators were not surprised, since Aharoni did not systematically collect faunal remains from Ramat Raḥel.
[25] Ibid., 41.

parallels to this scene include the depiction of a king seated on a throne with a procession of musicians and captives, carved on a Late Bronze Age Ivory from Megiddo.[26] A late-eleventh century example also comes from the sarcophagus of Ahiram of Byblos,[27] who is depicted seated on a throne with a cup in his right hand. The Iron age II Katumuwa Stele from Zincirli also depicts a seated king with a cup in his right hand.[28] Finally, the seventh century BCE "Garden Banquet of Assurbanipal"[29] uncovered in Palace A from Nimrud also depicts the reclining king and seated queen; both are holding cups in their right hands. In these select examples, the king or queen is depicted seated on a throne and is connected to banqueting scenes, although the contexts for these feasts differ.[30]

2.4. Locus 13174: The Persian Period Pit

While the focus of this study is on the late Iron II period, examining the later Persian period pit (Locus 13174) allows for one to highlight the unique nature of the late-Iron II faunal remains. Locus 13174 contains a sizeable collection of animal remains contemporary to the Phase 3 administrative center. The pit was uncovered in Area D1 and based on the vessels in the pit, dates to the sixth and fifth centuries BCE. Locus 13174 contains an extensive amount of restorable ceramic vessels, of which many bear stamp impressions either on the bodies (5 examples) or handles (35 examples), and is the largest concentration of impressions discovered to date.[31] The excavators believe that the jars were from nearby storage rooms and then discarded into the pit.

The bone assemblage has overlapping points with earlier Phases 1 and 2, but diverges as well. The largest percentage of the collection is sheep/goat (79 %), with cattle a distant second (15 %). Interestingly, pig is also found within the collection (3 %), and bird (2 %). Other species, which make up less than 1 % of the collection include camel, donkey, gazelle, ibex, and dog. While the presence of gazelle and ibex may indicate that hunting wild animals took place near Ramat Raḥel, the percentage of bones is statistically very minor in comparison to the rest of the collection. Thus, if hunting took place, it was not a major component of the diet.

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[26] Loud 1939.

[27] Markoe 1990.

[28] There are many examples of seated males holding drinking vessels in their hands. Many of these scenes depict funerary cultic scenes, as is the case with the sarcophagus of Ahiram as well as the Katumuwa Stele. For a thorough discussion and more examples, see Hermann and Schloen 2014.

[29] BM 124920.

[30] D. Bonatz refers to the seated males on thrones with a drinking cup as "Die Speisetischszene," which are commonly found in Syro-Hittite statuary (Bonatz 2000). There are also many examples in earlier Sumerian and later Assyrian and Persian examples.

[31] Freud 2011a.

Dog appears in the faunal record for the first time in the Persian period. Dog consumption was not common in the Persian period and there are no signs of this at Ramat Raḥel. That is, there are no butcher marks or any signs of trauma to the bones. Dog bones do appear in the Persian period at certain sites, most notably coastal sites such as Ashkelon[32] and Dor,[33] but a few canid bones have also been uncovered in sites in Judah during the Persian period, specifically at Jerusalem.[34] As the Persian period dog remains reveal, there is not one model for why dogs appear in Persian and Hellenistic contexts. In the example of Ramat Raḥel, the bones are not buried as an individual interment, but rather are part of the pit contents.

While the species present do not diverge greatly from the Iron II period, with the exception of pig and only by 2 %, the size of the collection allows for us to offer more interpretations concerning the material remains. When examining the archaeological animal – that is, what parts of MM and LM remains that are uncovered – the remains represent a healthy representation of the entire skeleton. Moreover, the highest percentage of MM cuts are of the meatier portions – long bones, axial, and even the head – indicating that the faunal remains are from meals and not from the primary butchering activities. This is similar to Phases 1 and 2, where the bone detritus represented meals rather than initial butchering activities.

2.5. Analysis of all contexts

As these four contexts have shown, sheep and goat remains are the most abundant in all contexts and all periods, see Table 1.

Table 1: Percentage of Major Species (based on NISP) from Ramat Raḥel Phases 1–3

	Phase 1	Phase 2	Locus 14109 (Phase 2)	Locus 13174 (Phase 3)
Sheep/Goat	88 %	78 %	63 %	79 %
Cattle	11 %	11 %	8 %	15 %
Bird	0 %	11 %	29 %	2 %
Pig	0 %	0 %	0 %	3 %

This is not surprising since sheep and goat are, generally, the most common animals consumed in the Mediterranean world. The presence of cattle, even though

[32] Wapnish and Hesse 1993.

[33] Sapir-Hen 2011.

[34] See Horwitz, Wolff, and Ortiz 2016; 2017 for a list of sites with canid remains from the Iron II through the Hellenistic period in the Southern Levant.

it is less than 20 %, is also normal. Indeed, the percentage of cattle is within the expected range at a Judean highland site in the late Iron II through early Persian period. Sapir-Hen, Gadot, and Finkelstein provide two comparative sites for Ramat Raḥel during the late Iron II Phase 2 period: Tel Moza, located in the Soreq Valley, and the Western Wall Plaza in Jerusalem.[35] At the site of Tel Moza, the assemblage consisted of 68 % sheep/goats, 30 % cattle, and 1 % pig. In contrast, at the sight of the Western Wall plaza in Jerusalem, 90 % of the assemblage was sheep/goat, 8 % cattle, and less than .5 % was pig.[36] As Sapir-Hen, Gadot, and Finkelsten point out, the location of Tel Moza, the percentage of cattle, and the age of the cattle reveal a plow-based agricultural economy focused on grain production. In contrast, the lower cattle numbers at the Western Wall plaza in Jerusalem was because it was not a center of plow-based agriculture like Tel Moza in the Sorek Valley.

At the site of Ramat Raḥel, grain storage facilities have not been uncovered. There is no evidence for a dependence on plow-based agriculture, which is what would be needed for a higher assay of cattle. The Ramat Raḥel economy was dependent on olive oil and/or wine, as indicated by the hundreds of jar handles and remains of storage vessels. A plentiful supply of cattle would not be present in an area focused on olive oil or wine production. Rather, animals that could be brought from the hinterland are present, namely sheep and goats. And, as the bones remains indicate, sheep were preferred over goats. This is evident in both ritual pit contexts and other bone deposit contexts. This is also what Sapir-Hen, Gadot, and Finkelstein have reported of the faunal remains from the Western Wall plaza in Jerusalem.[37] And thus, as the Ramat Raḥel material indicates, and Tel Moza and Jerusalem also indicate, economic factors determine the percentage of cattle versus sheep and goats in the late Iron II material. Also, the governmental power at Ramat Raḥel probably determined this as well.

The age of the animals also provides some important information concerning the animal economy. In a normal pastoralist economy, one would expect to find a range of ages in the sheep and goat remains, indicating whether the pastoralists focused on a dairy economy, a meat economy, a wool economy, or a mixed economy (particularly dairy and meat). At Ramat Raḥel, the age distribution indicates a meat economy and the portions of bones preserved – that is, meatier parts of the animal – indicate that meat provisioning also may have taken place. Meat provisioning means that outside pastoralists brought animals to the site of Ramat Raḥel, and someone (possibly the administrative elite at the site) determined what age and species of animal would be consumed by the rest of the citizens of the site. In all of these periods, animals were of prime age. This indicates

[35] Sapir-Hen, Gadot, and Finkelstein 2016.
[36] Ibid.
[37] Ibid.

that the pastoralists were culling the more select animals (adults and sub-adults) for the population at Ramat Raḥel.

Differences arise, however, when one reconsiders Locus 14109. Birds and fish are noteworthy in this specific pit setting compared to other faunal assemblages at Ramat Raḥel. While fish are found at other sites throughout Judah and the coast, the number of bones within the Ramat Raḥel ritual context is high (6.5 %) for a Judean highland site. The variety of fish also indicates a network of trade routes bringing specific goods to the center of Ramat Raḥel. As Lernau has argued, the presence of pools within the garden at Ramat Raḥel made the storage of the freshwater fish, such as the Nile Catfish possible for a period of time. And indeed, fish are not represented in the faunal collection before the Phase 2 addition of the garden. Additionally, the garden environment, sustained by the pools and cisterns, also helped birds to thrive in this highland site. Although there is an increase in bird consumption during Phase 2 compared to Phase 1, the most abundant number is found in Locus 14109.

2.6. Ramat Raḥel: Conclusion

The Phase 2 ritual pit clearly reveals specialized eating behaviors in an elite setting. Certain species are outstanding when compared to the larger Ramat Rahel assemblage, such as the many different varieties of fish and birds. But as most of the collection reveals from all of the different contexts, sheep, goat, and cattle are generally the most abundant species. Cattle appears to be rare because of the location of Ramat Raḥel in the Repha'im Valley, which focused on the collection of olive oil and/or wine. The preference for sheep in all periods reveals intentional herd management choices, similar to the Western Wall plaza in Jerusalem.[38] The percentage of cattle also indicates its distance from the Sorek Valley, which was the grain production center/plow-based agricultural center of ancient Judah.

The low percentage of cattle indicates that Ramat Raḥel was not part of the grain producing economy of the Sorek Valley. Rather, it was part of the olive oil and/or wine collection of the Repha'im Valley. Additionally, the healthy representation of sheep and goat, the age of the sheep and goat when they are slaughtered, and the lack of domestic cooking spaces may indicate centralized cooking at Ramat Raḥel. This may have meant that Ramat Raḥel had a cookhouse of sorts, separate from the administrative building. And thus, food was cooked in one location and then distributed to the inhabitants of Ramat Raḥel.

[38] Sapir-Hen et al. 2016.

3. Ashkelon in the Iron II

The late-Iron II was a period of economic growth and development for the Philistine city of Ashkelon. This came to an end in 604 BCE when Ashkelon was destroyed by the Babylonian army, under the leadership of king Nebuchadnezzar II. The destruction of Ashkelon is mentioned in the Babylonian Chronicle, stating that Nebuchadnezzar "Marched to the city of Ashkelon and captured it in the month of Kislev. He captured its king and plundered it and carried off [spoil from it …]. He turned the city into a mound and heaps of ruins and then in the month of Sebat he marched back to Babylon."[39]

The archaeological remains reveal that Nebuchadnezzar utterly destroyed the entire city of Ashkelon, including the center of the city.[40] Before its complete destruction in the late Iron II, Ashkelon was a well-fortified coastal city. Throughout the seventh century BCE, Ashkelon was an international city, trading regularly with Phoenician ports such as Tyre, as evidenced by the Phoenician pottery remains.[41] Other trade goods were also brought to Ashkelon from western locations such as the Greek islands, Ionia, Corinth, and Cyprus.[42] Egyptian goods were also found in abundance in the late-seventh century remains of Ashkelon, indicating trade from the south as well.[43]

3.1. The Faunal Collection

The site of Ashkelon was excavated under the directorship of Lawrence E. Stager (1985–2016) and Daniel Master (2007–2016). The most extensive archaeological excavations yielding evidence of seventh century occupation were found in Grids 38 and 50.[44] Grid 38 is characterized by an industrial building and alley running along the eastern side of the building. Within the building (Building 776), loom weights and presses reveal that industrial activities such as weaving and wine production occurred.[45] In areas of industrial activities, the zoological evidence is found in "industrial areas" where, as Hesse, Fulton, and Wapnish[46] have observed, there is no clear need for specific animal products. The faunal assemblage is small (1,355 bones) in comparison to the very large sample from Grid 50 (24,298 bones).[47] The faunal remains from Grid 50 were uncovered in the quarry

[39] BM 21946, 18–20; The name Ashkelon is damaged in the text. See Stager 2011, 1 for a discussion of the identification and why Ashkelon is the best reconstructed name.

[40] Stager 2011.

[41] Ibid.; Master and Stager 2014.

[42] Ibid., 9; Waldbaum 2011.

[43] Walton 2011; Keel 2011; Bell 2011; Press 2011; Park 2011.

[44] Stager, Master, and Schloen 2011. More recently, Grid 51 has revealed more evidence of seventh century Ashkelon and will be the topic of forthcoming publications.

[45] Stager 2011.

[46] Hesse, Fulton, and Wapnish 2011, 619.

[47] Ibid. 2011, 620.

fill and also the marketplace. In the seventh century, the western slope that borders the seashore was quarried for stone, probably due to the intensification of building projects in the city. After quarrying was complete, fill was brought in to level the area, and the marketplace was built over the fill.[48] It is this late-seventh century marketplace that offers the most complete picture of late-seventh-century life, although the seventh-century quarry fill offers an important contribution to the discussion as well. Although the marketplace was destroyed by a massive conflagration in 604 BCE at the hands of Nebuchadnezzar and his army, many of the features of the marketplace are preserved, namely the streets, alleyways, and building foundations.

Among the marketplace detritus, a large number of bones are from articulations that are still preserved. In some cases, phalanges (Ph) were found together from the same foot; in other cases, preserved tooth rows of sheep and goats were uncovered. Still in other examples, bird bones were found in what could be described as bone "caches."[49] Indeed, most of the bird bones were found grouped together rather than dispersed throughout Grid 50. By plotting the find spots, we were able to determine certain behaviors within the marketplace. For example, we found that many of the tooth rows (mandibulae and maxillae) were found in the plaza and the streets. The high number of mandibulae and maxillae and a low number of long bone and axial remains indicate that these cuts had been sold in the marketplace and distributed to the consumers throughout the site. Thus, the final stages of carcass dismemberment occurred in the marketplace. Yet the low percentage of lower phalanges (namely the Ph2 and Ph3) indicates that skinning took place at a different location. Finally, the bird bones were concentrated in specific locations. Indeed, 330 bird bones were located in one room of the marketplace, indicating specialization of sales for this particular species. The 604 BCE destruction preserved the economic activities that were taking place in Grid 50, and it appears to have continued up to the eve of the demise of Ashkelon.

3.2. Analysis of Grids 38 and 50

The seventh-century Ashkelon faunal collection reflects the most consumed species of sheep, goat, and cattle. It is significant, however, that bird is more abundant in certain areas than cattle, specifically in the Grid 50 marketplace and Grid 38 industrial buildings.

[48] Stager 2011, 39.
[49] Hesse, Fulton, and Wapnish 2011, 629.

Table 2: Percentage of Major Species from Ashkelon Grid 38 and 50 Contexts.[50]

	Grid 50 Quarry	Grid 50 Buildings	Grid 50 Streets	All Grid 50	Grid 38
O/C	86 %	72 %	82 %	80 %	86 %
Bos	11 %	7 %	11 %	9 %	5 %
Aves	3 %	22 %	7 %	11 %	8 %

It is well-established that if intensive plow-based agriculture were taking place, the faunal remains should contain at least 20 % cattle remains.[51] Since the cattle remains comprise only 10 % of the overall sample, it is clear that intensive plow-based agriculture was not a significant part of the agricultural economy by the late Iron II period. This is in contrast to the Iron I material, when cattle remains make up approximately 25 % of the sample, indicating sustained plow-based agriculture for approximately two centuries.[52] Yet this clearly changes over time, as the quarry and marketplace faunal remains indicate. Depending on the area, when one compares the sheep to goat ratio, one finds a 2.7:1 (quarry) versus a 3.6 to 1 (marketplace) ratio. Hesse, Fulton, and Wapnish interpret this to mean that the quarry fill represents the larger eating patterns of Ashkelon, versus the marketplace detritus which generally were the offcuts of butchering that had been discarded, but had yet to make it to the city dump.[53]

When one considers the entire bone collection – that is, species that cannot be identified, so are referred to as scrap, bones identified by size, that is Small Mammal (SM), MM, and LM, and also identifiable species – there is a great deal of variety. Present among the identifiable species are pigs, donkeys, camels, dogs, deer, small carnivores (weasels and cats), gazelles, and sea turtles. But similar to Ramat Raḥel, all of these species make up less than one percent of the overall collection.

One of the finds on which much is written, particularly with regard to the Philistines, is the presence or absence of pig.[54] This focus arises out of biblical prohibitions concerning pigs as well as our modern interest in food prohibitions and why pig – a mainstay in certain regions of the Mediterranean world – is largely ignored in the Iron Age southern Levant (with, of course, some noteworthy exceptions). In order to draw a diachronic distinction of bone remains at Ashkelon, it is necessary to say a few words about pigs. In the Hesse and Fulton[55] analysis of the

[50] From Hesse, Fulton, and Wapnish 2011.

[51] Redding 1981, 1984; Rosen 1986; Zeder 1986; Wapnish and Hesse 1991.

[52] Hesse and Fulton, forthcoming a.

[53] Hesse, Fulton, and Wapnish 2011.

[54] Cf. Hesse 1986, 1990; Stager 1995; Finkelstein 1996; Hesse and Wapnish 1997, 1998; Killebrew and Lev-Tov 2008; Uziel 2007; Lev-Tov 2006, 2010; Faust and Lev-Tov 2011; Maeir, Hitchcock, and Horwitz 2013; Sapir-Hen et al. 2013; Hesse and Fulton 2018.

[55] Ibid.

Middle Bronze IIA collection (2000–1750 BCE), pigs contribute a little less than 5 % of the overall faunal sample, which is noteworthy since other contemporary sites have a higher assay of pig. An analysis of the Iron I period (1175–1000 BCE), that is, the period when the Philistines first settle Ashkelon, finds that out of the identifiable species from the earliest phase of Philistine occupation (Phase 20), pig contributes 2 % of the overall diet. In the late twelfth century, Phase 19, pig increases to 8 %, and during the early eleventh century, Phase 18, pig remains reach their highest percentage at 14 %. By the late eleventh century, Phase 17, pig remains decrease to 9 %. During the Iron II period, pig remains decline so that by the seventh century, less than 1 % of the identified species is pig.[56]

This low percentage of pig (>1 %) is approximately the same amount that Sapir-Hen, Gadot, and Finkelstein (2016) report from late-Iron II Tel Moza and the Western Wall plaza in Jerusalem. In the later Persian period, when Ashkelon is next inhabited, Lipovitch[57] notes in his earlier study of the faunal remains and Hesse and Fulton find in their preliminary observation that pig consumption is not a mainstay of the diet.[58] And, in the recently analyzed Hellenistic material, the percentage of pig is still minor, reaching only 3 %.[59] Hesse and Fulton conclude that, with the exception of the early eleventh century, pig never became a significant part of the Ashkelon diet. In certain other Philistine cities, namely Miqne-Ekron, Justin Lev-Tov's analysis of the faunal remains reveals a higher percentage of pig, but it never reaches over 30 % of the major species identified.[60]

The low percentage of cattle speaks to the nature of the city of Ashkelon in the late-Iron II period. This was not a city driven by intensive plow-based agriculture, but rather focused on the sea. Omri Lernau's analysis of the piscine remains from the late-Iron II period found that the inhabitants of Ashkelon ate freshwater and saltwater, as well as local and imported fish. Many different species are represented, including several Nilotic fish, such as Nile Catfish and perch. The presence of these two species reveals ongoing trade with Egypt. Lernau also found that the percentage of fish that would have been traded to Ashkelon via the Mediterranean or fish that were caught in the deeper Mediterranean waters dramatically decreases leading up to the 604 BCE destruction of the city.[61] Based on this evidence, Lernau argues that during the Babylonian siege, trade from Egypt was probably blocked, changing the piscine dietary choices of the Ashkelon inhabitants.

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[56] Hesse and Fulton, forthcoming a.

[57] Lipovitch 2009.

[58] Hesse and Fulton have yet to analyze the most recent Persian Period material from Ashkelon. This is a preliminary observation of the most current excavations from Grid 51.

[59] Hesse and Fulton, forthcoming b.

[60] Faust and Lev-Tov 2011.

[61] Lernau 2011, 655–57.

3.2. Grid 38 in the Iron I: The Ashkelon Pits

Similar to Ramat Raḥel, some of the most intriguing behaviors at Ashkelon are not found in the everyday consumption patterns, but rather in the pit deposits that have been found. The most noteworthy deposits come from much earlier, during the Iron I period, which is commonly thought of as the initial settlement of the Philistines. Hesse and Fulton[62] have identified many pit deposits dating from this era, which Adam Aja[63] classified by skeletal part: deposits of skull, deposits of forelimb, and deposits of complete newborn (puppies). The completed Iron I analysis for Ashkelon reveals that there were over 70 bone deposits, 40 of which we classify as exceptional, from three major species of Equid (all of them are donkey), canids (puppies), and ovicaprid (both sheep and goat). These deposits include: donkey deposits of heads and mandibles, sheep/goat skulls, forelimbs or hindlimbs, and almost complete puppy skeletons. Some of the pit deposits were packed in clay and in a few examples, they were burned in situ. Other examples of pit deposits expand the pit burial behaviors including young sheep packed in a pit which contained ash as well as charcoal, one goat foot with a sheep skull, and a goat forelimb and hind limb, to name a few. The suite of ritual bone deposits all appear in domestic settings in the Iron I. Note that excavators did not find fore or hind limbs of pigs. Out of the over 70 pit deposits, excavations uncovered one pig foot (wrist to phalanges).

Fore and hind limb deposits of caprines have also been observed at Miqne-Ekron[64] and Tell es-Safi/Gath.[65] Yet by the period of the late-Iron II, the most common animal bone deposits of sheep/goat fore and/or hind limbs have not been uncovered and when pit deposits are found, they are not in the context of clearly domestic space. Rather, they are connected to the behaviors of the late Iron II market. Indeed, in Ashkelon Grid 51, two limbs and an axial skeleton were found in a pit cut into an earlier plaster covered floor. One limb consists of a forelimb from the scapula to the metacarpals and the other limb is a hind, from the hip girdle to the astragalus (ankle).

In both of these limb deposits, it appears that they were defleshed and later placed into this pit. A modern anecdote can explain what these cuts represent: When buying meat in the eastern Delta of Egypt, each morning, skinned carcasses of sheep, goats, and cattle (in the case of Egypt) were hung in the butchers' stalls. I observed, along with Brian Hesse, that interested customers would approach the butcher and negotiate which cut of meat they desired. As the morning progressed, the carcasses would steadily decrease as each customer would request the cuts, removing meat and bones from the carcass. In this specific

[62] Hesse and Fulton, forthcoming a.
[63] Aja 2009.
[64] Hesse et al. 2012.
[65] Hitchcock et al. 2015.

example, the weight of the meat rather than a specific cut was how the transaction was made.[66] In the Old City of Jerusalem, one can also witness this process. Oftentimes, carcasses are also divided, and so one can see a fore or hind of an animal hanging (1/4 of the animal), rather than the entire carcasses.

3.3. Ashkelon: Conclusion

These ethnographic examples provide a framework for the bone behaviors we see in the late-Iron II marketplace, located in Grid 50 and 51. These earlier Iron I bone deposits, which appear to have ritual significance in domestic settings have been replaced with pits of detritus from the marketplace. So, what was a possible marker of Philistine behavior, also seen at Miqne-Ekron and also Tel es-Safi/Gath, wanes in the early Iron II at Ashkelon and completely disappears by the late-Iron II. This may indicate that this particular ritual practice fell out of favor by the inhabitants of Ashkelon, the different use of the space does not preserve this type of ritual, or it may also indicate the changing nature of the population of Ashkelon over time. The Late-Iron II may reflect a more international population, with new markers of identity rather than older "Philistine" behaviors, and more or other cultural influences. And this possible general cultural assimilation is also reflected in the adoption of NW Semitic writing and language at Ashkelon (and at Miqne-Ekron) by the early Iron II period.

This bias to see the city of Ashkelon as "Philistine" in the late-Iron II is affected by the biblical texts, specifically the prophets who are set in the context of the eighth and seventh centuries, which mention Ashkelon as part of the "Philistines."[67] What this may tell us is that the writers of these prophetic texts, possibly living in Jerusalem (or another location after the destruction of Jerusalem in the early sixth century), saw the city of Ashkelon as "Philistine." This, however, does not indicate how the inhabitants of Ashkelon saw themselves.[68]

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[66] Hesse and Wapnish also observed this similar phenomenon in Eastern Iran, see Hesse, Fulton, and Wapnish 2011.

[67] Cf. Jer 47:5–7; Amos 1:8; Zeph 2:4. The dates provided are the contexts in which the prophets are situated based on the kings mentioned in the text, not necessarily the compositional dates of the material. The compositional dates of these particular prophetic texts are debated amongst scholars. For Jer 47:5–7, Lundbom (2004, 229) provides a possible compositional date ranging from late-7th century (period of Josiah) to the exilic period. For Amos 1:8, Arneth (2004) argues for an eighth-century date for this passage, while other scholars date it to later periods ranging from late-monarchic to postexilic (cf. Marti 1904, 152, 160–61; Pfeifer 1976, 61–62; Dietrich 1992, 317). In the example of Zeph 2:4, Sweeney (2003, 107–9) dates this passage to the late-monarchic period (see also Christensen 1984). Hagedorn argues that the Oracles against the Nations were some of the earliest material in Zephaniah (Hagedorn 2011, 169–71). Zechariah 9:4–6 also mentions Ashkelon as a geographical region that is "Philistine." Redditt (2012) argues for a Persian period (late-sixth–fifth century BCE) date for this particular passage.

[68] This point is part of the larger scholarly debate concerning the Philistines (cf. Maeir and Hitchcock 2016).

4. Ramat Raḥel and Ashkelon: A Regional Evaluation

As countless studies have argued, and one faunal study recently has observed, the more mundane practices of daily food consumption as well as ceremonial contexts may "express ethnic identity and cultural influences."[69] In certain cases, daily and ceremonial food consumption may express both "ethnic identity and cultural influences." Yet when we examine the diet from "Philistine" Ashkelon and Judean Ramat Raḥel in the late-seventh century, it is evident that the diets are quite similar. Sheep and goat are the dominate species and cattle runs a distant second. Both settlements also have examples of birds and fish consumption. What is noticeably absent in both cases is pig consumption. So, while some scholars would argue that pig is a marker for "other," particularly in the Iron I period – and again please note that it is not the dominate meat choice in the Iron I at Ashkelon – it is clear that this is not applicable for either the Judean highland site of Ramat Raḥel or the "Philistine" city of Ashkelon in the Iron II. This is also observed by Sapir-Hen, Gadot, and Finkelstein from other Judean sites as well.[70]

In both Ashkelon and Ramat Raḥel, sheep are preferred over goat. While Ashkelon reveals a thriving meat market in the late-Iron II, the highest percentage of sheep/goat remains are relatively old. This is in contrast to the earlier seventh-century quarry fill material, where the highest percentage of animals come from prime-age animals. The Grid 50 marketplace material, collected from the 604 BCE destruction layer, reveals some divergences in the mortality pattern of sheep and goat, showing that older animals were for sale in the marketplace. The age profile indicates that the prime-aged animals were not sold to the marketplace at Ashkelon. Rather, pastoralists who supplied animals to Ashkelon sent their prime-age animals to other markets in order to meet other demands. Paula Wapnish-Hesse observes that at Tell Jemmeh in the seventh century, there was a higher percentage of goat to sheep, and both goats and sheep tended to be older than earlier periods.[71] In both the example of Ashkelon and Tell Jemmeh, it appears that the more desirable-aged animals (at Jemmeh, sheep, and at Ashkelon, young sheep) were removed to another location, possibly to feed the superpower in control at the time (namely Assyria and later Babylon or Egypt). This is in contrast to the earlier quarry sample, where the prime-aged animals were consumed by the inhabitants of Ashkelon.

In contrast to these culling practices at Ashkelon, Ramat Raḥel never faces a time in which the older animals are consumed. Rather, the animals are a range of prime ages with no elderly animals in the collection (6 months–approximately 5 years). And, in the case of the feast, the age of the animal (of which, all the

[69] Perry-Gal et al. 2015, 213.

[70] Sapir-Hen, Gadot, and Finkelstein 2016; Their analysis concludes that there is a distinction between Israel and Judah, based on the faunal remains.

[71] Wapnish, 1993.

animals are young) reflects the wealth of the feast. The presence of fish is significant in the Judean highland feast since they would have had to be imported from other locations. This is also true for the cattle remains. Locus 14109 preserves the remains of a feast which may have functioned as a "political tool" for defining specific relationships.[72] And, when consumption is managed in this way, it can unify or divide a group.[73] Ashkelon's contemporary material to the feasting pit at Ramat Raḥel shows no signs of elite feasting. Rather, Ashkelon preserves the remains of the marketplace economy and the age of the animals reflects the stress that the community was under leading up to the destruction of the city. Yet even leading up to Ashkelon's destruction, there is no evidence of the consumption of animals that are not commonly consumed in the late-seventh century, such as donkey, dog, cats, weasels, or even pigs. And thus, the citizens of Ashkelon were not eating any protein source they could find.

Both Ramat Raḥel and Ashkelon represent important settlements in the late-Iron Age. Ramat Raḥel was an administrative center collecting taxes for the region of Judah. The faunal remains reveal a community supplied with the typical animal fare of the Late-Iron II period: Sheep, goat, and cattle. Later, birds and fish are introduced into the diet, and this is most clearly seen in the feasting pit evidence. The majority of the bones are from foods that are considered, according to the Torah food laws (namely in Leviticus and Deuteronomy), to be proper to eat.[74] It is noteworthy to observe that with regard to the Levitical food prohibitions from the Torah, the species that were consumed at Ramat Raḥel and Ashkelon are considered acceptable, at least from a species perspective. The (possibly) prohibited species are the Nile Catfish (because they do not have scales) found in Locus 14109 and the pig found in small percentages at both sites.[75] As well, the small percentage of camel, donkey, and dog represent prohibited species, but there are no clear signs of consumption. The bones that may have been prohibited are the Nile Catfish. Ashkelon follows a similar pattern: The majority of the collection represents food that, according to Torah food prohibitions, were edible.

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[72] Dietler 1996.

[73] Fulton et al. 2015, 42.

[74] Of course, current scholarly consensus does not place the formation of the Torah in the seventh century, but later.

[75] Leviticus 11:12 indicates that fish without scales were prohibited. As Lernau's extensive research on Nile Catfish has shown, it was regularly consumed at both coastal and inland sites in the Southern Levant. This indicates that either catfish were not considered prohibited, or the prohibition was not important in the late-Iron II because it did not exist. A third interpretation may be that people did not follow the prohibitions. Pig is specifically prohibited from consumption in Lev 11:7 and Deut 14:8, even though it has divided hooves, but it does not chew its cud. Both chewing cud and divided hooves are necessary for consumption, according to the Levitical and Deuteronomic laws. As most scholars argue, however, the food laws from the Torah are written down later than the Iron II period.

To be clear, this is not an argument for Philistine Ashkelon caring about Judean food prohibitions, or that the Torah was a body of literature in seventh-century Judah, but it is important to note that food choices, where land mammals are concerned, did not differ all that much between Judean Ramat Raḥel and Philistine Ashkelon. This may be one of the main reasons why the Philistine coast was not identified by the writers of those earlier mentioned prophetic texts as "the pig and dog eating Philistines." These were not known practices of the Philistines by the time of the composition of the literature that mentions this group (or groups) of people.

5. Conclusion

Ramat Raḥel and Ashkelon provide two important case studies for exploring questions related to regional differences in the dietary practices of the late-Iron II period. What this study reveals, however, is very little variation in the species consumed on the coast and in the highlands. Instead, the faunal remains reveal major differences concerning external economic pressures for each region. With the increasing pressure from and subsequent demise by the Babylonians on the city of Ashkelon, its meat economy underwent major changes. What was once a rich marketplace, supplying younger animals to the city dwellers switched as Babylonian pressure mounted on the city. In contrast, Ramat Raḥel never faced these economic pressures, probably because of its position as a center of economic control under the protection or control of Assyria, Babylon, Egypt, and Persia. Subsequent studies on both sites will help elucidate more specifically the market versus provisioning economy and how this affected local producers in each region.

Continuity, Innovation and Transformation in Cooking Habits

The Central and Southern Shephelah between the Late Fourth and the First Centuries BCE

*Débora Sandhaus**

At the end of the fourth century BCE, the Shephelah, which had been under Persian rule for two centuries along with the rest of the southern Levant, was conquered by Alexander the Great. In the following centuries, control of the area was disputed by Alexander's heirs. During the third century BCE, it was under Ptolemaic rule, and in the second century BCE century, it changed hands to the Seleucid kings.

The two empires divided the land into local provinces, broadly defined along ethnic lines: to the south lay the province of Idumea, while to the north lay the province of Yehud/Judea. Differences in settlement patterns observed to the north and the south of the 'Ella Valley[1] and the distribution of Yehud stamped jars[2] allow archaeologists to define the valley as the political boundary between the two provinces.

The area to the north of the 'Ella Valley was inhabited by small settlements and isolated farms. The settlements to the south are more variegated, including the major city of Marissa (the site of Maresha), a satellite village, isolated farms, and an inn.[3]

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[1] Sandhaus and Kreimerman 2017; Sandhaus 2018.

[2] Lipschits and Vanderhooft 2011.

[3] See Sandhaus 2018 for references.

The settlement pattern shows that both flanks of the 'Ella Valley were settled during the fourth century BCE and that most sites continue to exist into the third century BCE (the Ptolemaic period). While the settlements north of the 'Ella Valley ceased to exist by the middle of the third century, the settlements to its south continued in existence and even flourished during the second century BCE (the Seleucid period). By the middle – late second century BCE, the sites south of the 'Ella Valley had been abandoned and/or destroyed. At that time, new settlements arose elsewhere, first in the area to the north of the valley where the abandoned sites were reoccupied (late second – early first century BCE) and somewhat later south of the 'Ella Valley (mid first century BCE). The destruction of the previous settlements and the erection of new ones are generally associated with the Hasmonean rulers, a local dynasty that had taken control over the area.[4]

The unique historical circumstances of this region gave rise to cultural encounters between the two different indigenous populations as well as between these populations and the foreigners who moved into the land from distant places as part of the Hellenistic armies and administration. These interactions resulted in a complex picture in which different strategies of acceptance, rejection, adaptation, adoption, and appropriation of foreign ideas and practices appear in different sites throughout the region.

In this historical setting, several issues of cultural interaction arise in connection with food, identity, and colonialism. The present contribution addresses some relevant issues related to cultural encounters and interactions: why and how were some foreign foods and alimentary practices adopted in the context of colonial encounters while others were ignored? Were they rejected or turned into protest elements or symbols of differences?[5] What are the mechanisms chosen by the inhabitants of a site, and why did they select these ones instead of others? Is there a common pattern to certain sites? Did these groups of people exhibiting similar patterns of behavior and facing new ideas belong to a certain geo-political picture or a given chronological range?

New evidence from recently excavated sites in the central Shephelah alongside the 'Ella Valley allows for examination of the foodways revealed in cooking assemblages over more than three hundred years – the late fourth to the first centuries BCE. As a boundary zone, it serves as an ideal case-study, manifesting how different patterns of human behavior, particularly table manners and cooking habits, are documented in the material culture.

Nine sites within a radius of 30 km were selected to represent the kitchenware assemblages of the two different regions. The sites to the north of the 'Ella Valley, forming part of the province of Yehud/Judea, are represented by Ramat Beth-Shemesh, Nahal Yarmut, Khirbet Qeiyafa, and Tel Azekah. To the south

[4] Ibid.
[5] Dietler 2010

of the valley, the sites in the province of Idumea are represented by Aderet, Khirbet er-Ras, Maresha, Amaṭẓya, and Tel ʻEton. The only urban site in the area is Maresha. Even though the city officially belonged to the Idumean province, it is sufficiently close to the border to be familiar to the inhabitants of both the northern and southern regions. To some extent, those sites may have been involved in its economy as well. Thus, social and economic encounters between Maresha and the neighboring settlements presumably existed: the city probably acted as the major agent in the processes of transmission, adoption or rejection, and transformation of foreign habits for foodways in relation to the local cuisine practices of the Idumean and Judean countryside. In the process of the indigenization of foreign habits, residents of urbans centers, such as the social elites, likely play an important role[6] – though this relationship will not be discussed in detail in this article.

Within this broader sphere of development, this article focuses on changes in cooking assemblages, which, given the inherent connection between cooking vessels and foodways, necessarily implies patterns of cooking and preparing meals. As discussed in numerous studies from various disciplines such as anthropology, archaeology, ethnography, and sociology, foodways are not simply the fulfillment of a necessity but bear symbolic,[7] ethnic,[8] and sociopolitical significance.[9]

Moreover, when two societies become involved in colonial contact and exchange, foodways often play a complex role in transformations and negotiations involving, among other things, identity, social and political organization, and gender relations.[10] Following this line of research, I will argue that different strategies of preparation and cooking over different periods and regions can reflect different attitudes toward the maintenance of cultural boundaries. After a period of strongly traditional assemblages on both sides of the valley, the southern (Idumean) side developed a significant openness to foreign pots, such as the casserole, that were produced in foreign workshops. Then, at a later stage, the expansion of Hasmonean hegemony over the entire ʼElla Valley resulted in the rejection of foreign types, presumably to solidify Hasmonean identity over the region. Once this was secure, a renewed openness to foreign types such as the casserole developed, though they were now produced nearby in the Central Hill region of Judea.

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[6] Ibid.
[7] Douglas 1984; Lévi-Strauss 1983.
[8] Meadows 1994; Twiss 2007.
[9] Appadurai 1981; Goody 1982; Dietler and Hayden 2001; Luley 2014.
[10] Dietler 2007; Mills 2008; Luley 2014.

1. The Evidence from the Kitchenware of the Central Shephelah

The following table (Table 1) and figures (Figures 1–3) summarize the different forms of cooking pots appearing in the central Shephelah from the late fourth to the mid-first centuries BCE.

Table 1: Cooking Vessel Typology and Parallels

Form	Production	Sites and Location	Date	Illustration
Closed pot with short or long neck and short ledge or triangular rim	Central Shephelah Ware (LCP,[11] Ben-Shlomo et al.)	*North of the 'Ella Valley* Khirbet Qeiyafa (Sandhaus and Kreimerman 2015, figs. 3:10; 5:8*); Azekah (Shatil 2016) *South of the 'Ella Valley* Tel 'Eton (Faust, Katz and Eyall 2015, fig. 12:4*); Khirbet er-Ras (Sandhaus 2011, fig. 2.4:6)	5th (?) 4th – mid 3rd c. BCE	Fig. 1:1–4
Large closed pot characterized by a long vertical neck with rims varying from simple to sharp-cut	Central Shephelah Ware (LCP, Ben-Shlomo et al.) Coarse fabric. Relatively thick walls	*North of the 'Ella Valley* Azekah (Shatil 2016) Khirbet Qeiyafa (Sandhaus 2009: CP1*; Sandhaus and Kreimerman 2015, fig. 5:9) *South of the 'Ella Valley* Aderet (Seligman and Yogev, forthcoming); Tel 'Eton (Faust, Katz, and Eyall 2015); Khirbet er-Ras (Sandhaus 2011, fig. 2.4:1)	3rd c. BCE	Fig. 1:5–6
Globular body and a long, slightly convex neck with flattened rim	Locally produced Central Hill/Central Shephelah Ware (LCP, Ben-Shlomo et al.) Red fabric, thin walls	*North of the 'Ella Valley* Khirbet Qeiyafa (Sandhaus and Kreimerman 2015, fig. 5:10*) *South of the 'Ella Valley* Aderet (Seligman and Yogev, forthcoming)	3rd c. BCE	Fig. 1:7

[11] The LCP (Levantine Ceramic Project) is an open interactive website focused on research and publication of pottery in the Levant.

Form	Production	Sites and Location	Date	Illustration
Closed pot with sack-shaped like body shape, a long vertical neck with thickened rim	Southern Shephelah or in the Sharon Plain (Cohen-Weinberger 2011, 147–48).	*North of the 'Ella Valley* Missing *South of the 'Ella Valley* Aderet (Seligman and Yogev, forthcoming); Khirbet er-Ras (Sandhaus 2011, fig. 2.4:7*); Maresha (Levine 2003, fig. 6.10:92–93); Tel 'Eton (Faust, Katz and Eyall 2015, fig. 12:10*–11)	3rd – 2nd c. BCE	Figs. 1:8; 2:1
Closed cooking pot with a convex long neck ending in a thickened rim with a triangular section	Central Hill (Cohen-Weinberger 2011, 147)	*North of the 'Ella Valley* Missing *South of the 'Ella Valley* Aderet (Seligman and Yogev, forthcoming); Khirbet er-Ras (Sandhaus 2011, fig. 2.4:9*–10*; 12); Maresha (Levine 2003, fig. 6.6:72)	2nd c. BCE	Fig. 2:2–3
Closed cooking pot with small globular to squatted body form, vertical short neck ending in a simple pointed rim	Phoenician Coast (?)	*North of the 'Ella Valley* Missing *South of the 'Ella Valley* Aderet (Seligman and Yogev, forthcoming); Khirbet er-Ras (Sandhaus 2011, fig. 2.4:4*); Maresha (Levine 2003); Amaṭẓya (Sandhaus, forthcoming)	2nd c. BCE	Fig. 2:4
Closed squatted pot with short vertical neck ending in a simple rim. A groove is set on the internal part of the neck	Central Hill (Cohen-Weinberger 2011, 147)	*North of the 'Ella Valley* Ramat Beth-Shemesh, Nahal Yarmut and Nahal Zanoah* (Sandhaus, in preparation) *South of the 'Ella Valley* Aderet (Seligman and Yogev, forthcoming: pl.3:7); Khirbet er-Ras (Sandhaus 2011, fig. 2.4:11; Maresha (Levine 2003, fig. 6.6:74; Stern and Osband 2015, fig. 2.6: 3–4); Amaṭẓya (Sandhaus, forthcoming)	2nd – early 1st c. BCE	Figs. 2:5–6; 3:1–2

Form	Production	Sites and Location	Date	Illustration
Closed cooking pot with globular ribbed thin body, long neck simple rim	Central Hill (Ben-Shlomo, forthcoming)	*North of the 'Ella Valley* Nahal Zanoah*; Nahal Yarmut*; Azekah (Sandhaus, in preparation); Khirbet Qeiyafa (Sandhaus and Kreimerman, in preparation) *South of the 'Ella Valley* Khirbet er-Ras (Sandhaus 2011, fig. 2.4:5; 8–9); Maresha (Levine 2003, fig. 6.6: 70–71)	Mid to Late 2nd – 1st c. BCE	Fig. 3:3–6
Open cooking vessel – Casserole with slightly carinated body and angular ledge rim. Two horizontal handles drawn below the rim	Aegean or Phoenician Coast (?)	*North of the 'Ella Valley* Missing *South of the 'Ella Valley* Aderet (Seligman and Yogev, forthcoming, pl. 3:3); Khirbet er-Ras (Sandhaus 2011, fig. 2.4:14*) Maresha (Levine 2003, fig. 6.6: 77); Stern and Osband 2015)	3rd – 2nd c. BCE	Figs. 1:9; 2:6
Open cooking vessel – Casserole with slightly carinated body with everted neck ending in a simple rim	Judean Central Hill	*North of the 'Ella Valley* Nahal Zanoah*; Nahal Yarmut Azekah (Sandhaus, in preparation); Khirbet Qeiyafa (Sandhaus and Kreimerman, in preparation) *South of the 'Ella Valley* Missing	Late 2nd (?) –1st c. BCE	Fig. 3:7
Cooking ware Lids	Phoenician coast (?)	*North of the 'Ella Valley* Missing *South of the 'Ella Valley* Khirbet er-Ras (Sandhaus 2011, fig. 2.4:13*); Maresha (Levine 2003, fig. 6.2:29)	2nd c. BCE	Fig. 2:7

The references marked by * are the illustrated examples in the figures

2. The Late Fourth – Third-Century BCE Kitchenware Horizon (Figure 1)

During the end of the fourth and the first half of the third centuries BCE, the cooking assemblage of the sites in both sides of the 'Ella Valley demonstrates great continuity of local forms that clearly evolved from the Iron Age and Persian periods. Closed cooking pots produced in the Central Shephelah were in use in the fourth century BCE, both in northern and southern sites. In the early third century BCE, new forms of closed cooking pots, locally produced, appeared on both sides of the 'Ella Valley (Fig. 1:5–8). Alongside the earlier forms, these become the most common cooking pots used by the inhabitants of the Shephelah throughout the entire third century BCE.

At some point during the third century BCE, the assemblages on the southern side of the 'Ella Valley increased their repertoire of cooking forms by adding a southern Shephelah closed pot and a completely new cooking vessel: casseroles, an open large bowl made of cooking fabric imported either from the Aegean or the Phoenician coast.[12]

3. The Second-Century BCE Kitchenware Horizon (Figure 2)

The pottery from the second century BCE until the last decade of the century is mostly found only in sites in Idumean territory, on the southern side of the 'Ella Valley. Both the cooking assemblages from the city of Maresha and from the rural sites now include closed cooking pots with variable rim forms and different sizes along with the open casseroles that became more abundant in the kitchenware assemblage (Fig. 2). The closed vessels encompass the forms with long necks already attested in the third century BCE assemblages including the wide range of rim variants (Fig. 2:1–3) produced in the vicinity and the addition of new forms (Fig. 2:4–5). These additions are not just stylistic variations: none of the new forms were produced in the nearby area. One of the closed forms was manufactured in the Central Hill region (Fig. 2.4), and the second form (Fig. 2.5–6), as well as the casseroles and lids (Fig. 2:7–8), probably originated from the Phoenician northern coast of the Levant.[13]

[12] Berlin 2015.

[13] The petrography of the cooking wares from Khirbet er-Ras shows that the vessels used *Terra Rossa* clay as the raw material. This soil is not found in the Shephelah but to the east of it, in the Central Hill region and in the Galilee (Cohen-Weinberger 2011:147). It seems that by this time most cooking pots were brought from the Central Hill region. However, the form with the short neck and the casseroles found in the Idumean territory are common in the northern Phoenician coast and the Galilee. They were not tested petrographically, and it is possible that they were imported to the sites from the Phoenician coast (Berlin 2015).

4. The Late Second – First-Century BCE Kitchenware Horizon (Figure 3)

The kitchenware of the Shephelah in the late second – first century BCE is best represented by sites on the northern side of the 'Ella Valley. Forms appear in sites to the south of the 'Ella Valley only in destruction levels and in later unstratified fills. The ceramic assemblage comprised two main forms continuing the traditions of the closed cooking pots from the previous period and added a new form of casserole. The first form is the continuation of the cooking pot with the short rim and the inner groove (Fig. 3:1–2). The second is a new vessel (Fig. 3:3–6) combining the regional tradition of the thin globular closed pot with long necks (Fig. 2:1–5) with a northern fashion of ribbing on the body of the vessels.[14] Alongside the two closed cooking pots, an open cooking vessel – a casserole (Fig. 3:7) – appeared for the first time in Judean territory. The whole kitchen repertoire from the Shephelah is exclusively produced in Central Hill workshops using *Terra Rossa* clay.

5. Discussion: Foodways in the Central Shephelah on the Background of the Encounter between People and Cultures

The process involved in the selective domestication or 'indigenization' of some previously foreign goods, habits, and tastes and the rejection of others occurs through the encounter with another culture. This selective incorporation often operates according to a specific cultural logic and has an ongoing transformative effect on the reproduction of the culture.[15] Obviously, this process does not result from two cultures as static entities, but rather from the actions and relations taking place between individuals and social groups situated in a complex system of power and interests. Thus, the intercultural consumption is a continuous process of selective appropriation and creative assimilation according to local logics in a way that (re)constructs the culture in an ongoing manner.[16]

Two main phenomena showing different patterns were observed in the Shephelah assemblages: the first relates to the importation or exclusion of goods, specifically the cooking pots themselves from distant places. The second concerns the incorporation or rejection of vessels that represent a new way of cooking transforming the local *cuisine*.

During the late fourth century BCE, the northern and southern kitchenware assemblages are similar, and both areas show that the inhabitants' practices have

[14] Ibid.
[15] Dietler 2010, 18.
[16] Ibid., 19.

a great degree of continuity with indigenous traditions. In the third century BCE, the inhabitants of both sides of the valley continue to use locally produced cooking forms, but now a different pattern was observed for each side. The inhabitants of the Judean side of the border exclusively used local cooking forms with a strong connection to the Central Hill region. This affinity with the Central Hill region is observed in other aspects of the material culture, and it seems proper to explain this relationship on a basis of a shared set of values, behaviors, and beliefs traced back as early as the Iron Age, when the two areas were part of the kingdom of Judah.[17] On the other hand, the inhabitants of the Idumean sites to the south of the 'Ella Valley continue to use the local regional closed cooking forms, but they now incorporate a new form – casseroles.

Closed pots were traditionally used by the people to cook porridge and boiled meats. The addition of open vessels, like the casserole, add roasting and baking as new ways of cooking alongside indigenous practices. Thus, the importation and the incorporation of casseroles into the cooking habits in the Idumean kitchenware is a major change that implies the widening palate of the local inhabitants to new tastes and foods. As a condition for this major change, the people needed to be predisposed to and have a positive attitude towards this new practice.

Another difference between the two sides of the valley is the exclusiveness in the choice of local productions on the Judean side of the border in contrast to a certain degree of receptiveness on the Idumean side, including a few products from the southern Shephelah and the Aegean or the Phoenician coast, in addition to local products. In other words, the Judean sites north of the 'Ella Valley show a degree of rejection while the inhabitants of the southern side demonstrate a certain degree of openness.

The evidence suggests that during the second century BCE the pattern of receptiveness of the inhabitants of the Idumean territory grew to a higher degree as seen by the incorporation of cooking pots brought from the Judean Central Hill region in addition to larger proportions of imports from the northern Phoenician coast. The pattern observed in the cooking repertoire can be described as one component of the "glocal material culture" observed in the Mediterranean by the second century BCE. The people created a "glocal cuisine" (i.e. a cuisine which is simultaneously global and local)[18] through the process of combining international forms and symbolic meaning in the local repertoire together with traditional forms in order to create an entangled assemblage.[19]

Even though the second century BCE horizon is absent from sites north of the 'Ella Valley, the evidence from sites in other parts of the Judean countryside

[17] Sandhaus and Kreimerman 2015; Sandhaus and Kreimerman 2017 and the references found therein.

[18] For this concept see Robertson 1995.

[19] Dietler 2010; Stockhammer 2012.

reveal that kitchenware remained local, both in terms of its forms and production.[20] This pattern hints toward the application of a strategy of avoidance and to some extent of rejection of new traits by the inhabitants of the Judean territory.

In the late second and moreover throughout the first centuries BCE, the kitchenware of the Central Shephelah became part of a major phenomenon. The same kitchenware, as well as other aspects of material culture, are observed not merely in the former Judean territory but throughout the entire region of the Hasmonean state.[21] Potters in workshops such as those found on the western edge of Jerusalem in the Binyanei Ha'Uma and Crowne Plaza compounds,[22] the one in Hebron,[23] maybe another in Jericho, as suggested by wastes found in the site,[24] and Gamla[25] started to produce kitchenware forms in large scale and distribute them to long-distance markets.

The same pottery service appears first in the core of the Judean territory – the northern Shephelah, the Central Hill region, and the Judean Desert – and shortly thereafter expanded throughout the territory under Hasmonean hegemony. The cooking assemblage is characterized by a strict avoidance of imports and the production of forms that combine local as well as foreign forms and ideas, generating a distinctive repertoire. Potters from Jerusalem created these new forms starting as a fashion trend as early as the first half of the first century BCE, which then continued throughout the Roman period[26] following new consumption demands.

The textual evidence indicates that the Hasmoneans, assumed to have originated in the northern Shephelah, took over the entire territory. This dynasty was motivated by a strong ethnic identity forged around a distinctive religion, based on 'the one God, the one Torah and the one Temple' in Seth Schwartz words, describing Jewish identity of the first century BCE.[27] Andrea Berlin added a fourth pillar – a distinctive household.[28] They had a separatist agenda with many laws, including food prohibitions and abstentions[29] that played a considerable role in their propaganda.[30] The kitchenware that characterized this period, namely the incorporation of casseroles for the first time, is a clear example of how new ways of food production were adopted by groups of people but transformed to fit the

[20] Berlin 2013; Berlin 2015, 629, and the references found there.

[21] Berlin 2013; 2014; 2015.

[22] Arubas and Goldfus 2005, 29–60; Berlin 2005; Levi and Be'eri 2010; Levi and Be'eri 2017; Be'eri, Levi and Sandhaus, forthcoming.

[23] Eisenberg and Ben-Shlomo 2017; Bar-Nathan and Ben-Shlomo 2017.

[24] Bar-Nathan 2002.

[25] Berlin 2006.

[26] Berlin 2005; Berlin 2015; Hershkovitz 2005; Rosenthal-Heginbottom 2005.

[27] Schwartz 2001.

[28] Berlin 2013.

[29] E. g., 2 Macc 6:18–7:42; cf. 1 Macc 1:47, 63; Dan 1:8; expanded Esther addition C28; Jub. 22:16.

[30] Schwartz 2001; Freidenreich 2011.

symbolic meaning and the local dietary customs practiced by the inhabitants of the area. Moreover, one might say that by this time the foreign cooking practices were transformed into the indigenous kitchenware carrying a particular set of values and significance.[31]

6. Summary and Conclusions

In this paper I have argued that an analysis of the ceramic assemblages associated with cooking activity suggests that new cuisine practices emerged in the region in different stages involving different strategies of acceptance, rejection, adoption, appropriation that eventually transformed the local cuisines.

The differences between the two rural areas in the 'Ella Valley before the widespread dissemination of the "Jewish household" described by Berlin[32] for the Hasmonean period are remarkable. They narrate a chronicle of the different choices made by different people, described by van Dommelen and Rowlands as "different modes of contact" within colonial encounters.[33]

On one hand, it seems that that foodways were a major factor in the process of the formation and maintenance of the ethnic identity involved in the chosen behavior of the inhabitants of the Judean sites to the north of the 'Ella Valley. On the other hand, for the inhabitants of the southern region, which was part of the Idumean province, it seems that they belonged to a group whose ethnic, religious, and cultural associations did not limit their daily lives.

Finally, during the late second – first centuries BCE, the population of the entire 'Ella Valley area came under Hasmonean hegemony and adopted the restricted way of life reflected in the limited types of cooking pots, similar to those observed in the Judean realm following the Hasmonean takeover. Soon after, perhaps encouraged by their victory, they may have developed a certain amount of self-confidence that facilitated the adoption of some aspects of the former foreign cuisine, producing and transforming the significance of the foreign foodways in accordance to the group's values. They maintained their segregated character and provided a different significance to the dining practices that prevailed in the vicinity. In a matter of a few decades, this assemblage became the common household assemblage, part of the "Jewish household,"[34] everywhere in the southern Levant except along the coast.

The mechanisms put in motion to facilitate the massive transformation of foodways toward the adoption of a singular cuisine after the Hasmonean expansion included the incorporation of people that had not shared in this Judean

[31] Dietler 2010.
[32] Berlin 2013; 2014.
[33] van Dommelen and Rowlands 2012, 24.
[34] Berlin 2014.

cultural capital to that point. They now embraced this cuisine, which should be explained as one aspect of a bigger apparatus activated in the process of the formation and the consolidation of the cultural and ethnic identity of the *Judean* and eventually the *Jewish* society. The latter of which results from a complex process to be discussed in a future paper.

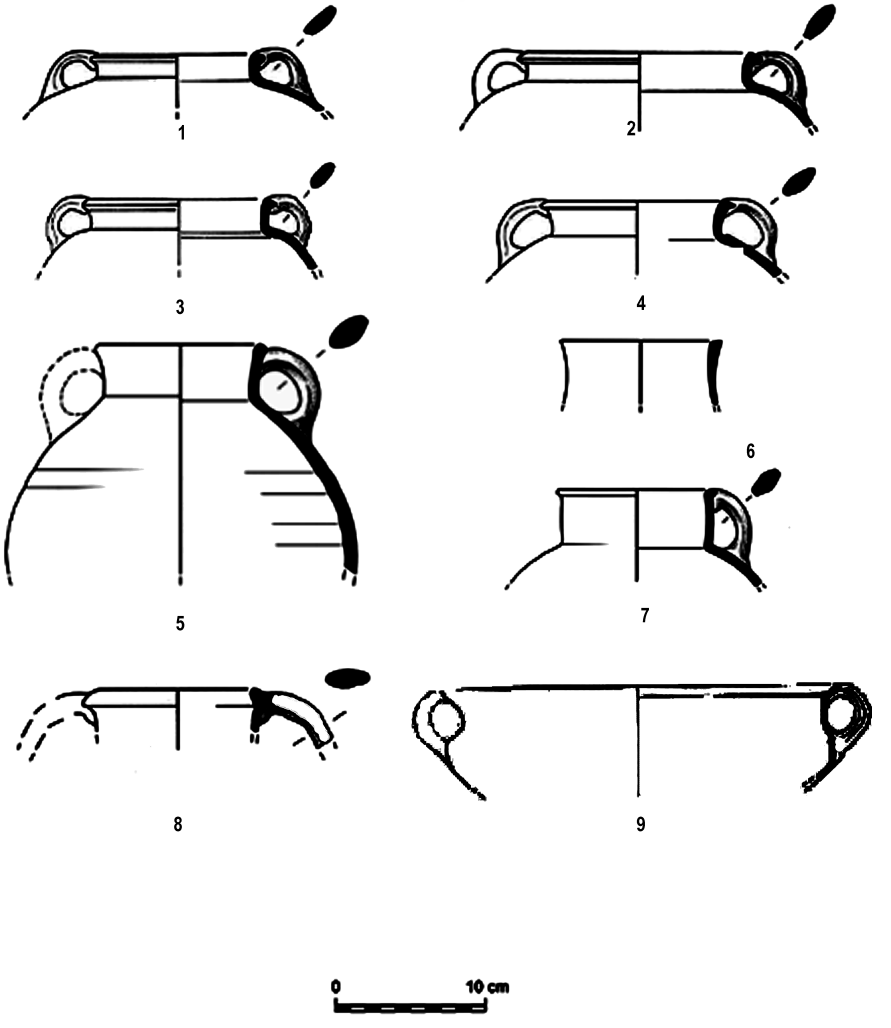

Fig.1: The Late Fourth – Third-Century BCE Kitchenware Pottery Assemblage.

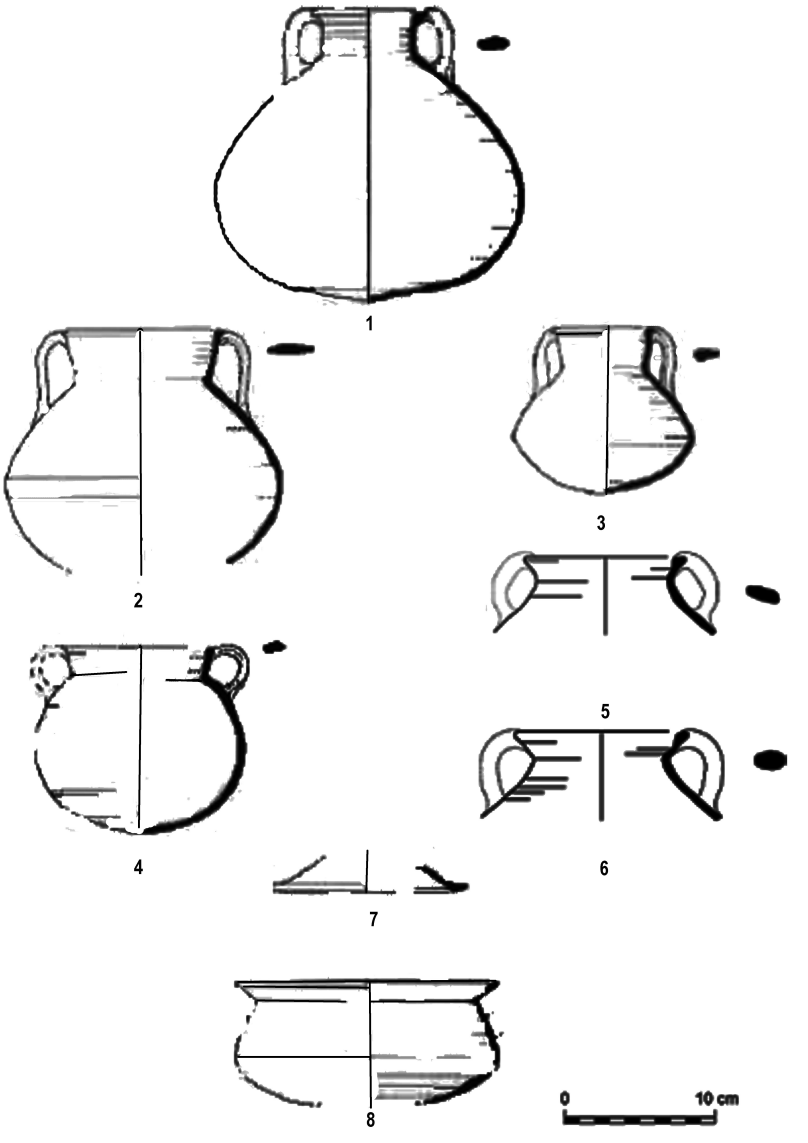

Fig. 2: The Second-Century BCE Kitchenware Pottery Assemblage.

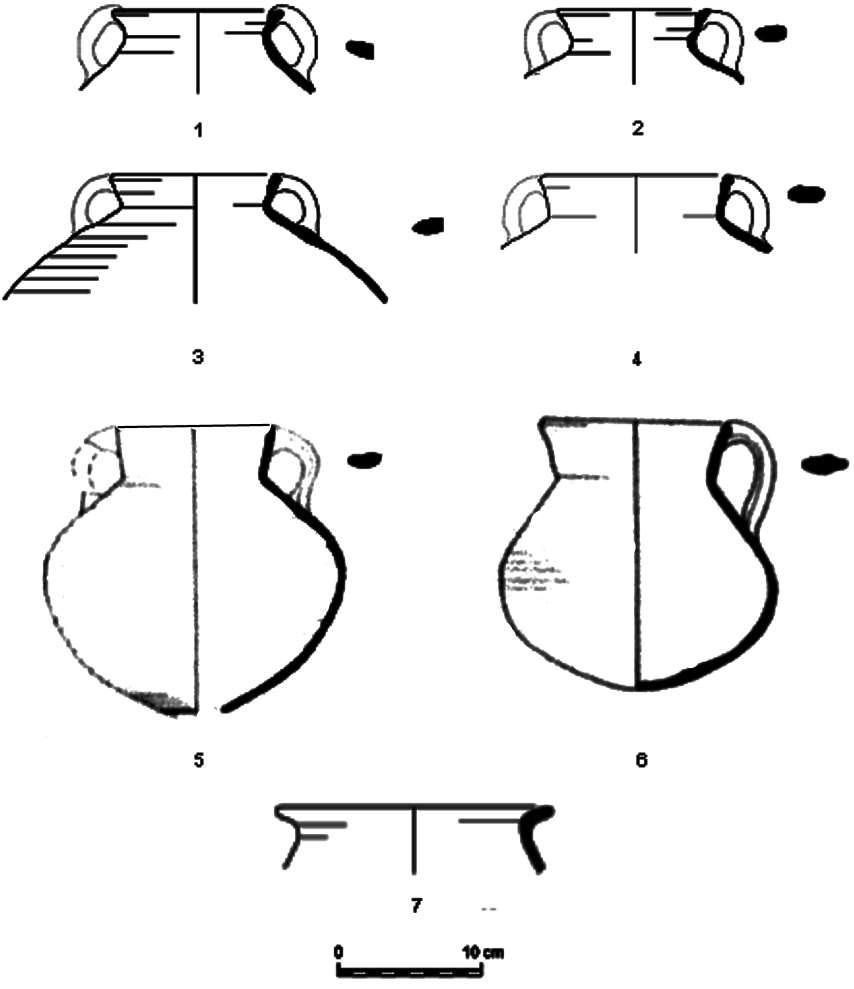

Fig. 3: The Late Second – First-Century BCE Kitchenware Pottery Assemblage.

General Bibliography

Abbreviations follow *The SBL Handbook of Style,* 2nd ed., Atlanta: Society of Biblical Literature, 2014.

Ackerman, Susan. 2013. "E-Dan." *JANER* 13:153–87.

Aharoni, Israel. 1943–1946. *Memories of a Hebrew Zoologist.* Jerusalem (Hebrew): Tel Aviv: Am Oved.

Aharoni, Yohanan. 1956. "Excavations at Ramat Raḥel, 1954: Preliminary Report." *IEJ* 6:102–11, 135–37.

–. 1962. *Excavations at Ramat Raḥel, Seasons 1959 and 1960.* Università di Roma, Centro di studi semitici, Serie archaeologica 2. Rome: Università degli studi, Centro di Studi Semitici.

–. 1964. *Excavations at Ramat Raḥel, Seasons 1961 and 1962.* Università di Roma Centro di studi semitici, Serie archaeologica 6. Rome: Università degli studi, Centro di Studi Semitici.

–. 1967. *The Land of the Bible: A Historical Geography*. Translated by Anson F. Rainey. Philadelphia: Westminster.

–. 1993. "Ramat Raḥel." Pages 1261–67 in vol. 4 of *The New Encyclopedia of Archaeological Excavations in the Holy Land*. Edited by Ephraim Stern. Jerusalem: Carta.

Aja, Adam. 2009. *Philistine Domestic Architecture in the Iron I Age*: Ph.D. diss., Harvard University.

Albarella, Umberto, Keith Dobney, and Peter Rowley-Conwy. 2006. "The Domestication of the Pig (*Sus scrofa*). New Challenges and Approaches." Pages 207–27 in *Documenting Domestication: New Genetic and Archaeological Paradigms.* Edited by Melinda Zeder et al. Berkeley: University of California Press.

Alster, Bendt. 1997. *Proverbs of Ancient Sumer: The World's Earliest Proverb Collections*. Bethesda, MD: CDL Press.

–. 2005. *Wisdom of Ancient Sumer*. Bethesda, MD: CDL Press.

Altmann, Peter. 2011. *Festive Meals in Ancient Israel: Deuteronomy's Identity Politics in Their Ancient Near Eastern Context.* BZAW 424. Berlin: de Gruyter.

–. 2019. *Banned Birds: The Birds of Leviticus 11 and Deuteronomy 14.* Archaeology and Bible 1. Tübingen: Mohr Siebeck.

–. Forthcoming a. "A Deeper Look at Deut 14:4–20 in the Context of Deuteronomy." In *To Eat or Not to Eat: Studies in the Biblical Dietary Laws*. Edited by Peter Altmann and Anna Angelini. Archaeology and Bible. Tübingen: Mohr Siebeck.

–. Forthcoming b. "Meat." *EBR.*

–, and Janling Fu, eds. 2014. *Feasting in the Archaeology and Texts of the Bible and the Ancient Near East.* Winona Lake: Eisenbrauns.

Altmann, Victoria. 2010. *Die Kultfrevel des Seth: Die Gefährdung der göttlichen Ordnung in zwei Vernichtungsritualen der ägyptischen Spätzeit (Urk. VI).* Wiesbaden: Harrassowitz.

Amar, Zohar, Ram Bouchnick, and Guy Bar-Oz. 2010. "The Contribution of Archaeozoology to the Identification of the Ritually Clean Ungulates Mentioned in the Hebrew Bible." *Journal of Hebrew Scriptures* 10:1–14.

Ambos, Claus. 2012. "Purifying the King by Means of Prisoners, Fish, a Goose, and a Duck. Some Remarks on the Mesopotamian Notions of Purity." Pages 89–103 in *How Purity Is Made*. Edited by Petra Rösch and Udo Simon. Wiesbaden: Harrassowitz.

Amit, Doran. 2009. *Model of Second Temple Jerusalem*. The Israel Museum: Jerusalem.

Angelini, Anna. Forthcoming. "The Reception and Idealization of the Torah in the Letter of Aristeas: The Case of the Dietary Laws." *HBAI*.

–, and Christophe Nihan. 2020. "Unclean Birds in the Hebrew and Greek Versions of Leviticus and Deuteronomy." Pages 39–67 in *The Text of Leviticus/Le texte du Lévitique*. Edited by Innocent Himbaza. Orbis Biblicus et Orientalis. Leuven: Peeters.

Appadurai, Arjun. 1981. "Gastropolitics in Hindu South Asia." *American Ethnologist* 8:494–511.

Arav, Rami. 2013. "Geshur: The Southwesternmost Aramean Kingdom." Pages 1–29 in *Arameans, Chaldeans, and Arabs in Babylonia and Palestine in the First Millennium B.C.* Edited by Angelika Berlejung and Michael P. Streck. Wiesbaden: Harrassowitz.

Arie, Eran. 2008. "Reconsidering the Iron Age II Strata at Tel Dan: Archaeological and Historical Implications." *TA* 35:6–64.

Arneth, Martin. 2004. "Die Komposition der Völkersprüche in Amos 1,3–2,16." *ZAR* 10:249–63.

Arnold, Elizabeth, Jonathan Greer, David Ilan, and Yifat Thareani. 2015. "Local Meals? Imported Sacrifices? An Isotopic Investigation of Animal Resources at Site of Tel Dan." Paper Presented at ASOR: Atlanta, GA, November 2015.

Arubas, Benny, and Haim Goldfus. 2005, eds. *Excavations on the Site of the Jerusalem International Convention Center (Binyanei Ha'uma): A Settlement of the Late First to Second Temple Period, the Tenth Legion's Kilnworks, and a Byzantine Monastic Complex: The Pottery and Other Small Finds*. Journal of Roman Archaeology. Supplementary Series 60. Portsmouth, RI: Journal of Roman Archaeology.

Athas, George. 2003. *The Tel Dan Inscription: A Reappraisal and a New Interpretation*. Sheffield: Continuum.

Aufrère, Sydney. 1986. "Études de lexicologie et d'histoire naturelle, VIII-XVII." *BIFAO* 86:1–32.

–. 1998. "Les interdits religieux des nomes dans les monographies en Égypte: Un autre regard." Pages 69–113 in *L'interdit et le sacré dans les religions de la Bible et de l'Égypte: suivis de deux conférences sur le thème Bible et Égypte et d'une postface interdisciplinaire, Actes de colloque, Montpellier, 20 mars 1998*. Edited by Jean-Marie Marconot and Sydney H. Aufrère. Montpellier: Université Paul Valéry.

Bakir, Abd El Moshe. 1966. *The Cairo Calendar N°86637*. Cairo: General Organisation for Govt. Print Offices.

Bar-Nathan, Rachel. 2002. *The Pottery*. Vol. 3 of *Hasmonean and Herodian Palaces at Jericho: Final Reports of the 1973–1987 Excavations*. Jerusalem: Israel Exploration Society; Institute of Archaeology, the Hebrew University.

Bar-Oz, Guy, Ram Bouchnick, Ehud Weiss, Lior Weissbrod, Daniella E. Bar-Yosef Mayer, and Ronny Reich. 2007. "Holy Garbage: A Quantitative Study of the City-Dump of Early Roman Jerusalem." *Levant* 39:1–12.

–, and David Ben-Shlomo. 2017. "Hellenistic, Roman and Late Pottery." Pages 281–334 in *The Tel Ḥevron 2014 Excavations: Final Report*. Edited by Emanuel Eisenberg and

David Ben-Shlomo. Ariel University Institute of Archaeology monograph series 1. Ariel: Ariel University Press.

Barguet, Paul. 1967. *Le livre des Morts des anciens Égyptiens*. LAPO I. Paris: Cerf.

Barth, Fredrik. 1969. *Ethnic Groups and Boundaries: The Social Organization of Culture Difference*. Long Grove, IL: Waveland.

Be'eri Ron, Danit Levi, and Débora Sandhaus. Forthcoming. *The Ceramics and the Epigraphic Evidence*. Vol. 2 of *Excavations at the International Convention Center (Binyane Ha-`Uma–Crowne Plaza Hotel) 2009–2010. Pottery Workshops from the Second Century BCE to the Second Century CE*. IAA Monograph. Jerusalem: Israel Antiquity Authority.

Beer, Michael. 2010. *Taste or Taboo. Dietary Choices in Antiquity*. Totnes: Prospect.

Bell, Catherine M. 1992. *Ritual Theory, Ritual Practice*. New York: Oxford University Press.

Bell, Lanny. 2011. "A Collection of Egyptian Bronzes." Pages 397–420 in *Ashkelon 3: The Seventh Century B.C.* Edited by Lawrence Stager, Daniel Master, and J. David Schloen. Winona Lake, IN: Eisenbrauns.

Ben-Shlomo, David, et al. 2018. "Shephelah/Central Hills Persian-early Hellenistic Cooking Ware." The Levantine Ceramics Project, accessed on 13 December 2018, https://www.levantineceramics.org/wares/shephelah-central-hills-persian-early-hellenistic-cooking-ware.

Ben-Tor, Amnon. 1980. "Yoqne'am Regional Project-Looks Beyond the Tell." *BAR* 6:30–44.

Berlin, Andrea M. 2005. "Pottery and Pottery Production in the Second Temple Period." Pages 29–60 in *Excavations on the Site of the Jerusalem Convention Center (Binyanei Ha'Uma): A Settlement of the Late First to Second Temple Period: The Tenth Legion's Kilnworks, and a Byzantine Monastic Complex. The Pottery and Other Finds*. Edited by Benny Arubas and Haim Goldfus. Journal of Roman Archaeology. Supplementary Series 60. Portsmouth, RI: Journal of Roman Archaeology.

–. 2006. *The Pottery of the Second Temple Period*. Vol. 1 of *Gamla: Final Reports*. Israel Antiquities Authority Reports 29. Jerusalem: Israel Antiquity Authority.

–. 2013. "Manifest Identity: From Ioudaios to Jew. Household Judaism as Anti-Hellenization in the Late Hasmonean Era." Pages 151–75 in *Between Cooperation and Hostility: Multiple Identities in Ancient Judaism and the Interaction with Foreign Powers*. Edited by Rainer Albertz and Jacob Wöhrle. Journal of Ancient Judaism Supplements 11. Göttingen: Vandenhoeck & Ruprecht.

–. 2014. "Household Judaism." Pages 208–15 in *Life, Culture and Society*. Vol. 1 of *Galilee in the Late Second Temple and Mishnaic Period*. Edited by David A. Fiensy and James Riley Strange. Minneapolis: Fortress.

–. 2015. "Hellenistic Period." Pages 629–72 in *The Ancient Pottery of Israel and its Neighbors: From the Iron Age through the Hellenistic Period*. Vol. 2. Edited by Seymour Gitin. Jerusalem: Israel Exploration Society.

–, and Peter Stone. 2016. "The Hellenistic and Early Roman Period." Pages 133–202 in *Akko II: The 1991–1998 Excavations: The Early Periods*. Edited by Moshe Hartal, Danny Syon, Eliezer Stern, Ayelet Tatcher, and Andrea Berlin. IAA Report 60. Jerusalem: Israel Antiquity Authority.

Berthelot, Katell. 2001. "L'interprétation symbolique des lois alimentaires dans la Lettre d'Aristée: une influence pythagoricienne." *JJS* 52:253–68.

Bilik, E. 1961. "Clean Ungulates in the Bible." *Beth Mikra* 6:28–31. (Hebrew).

Binford, Lewis R. 1978. *Nunamiut Ethnoarchaeology*. Studies in Archeology. New York: Academic Press.
–. 1981. *Bones: Ancient Men and Modern Myths*. New York: Academic Press.
–. 1984. "Butchering, Sharing, and the Archaeological Record." *Journal of Anthropological Archaeology* 3:235–57.
Biran, Avraham. 1994a. *Biblical Dan*. Jerusalem: Hebrew Union College.
–. 1994b. "Tel Dan: Biblical Texts and Archaeological Data." Pages 1–17 in *Scripture and Other Artifacts: Essays on the Bible and Archaeology in Honor of Philip J. King*. Edited by Mordechai Coogan et al. Louisville: Westminster John Knox.
Birnbaum, Pierre. 2013. *La République et le cochon*. Paris: Seuil.
Blanton, Richard, and Gary Feinman. 1984. "The Mesoamerican World System." *American Anthropologist* 86:673–82.
Böck, Barbara. 2016. "On the Ancient Mesopotamian Concept of 'Taboo': Transgression and Delimitation." Pages 305–21 in *Borders: Terminologies, Ideologies, and Performances*. WUNT 366. Edited by Annette Weissenrieder. Tübingen: Mohr Siebeck.
Boessneck, Joachim, Hans-Hermann Müller, and Manfred Teichert. 1964. "Osteologische Unterscheidungsmerkmale zwischen Schaf (*Ovis aries* Linné) und Zeige (*Capra hircus* Linné)." *Kühn Archiv* 78:1–129.
Bommas, Martin. 1999. *Die Mythisierung der Zeit: Die beiden Bücher über die altägyptischen Schalttage des magischen pLeiden I 346*. GöF 4.37. Wiesbaden: Harrassowitz
Bonatz, Dominik. 2000. *Das syro-hethitische Grabdenkmal: Untersuchungen zur Entstehung einer neuen Bildgattung in der Eisenzeit im nordsyrisch-südostanatolischen Raum*. Mainz. Von Zabern.
Borgeaud, Philippe. 1994. "Le couple sacré/profane: Genèse et fortune d'un concept 'opératoire' en histoire des religions." *RHR* 211:387–418.
–. 2004. "Réflexions grecques sur les interdits alimentaires (entre l'Égypte et Jérusalem)." Pages 95–121 in *Food and Identity in the Ancient World*. Edited by Cristiano Grottanelli and Lucio Milano. Padua: S.A.R.G.O.N.
–. 2012. "Greek and Comparatist Reflections on Food Prohibitions." Pages 261–87 in *Purity and the Forming of Religious Traditions in the Ancient Mediterranean World and Ancient Judaism*. Edited by Christian Frevel and Christophe Nihan. Dynamics in the History of Religion 3. Leiden: Brill.
Borowski, Oded. 1998. *Every Living Thing: Daily Use of Animals in Ancient Israel*. Walnut Creek, CA: Altamira.
Bouaniche, Catherine. 2006. "Mise à mort rituelle de l'animal, offrande carnée dans le temple égyptien." Pages 149–50 in *La cuisine et l'autel: Les sacrifices en question dans les sociétés de la Méditerranée ancienne*. Edited by Stella Georgoudi, Renée Koch Piettre, and Francis Schmidt. Bibliothèque de l'Ecole des Hautes Etudes. Sciences Religieuses 124. Turnhout: Brepols.
Brandl, Baruch. 2009. "An Israelite Administrative Jar Handle Impression from Bethsaida (et-Tell)." Pages 136–46 in *Bethsaida, A City by the North Shore of the Sea of Galilee*. Vol. 4. Edited by Rami Arav and Richard A. Freund. Kirskville, MO: Truman State University Press.
Bras, Paul. 1999. "Réflexions sur les fondements de la diététique dans le monde grec ancien (à propos de l'interdit de la fève)." *Dialogues d'Histoire ancienne* 25:221–46.
–. 2001. "La fève: interdit religieux alimentaire égyptien et grec." Pages 447–84 in *Encyclopédie religieuse de l'univers de l'univers végétal: croyances phytoreligieuses de l'Egypte*

ancienne 2. Edited by Sydney Aufrère. Montpellier: Université Paul Valéry-Montpellier III.

Brewer, Douglas J., and Rénée F. Friedman. 1989. *Fish and Fishing in Ancient Egypt.* Cairo: American University in Cairo Press.

Brixhe, Jean. 2014. "Akhénaton mangeait-il ses chiens?" *CRBL* 125:5–6.

Brugsch, Heinrich et al. 1889. *Two Hieroglyphic Papyri from Tanis.* London: Trübner.

Brunner, Helmut. 1975. "Enthaltsamkeit." Pages 1229–31 in vol. 1 of *Lexikon der Ägyptologie.* Edited by Wolfgang Helck, Eberhard Otto, and Wolfhart Westendorf. Wiesbaden: Harrassowitz.

Budge, E. A. Wallis. 1898. *The Book of the Dead. The Chapter of Coming Forth by Day.* London: Paul.

Bunimovitz, Shlomo, and Zvi Lederman. 2011. "Canaanite Resistance: The Philistines and Beth-Shemesh – A Case Study from Iron Age I." *BASOR* 364:37–51.

Bunn, Henry T., Laurence E. Bartram, and Ellen M. Kroll. 1988. "Variability in Bone Assemblage Formation from Hadza Hunting, Scavenging, and Carcass Processing." *JAA* 7:412–57.

Burnside, Jonathan. 2016. "At Wisdom's Table: How Narrative Shapes the Biblical Food Laws and Their Social Function." *JBL* 135:223–45.

Carmichael, Calum. 2006. *Illuminating Leviticus: A Study of its Laws and Institutions in the Light of Biblical Narratives.* Baltimore: John Hopkins University Press.

Casaburi, Maria C. 2000. "The Alleged Mesopotamian 'Lent': The Hemerology for Tešritu." *SEL* 17:13–19.

Cavigneaux, Antoine, and Farouk N. H. Al-Rawi. 1993. "New Sumerian Literary Texts from Tell Haddad (Ancient Meturan): A First Survey." *Iraq* 55:91–105.

Charpin, Dominique. 2015. "Les 'barbare amorrites': clichés littéraires et réalités." Pages 31–46 in *Tabou et transgression: Actes du colloque organisé par le Collège de France, Paris, les 11–12 avril 2012.* Edited by Jean-Marie Durand, Michaël Guichard, and Thomas Römer. OBO 274. Fribourg: Academic Press; Göttingen: Vandenhoeck & Ruprecht.

Christensen, Duane L. 1984. "Zephaniah 2:4–15: A Theological Basis for Josiah's Program of Political Expansion." *CBQ* 46:669–82.

Civil, Miguel. 1981. "The Home of the Fish. A New Sumerian Literary Composition." *Iraq* 23:154–75.

Cohen, Yoram. 2002. *Taboos and Prohibitions in Hittite Society: A Study of the Hittite Expression* natta āra *('not permitted')*. THeth 24. Heidelberg: Universitätsverlag C. Winter.

Cohen-Weinberger, Anat. 2011. "Petrographic Results." Pages 145–49 in *The Excavations of Khirbet er-Rasm, Israel: The Changing Faces of the Countryside.* Edited by Avi Faust and Adi Erlich. BAR International Series 2187. Oxford: Archaeopress.

Cope, Carole. 2004. "The Butchering Patterns of Gamla and Yodefat: Beginning the Search for 'Kosher' Practice." Pages 25–33 in *Behaviour Behind Bones: The Zooarchaeology of Ritual, Religion, Status and Identity.* Edited by Sharyn Jones O'Day, Wim Van Neer, and Anton Ervynck. Oxford: Oxbow Books.

–. 2016. "Butchery Patterns." Pages 331–42 in *Gamla III: Shmarya Gutmann Excavations 1976–1989 Finds and Studies, Part 2.* Edited by Danny Syon, Shemaryah Guṭman, and Shua Amorai-Stark. Israel Antiquity Authority Report 59. Jerusalem: Israel Antiquities Authority.

Curtis, Robert I. 2001. *Ancient Food Technology.* Technology and Change in History 5. Leiden: Brill.

D'Iatchenko, Vladimir, Francine David, and I. Gratchev. 2007. "Les animaux dans les pratiques funéraires du IXe-Xe siècle dans l'île de Tagar (bassin de l'Ienisseï): Comparaisons avec quelques données ethnographiques." Pages 363–76 in *Les Civilisations du renne d'hier et d'aujourd'hui: Approches ethnohistoriques, archéologiques et anthropologiques, XVIII Rencontres Internationales d'Archéologie et d'Histoire d'Antibes*. Edited by Sylvie Beyries and Virginie Vaté. Antibes: CNRS.

Darby, William J., Paul Ghalioungui, and Louis Grivetti. 1977. *Food: The Gift of Osiris*, 2 vols. London: Academic Press.

Davis, Andrew R. 2013. *Tel Dan in Its Northern Cultic Context*. Atlanta: SBL Press.

deFrance, Susan D. 2009. "Zooarchaeology in Complex Societies: Political Economy, Status, and Ideology." *JAR* 17:105–68.

Delnero, Paul. 2012. "Šulpa'e." *RlA* 13, 284–86.

Derchain, Philippe. 2008. "Questions de mots: Le mot et l'objet – l'objet et le signe." *LingAeg.* 16:303–5.

Descola, Philippe. 2005. *Par-delà nature et culture.* Paris: Gallimard.

Dietler, Michael, and Brian Hayden, eds. 2001. *Feasts: Archaeological and Ethnographic Perspectives on Food, Politics, and Power*. Washington DC: Smithsonian Institution Press.

Dietler, Michael. 1996. "Feasts and Commensal Politics in the Political Economy: Food, Power and Status in Prehistoric Europe." Pages 87–125 in *Food and the Status Quest: An Interdisciplinary Perspective*. Edited by Polly Wiessner and Wulf Schiefenhövel. Oxford: Berghahn.

–. 2007. "Culinary Encounters: Food, Identity, and Colonialism". Pages 218–242 in *The Archaeology of Food and Identity*. Edited by Katheryn Twiss. Carbondale: Center for Archaeological Investigations, University of Southern Illinois Press.

–. 2010. *Archaeologies of Colonialism: Consumption, Entanglement and Violence in Ancient Mediterranean France*. Berkeley: University of California Press.

Dietrich, Walter. 1992. "JHWH, Israel und die Völker beim Propheten Amos." *ThZ* 48:315–28.

Digard, Jean-Pierre. 2007. "Pourquoi mange-t-on certains animaux et pas d'autres? Réflexions sur le statut relatif des animaux domestiques." Pages 172–77 in *L'homme, le mangeur et l'animal: Qui nourrit l'autre*? Edited by Jean-Pierre Poulain. Les Cahiers de l'Ocha 12. Paris: OCHA.

Dommelen, Peter van, and Rowlands, Michael. 2012. "Material Concerns and Colonial Encounters." Pages 20–31 in *Materiality and Social Practices. Transformative Capacities of Intercultural Encounters*. Edited by Joseph Maran and Philipp Stockhammer. Oxford: Oxbow.

Donnat Beauquier, Sylvie. 2014. *Écrire à ses morts: Enquête sur un usage rituel de l'écrit dans l'Égypte pharaonique*. Paris: Jérome Millon.

Douglas, Mary. 1966. *Purity and Danger: An Analysis of Concepts of Pollution and Taboo*. London: Routledge & Kegan Paul.

–. 1972. "Deciphering a Meal." *Daedelus* 101:61–81.

–. 1984. "Standard Social Uses of Food: Introduction." Pages 1–39 in *Food in the Social Order: Studies of Food and Festivities in Three American Communities*. Edited by Mary Douglas. New York: Russell Sage.

–. 1993. "The Forbidden Animals in Leviticus." *JSOT* 59:3–23.

–. 1999. *Leviticus as Literature*. Oxford: Oxford University Press.

Driesch, Angela von den. 1976. *A Guide to the Measurement of Animal Bones from Archaeological Sites.* MA Thesis, Harvard University.

Dunbabin, Katherine. 1998. "Ut Graeco More Biberteur: Greeks." Pages 81–101 in *Meals in a Social Context: Aspects of the Communal Meal in the Hellenistic and Roman World.* Edited by Hanne Nielsen and Inge Nielsen. Aarhus: Aarhus University Press.

–. 2003. *The Roman Banquet: Images of Conviviality*. Cambridge: Cambridge University Press.

Durand, Jean-Marie. 2015. "Tabou et trangression: le sentiment de la honte." Pages 1–18 in *Tabou et transgression: Actes du colloque organisé par le Collège de France, Paris, les 11–12 avril 2012.* Edited by Jean-Marie Durand, Michaël Guichard, and Thomas Römer. OBO 274. Fribourg: Academic Press ; Göttingen: Vandenhoeck & Ruprecht.

Durkheim, Émile. 1960. *Les formes élémentaires de la vie religieuse*. Paris: Presses Universitaires de France.

Earle, Timothy K. 1977. "A Reappraisal of Redistribution: Complex Hawaiian Chiefdoms." Pages 213–29 in *Exchange Systems in Prehistory.* Edited by Timothy K. Earle and Jonathon E. Ericson. New York: Academic Press.

Ebeling, Erich. 1953. *Die akkadische Gebetsserie "Handerhebung": Von neuem gesammelt und herausgegeben*. Deutsche Akademie der Wissenschaften zu Berlin. Institut für Orientforschung Veröffentlichung 20. Berlin: Akademie-Verlag.

Eilberg-Schwartz, Howard. 1990. *The Savage in Judaism: An Anthropology of Israelite Religion and Ancient Judaism*. Bloomington, IN: Indiana University Press.

Eisenberg, Emanuel, and David Ben-Shlomo, eds. 2017. *The Tel Heyron 2014 Excavations: Final Report.* Ariel: Ariel University Press.

El-Khomi, S. 2000. "Missbildung vom Alkohol im altägyptischen Alltag?" *ASAE* 75:211–222.

Elsner, Jas, and Ian Rutherford. 2010. *Pilgrimage in Graeco-Roman and Early Christian Antiquity: Seeing the Gods*. Oxford: Oxford University Press.

Emerit, Sybille. 2002. "A propos de l'origine des interdits musicaux dans l'Égypte ancienne." *BIFAO* 102:189–210.

Ermidoro, Stefania, 2014. "Food Prohibition and Dietary Regulations in Ancient Mesopotamia." *Aula Orientalis* 32:79–91.

–. 2016. "Eating and Drinking in Dreams: Tablet A of the Assyrian 'Dream Book'." Pages 161–79 in *Libiamo ne' lieti calici. Ancient Near Eastern Studies Presented to Lucio Milano on the Occasion of his 65th Birthday by Pupils, Colleagues and Friends*. AOAT 436. Edited by Paola Corò et al. Münster: Ugarit-Verlag.

–. 2019. "Guests of the Gods: Ritualized Meals in First-Millennium Assyria." Pages 305–34 in *Religion et alimentation dans l'Egypte et l'Orient anciens*. Edited by Marie-Lys Arnette. Recherches d'archéologie, de philologie et d'histoire 43. Cairo: IFAO.

Evin, Allowen, Thomas Cucchi, Andrea Cardini, Una Strand Vidarsdottir, Greger Larson, and Keith Dobney. 2013. "The Long and Winding Road: Identifying Pig Domestication through Molar Size and Shape." *JAS* 40:735–43.

Eyre, Christopher. 2002. *The Cannibal Hymn: A Cultural and Literary Study*. Liverpool: Liverpool University Press.

Fall, Khadiyatoulah, et al., eds. 2014. *Le Halal dans tous ses états*. Laval: Presses de l'Université de Laval.

Faust, Avraham. 2000. "The Rural Community in Ancient Israel during Iron Age II." *BASOR* 317:17–39.

–. 2010. "Future Directions in the Study of Ethnicity in Ancient Israel." Pages 55–68 in *Historical Biblical Archaeology and the Future: The New Pragmatism*. Edited by Thomas E. Levy. New York: Routledge.
–, and Adi Erlich, eds. 2011. *The Excavations of Khirbet er-Rasm, Israel. The Changing Faces of the Countryside*. BAR International Series 2187. Oxford: Archaeopress.
–, Hayah Katz, and Pirchia Eyall. 2015. "Late Persian – Early Hellenistic Remains at Tel 'Eton." *Tel Aviv* 42:103–26.
–, and Justin Lev-Tov. 2011. "The Constitution of Philistine Identity: Ethnic Dynamics in Twelfth to Tenth Century Philistia." *OJA* 30:13–31.
–, and Ehud Weiss. 2005. "Judah, Philistia, and the Mediterranean World: Reconstructing the Economic System of the Seventh Century B.C.E." *BASOR* 338:71–92.
Feder, Yitzhaq. 2016. "Defilement, Disgust, and Disease: The Experiential Basis of Hittite and Akkadian Terms for Impurity." *JAOS* 136:99–116.
Felixs, Yehudah. 1984. *Animals and Plants of the Torah*. Jerusalem: Hatzair. (Hebrew).
Ferrières, Madeleine. 2002. *Histoire des peurs alimentaires: Du Moyen Âge à l'aube du XX^e siècle*. Paris: Seuil.
Fessler, Daniel M.T., and Navarrete, Carlos D. 2003. "Meat Is Good to Taboo: Dietary Proscriptions as a Product of the Interaction of Psychological Mechanisms and Social Processes." *Journal of Cognition and Culture* 3:1–40.
Fiddes, Nick. 2004. *Meat: A Natural Symbol*. London: Taylor & Francis.
Finkelstein, Israel. 1996. "Ethnicity and the Origin of the Iron I Settlers in the Highlands of Canaan: Can the Real Israel Stand Up?" *BA* 59:198–212.
–. 2013. *The Forgotten Kingdom: The Archaeology and History of Ancient Israel*. Atlanta: SBL Press.
Firmage, Edwin B. 1990. "The Biblical Dietary Laws and the Concept of Holiness." Pages 177–208 in *Studies in the Pentateuch*, edited by John A. Emerton. Leiden: Brill.
Fischler, Claude. 1988. "Food, Self and Identity." *Social Science Information* 27:275–93.
Fisher, Toni G. 2005. *A Zooarchaeological Analysis of Change in Animal Utilization at Bethsaida from Iron Age II through the Early Roman Period*. Ph.D. diss., University of Tennessee.
Fissolo, Jean-Luc. 2014. "Des abeilles et des dieux." Pages 259–74 in *Le Myrte & la rose: Mélanges offerts à Françoise Dunand par ses élèves, collègues et amis*. Edited by Gaëlle Tallet and Chistiane Zivie-Coch. *CENiM* 9/2. Montpellier: Université Paul Valéry.
Fonseca, Rui P. 2015. "Between Acceptance and Veto: The Meat Perceptual Dimensions." *Danish Journal of Sociology and Political Sciences* 2:51–9.
Fowles, Severin M. 2008. "Steps Toward an Archaeology of Taboo." Pages 15–37 in *Religion, Archaeology, and the Material World*. Edited by Lars Fogelin. Center for Archaeological Investigations Occasional Paper 36. Carbondale, IL: Southern Illinois University Press.
Frandsen, Paul John. 1986. "Tabu." Pages 135–42 in vol. 6 of *Lexikon der Ägyptologie*. Edited by Wolfgang Helck, Eberhard Otto, and Wolfhart Westendorf. Wiesbaden: Harrassowitz.
–. 1998. "On the Avoidance of Certain Forms of Loud Voices and Access to the Sacred." Pages 975–1000 in *Egyptian Religion: The Last Thousand Years, 2. Studies Dedicated to the Memory of Jan Quaegebeur*. Edited by Willy Clarysse, Antoon Schoors, and Harco Willems. Leuven: Peeters.
–. 1999. "On Fear of Death and the Three *Bwt* connected with Hathor." Pages 131–48 in *Gold of Praise: Studies on Ancient Egypt in Honor of E.F. Wente*. Edited by Emily

Teeter and John A. Larson. Studies in Ancient Oriental Civilization 58. Chicago: University of Chicago Press.
–. 2000. "On the Origin of the Notion of Evil in Ancient Egypt." *GM* 179:9–34.
–. 2001. "*Bwt* in the Body." Pages 141–74 in *Social Aspects of Funerary Culture in the Egyptian Old and Middle Kingdoms.* Edited by Harco Willems. OLA 103. Leuven: Peeters.
–. 2002–2003. "Le fruit défendu dans l'Égypte ancienne." *BSÉG* 25:57–74.
–. 2004. "Sin, Pollution, and Purity. Egypt." Pages 497–99 in *Religions of the Ancient World: A Guide*. Edited by Sarah Iles Johnston. Cambridge, MA: Harvard University Press.
–. 2010. "Durkheim's Dichotomy Sacred: Profane and the Egyptian Category *Bwt*." Pages 149–74 in *Millions of Jubilees: Studies in Honor of David P. Silverman.* Edited by Zahi Hawass and Jennifer House Wegner. Suppl. ASAE 39. Cairo: Conseil Suprême des Antiquités d'Egypte.
Frazer, James. 1875–1889. "Taboo." Pages 15–18 in vol. 22 of *Encyclopædia Britannica.* Ninth Edition. Chicago: Encyclopedia Britannica.
Freud, Liora. 2011a. "Iron Age Pottery Assemblages: Typology, Chronology, and Function." *NEA* 74:13–14.
–. 2011b. *The Longue Durée of the 7th Century BCE. A Study of the Iron Age Pottery Vessels from Ramat Raḥel.* MA thesis, Tel Aviv University.
Freidenreich, David M. 2011. *Foreigners and Their Food: Constructing Otherness in Jewish, Christian, and Islamic Law.* Berkeley: University of California Press.
Frost, Frank. 1999. "Sausage and Meat Preservation in Antiquity." *Greek, Roman and Byzantine Studies* 40:241–52.
Fulton, Deirdre N., Yuval Gadot, Assaf Kleinman, Liora Freud, Omri Lernau, and Oded Lipschits. 2015. "Feasting in Paradise: Feast Remains from the Iron Age Palace of Ramat Raḥel and Their Implications." *BASOR* 374:29–48.
Gadot, Yuval. 2015. "In the Valley of the King: Jerusalem's Rural Hinterland in the 8th–4th centuries BCE." *TA* 42:3–26.
Gamer-Wallert, Ingrid. 1970. *Fische und Fischkulte im alten Ägypten.* ÄgAbh 2. Wiesbaden: Harrassowitz.
Gardiner, Alan H. 1935. *Hieratic Papyri in the British Museum:* 3rd Series: Chester Beatty Gift. London: British Museum.
Gaspa, Salvatore. 2012. "Meat Offerings and Their Preparation in the State Cult of the Assyrian Empire." *BSOAS* 72:249–73.
Geller, Mark J. 1990. "Taboo in Mesopotamia. A Review Article." *JCS* 42:105–17.
–. 2012. "Tabu (Taboo)." *RlA* 13:394–95.
Gerstenberger, Erhard S. 2009. "Speisetabus (Lev 11; Dtn 14): Ängste und Hoffnungen." Pages 179–95 in *Essen und Trinken in der Bibel: ein literarisches Festmahl für Rainer Kessler zum 65. Geburtstag.* Edited by Michaela Geiger, Christl M. Maier, and Uta Schmidt. Gütersloh: Gütersloher Verlagshaus.
Goodman, Martin. 1990. "Kosher Olive Oil in Antiquity." Pages 227–45 in *A Tribute to Geza Vermes: Essays on Jewish and Christian Literature and History*. Edited by Philip Davies and Richard T. White. JSOTSup 100. Sheffield: JSOT Press.
–. 1999. "The Pilgrimage Economy of Jerusalem in the Second Temple Period." Pages 69–76 in *Jerusalem: Its Sanctity and Centrality to Judaism, Christianity and Islam.* Edited by Lee I. Levine. New York: Continuum.
Goody, Jack. 1982. *Cooking, Cuisine, and Class: A Study in Comparative Sociology*. Cambridge: Cambridge University Press.

Grandet, Pierre. 1994. *Le papyrus Harris I (BM 9999).* Bibliothèque d'étude 109. Cairo: IFAO.

Greenfield, Haskel J. and Ram Bouchnick. 2010. "Kashrut and Shechita – The Relationship Between Dietary Practices and Ritual Slaughtering of Animals on Jewish Identity." Pages 1–10 in *Identity Crisis: Archaeological Perspectives on Social Identity: Proceedings of the 42nd (2010) Annual Chacmool Archaeology Conference, University of Calgary, Calgary, Alberta.* Edited by Lindsay Amundsen-Meyer, Nicole Engel, and Sean Pickering. Calgary: Chacmool Archaeological Association, University of Calgary.

Greer, Jonathan S. 2010. "An Israelite *Mizrāq* at Tel Dan?" *BASOR* 358:27–45.

–. 2012. "Cultic Practices at Tel Dan – Was the Northern Kingdom Deviant?" *BAR* 38:26, 67.

–. 2013. *Dinner at Dan: Biblical and Archaeological Evidence for Sacred Feasts at Iron Age II Tel Dan and Their Significance.* Leiden: Brill.

–. 2014. "Was 'Israelite' Sacrifice Practiced at Tel Dan?" *The Bible and Interpretation.* http://www.bibleinterp.com/articles/2014/01/gre388028.shtml.

–. 2017. "The Cult at Dan: Aramean or Israelite?" Pages 3–18 in *Wandering Arameans: Arameans outside Syria – Textual and Archaeological Perspectives.* Edited by Angelika Berlejung, Aren M. Maeir, and Andreas Schüle. Leipziger Altorientalistische Studien 5. Wiesbaden: Harrassowitz.

–. 2020. "The 'Priestly Portion' in the Hebrew Bible: Its Ancient Near Eastern Context and Its Implications for the Composition of P." *JBL* 138 (2019): 263–84.

–, Elizabeth Arnold, Jessica Rowland, and Marcy Fryling. Forthcoming. "The Iron II Animal Bone Remains from Tel Dan." In *Dan V: A Chronicle of the Excavations, Iron Age I.* Edited by Yifat Thareani. Jerusalem: Hebrew Union College/Jewish Institute of Religion.

–, and Brian Hesse. Forthcoming. "The Late Bronze Age Animal Bone Remains from Tel Dan." In *Dan III Supplement: A Chronicle of the Excavations, Iron Age I.* Edited by David Ilan. Jerusalem: Hebrew Union College/Jewish Institute of Religion.

–, Deirdre N. Fulton, and Paula Wapnish. Forthcoming. "The Iron I Animal Bone Remains from Tel Dan." In *Dan IV: A Chronicle of the Excavations, Iron Age I.* Edited by David Ilan. Jerusalem: Hebrew Union College/Jewish Institute of Religion.

Grigson, Caroline. 1987. "Pastoralism and Other Aspects of Animal Management in the Chalcolithic of the Northern Negev." Pages 219–41 in *Shiqmim I.* Edited by Thomas E. Levy. BAR International Series 356. Oxford: Archaeopress.

–. 1995. "Plough and Pasture in the Early Economy of the Southern Levant." Pages 245–68 in *The Archaeology of Society in the Holy Land.* Edited by Thomas E. Levy. London: Cassell.

–. 2007. "Culture, Ecology and Pigs from the 5th to 3rd Millennium BC around the Fertile Crescent." Pages 83–108 in *Pigs and Humans. 10,000 Years of Interaction.* Edited by Umberto Albarella et al. Oxford: Oxford University Press.

Grimal, Nicolas 1981. *La stèle triomphale de Pi(ankh)y au Musée du Caire.* MIFAO 105. Cairo: IFAO.

Guichard, Michaël, and Lionel Marti. 2013. "Purity in Ancient Mesopotamia: The Paleo-Babylonian and Neo-Assyrian Periods." Pages 47–114 in *Purity and the Forming of Religious Traditions in the Ancient Mediterranean and Ancient Judaism.* Dynamics in the History of Religions 3. Edited by Christian Frevel and Christophe Nihan. Leiden: Brill.

Gus-Zilberstein, Bracha. 1995. "The Typology of the Hellenistic Coarse Ware and Selected Loci of the Hellenistic and Roman Periods." Pages 289–433 in *Excavations at Dor, Final Report IB: Areas A and C: The Finds*. Edited by Ephraim Stern. Jerusalem: Israel Antiquity Authority.

Hackett, Jo Ann. 2002. "Hebrew (Biblical and Epigraphic)." Pages 139–56 in *Beyond Babel: A Handbook for Biblical Hebrew and Related Languages*. Edited by John Kaltner and Steven L. McKenzie. Atlanta: Scholars Press.

Hagedorn, Anselm C. 2011. *Die Anderen im Spiegel: Israels Auseinandersetzung mit den Völkern in den Büchern Nahum, Zefanja, Obadja, und Joel.* BZAW 414. Berlin: de Gruyter.

Hahn, Hans P. 2012. "Words and Things: Reflections on People's Interaction with the Material World." Pages 4–12 in *Materiality and Social Practices: Transformative Capacities of Intercultural Encounters*. Edited by Joseph Maran and Philipp Stockhammer. Oxford: Oxbow.

Halivni, David W. 2009. *Midrash, Mishnah, and Gemara: The Jewish Predilection for Justified Law.* Cambridge, MA: Harvard University Press.

Hallo, William W. 1985. "Biblical Abomination and Sumerian Taboos." *JQR* 76:21–40.

Hamonic, Fanny. 2013. "Adieu veau, vache, cochon couvée … La boucherie à l'Ancien Empire: croisement des données iconographiques, textuelles et archéologiques." *Cahiers de l'École du Louvre.* Recherches en histoire de l'art, histoire des civilisations, archéologie, anthropologie et muséologie 3:53–62.

Hani, Jean. 1976. *La religion égyptienne dans la pensée de Plutarque*. Paris: Belles Lettres.

Harris, Marvin. 1975. *Cows, Pigs, Wars, and Witches: The Riddles of Culture*. Vintage Books. Anthropology and Sociology. New York: Vintage Books.

–. 1979. *Cultural Materialism: The Struggle for a Science of Culture*. New York: Random House.

–. 1985. *Good to Eat: Riddles of Food and Culture*. New York: Simon and Schuster.

–. 1997. "The Abominable Pig." Pages 67–79 in *Food and Culture: A Reader*. Edited by Carole Counihan, Penny van Esterik, and Alice Julier. London: Routledge.

Hartman, Gideon, Guy Bar-Oz, Ram Bouchnick, and Ronny Reich. 2013. "The Pilgrimage Economy of Early Roman Jerusalem (1st century BCE–70 CE) Reconstructed from the $\partial^{15}N$ and $\partial^{13}C$ Values of Goat and Sheep Remains." *JAS* 40:4369–76.

Hasegawa, Shuichi. 2012. *Aram and Israel during the Jehuite Dynasty*. BZAW 434. Berlin: de Gruyter.

Hecker, Howard. 1982. "A Zooarchaeological Inquiry into Pork Consumption from Prehistoric to New Kingdom Times." *Journal of the American Research Center in Egypt* 19:59–71.

Heeßel, Nils. 2000. *Babylonisch-assyrische Diagnostik*. AOAT 43. Münster: Ugarit-Verlag.

Hermann, Virginia Rimmer and J. David Schloen, eds. 2014. *In Remembrance of Me: Feasting with the Dead in the Ancient Middle East.* Chicago: Oriental Institute of Chicago.

Herrmann, Christian. 2011. "Egyptian Amulets." Pages 359–95 in *Ashkelon 3: The Seventh Century B.C.* Edited by Lawrence Stager, Daniel Master, and J. David Schloen. Winona Lake, IN: Eisenbrauns.

Hershkovitz, M. 2005. "The Pottery of the Late 1st and 2nd centuries A.D. from the 1949 Excavations." Pages 283–96 in *Excavations on the Site of the Jerusalem Convention Center (Binyanei Ha'Uma): A Settlement of the Late First to Second Temple Period: The Tenth Legion's Kilnworks, and a Byzantine Monastic Complex. The Pottery and Other*

Finds. Edited by Benny Arubas and Haim Goldfus. Journal of Roman Archaeology. Supplementary Series 60. Portsmouth, RI: Journal of Roman Archaeology.

Hesse, Brian. 1986. "Animal Use at Tel Miqne-Ekron in the Bronze Age and Iron Age." *BASOR* 264: 17–27.

–. 1990. "Pig Lovers and Pig Haters: Patterns of Palestinian Pork Production." *Journal of Ethnobiology* 10:195–225.

–, Deirdre N. Fulton, and Paula Wapnish. 2011. "Animal Production and Bone Debris at Ashkelon in the Seventh Century BCE." Pages 615–44 in *Ashkelon 3: The Seventh Century B.C.* Edited by Lawrence Stager, Daniel Master, and J. David Schloen. Winona Lake, IN: Eisenbrauns.

–, and Paula Wapnish. 1997. "Can Pig Remains be used for Ethnic Diagnosis in the Ancient Near East?" Pages 238–70 in *The Archaeology of Israel: Constructing the Past, Interpreting the Present.* Edited by Neil A. Silberman and David Small. Sheffield: Sheffield Academic Press.

–, and Paula Wapnish. 1998. "Pig Use and Abuse in the Ancient Levant: Ethnoreligious Boundary-Building with Swine." Pages 123–35 in *Ancestors for the Pigs: Pigs in Prehistory*. Edited by Sarah M. Nelson. MASCA Research Papers in Science and Archaeology 15. Philadelphia: University of Pennsylvania Museum Press.

–, Paula Wapnish, and Jonathan Greer. 2012. "Scripts of Animal Sacrifice in Levantine Culture-History." Pages 217–36 in *Sacred Killing: The Archaeology of Sacrifice in the Ancient Near East.* Edited by Anne E. Porter and Glenn M. Schwartz. Winona Lake, IN: Eisenbrauns.

Hesse, Paula, and Deirdre N. Fulton. 2018. Pages 489–508 in "The Middle Bronze Age Faunal Assemblage from Ashkelon." In *Ashkelon 6*. Edited by Lawrence E. Stager and David Schloen. Winona Lake, IN: Eisenbrauns.

–, and Deirdre N. Fulton. Forthcoming a. "Across the Spatial Divide: Ritualized and Everyday Animal Use at Iron I Ashkelon." In *Ashkelon 7*. Edited by Lawrence E. Stager, Daniel Master, and Adam Aja. Winona Lake, IN: Eisenbrauns

–, and Deirdre N. Fulton. Forthcoming b. "The Hellenistic Fauna of Ashkelon." In *Ashkelon 9*, Edited by Katherine Birney, Lawrence E. Stager, and Daniel Master. Winona Lake, IN: Eisenbrauns.

Hitchcock, Louise A., Liora K.Horwitz, Elisabetta Boaretto, and Aren M. Maeir. 2015. "One Philistine's Trash is an Archaeologist's Treasure: Feasting at Iron I, Tell es-Safi/Gath." *NEA* 78:12–25.

Hoffmeier, Joris-Karl. 1985. *Sacred in the Vocabulary of Ancient Egypt: The Term* Dsr, *with Special Reference to Dynasties I-XX*. Göttingen: Vandenhoeck &Ruprecht; Fribourg: Academic Press.

Horwitz, Liora K. 1987. "Faunal Remains from the Early Iron Age Site on Mount Ebal." *TA* 14(2): 173–89.

–, Armelle Gardeisen, Aren Maeir, and Liouse A. Hitchcock. 2017. "A Contribution to the Iron Age Philistine Pig Debate." Pages 93–116 in *The Wide Lens in Archaeology: Honoring Brian Hesse's Contribution to Anthropological Archaeology.* Edited by Justin Lev-Tov, Allan Gilbert, and Paula Wapnish. Atlanta: Lockwood Press.

–, and Jacqueline Studer, J. 2005. "Pig Production and Exploitation during the Classical Periods in the Southern Levant." *Archaeozoology of the Near East* 6:222–39.

–, and Eitan Tchernov. 1989. "Subsistence Patterns in Ancient Jerusalem: A Study of Animal Remains." Pages 144–54 in *Excavations in the South of the Temple Mount*. Edited by Eilat Mazar and Benjamin Mazar. Qedem 29. Jerusalem: The Hebrew University.

–, Samuel R. Wolff, and Steven Ortiz. 2016. "Digital Companion to 'The Context and Biometry of Iron Age II and Hellenistic Period Dog 'Burials' from Tell Gezer Compared to those from Other Sites in the Region." *Open Context*. http://opencontext.org.projects/646b7034–07b7–4971–8d89-ebe37dda4cd2.

–, Samuel R. Wolff, and Steven Ortiz. 2017. "The Context and Biometry of Iron Age II and Hellenistic Period Dog 'Burials' from Tel Gezer Compared to Those from Other Sites in the Region." Pages 297–333 in *The Wide Lens in Archaeology: Honoring Brian Hesse's Contributions to Anthropological Archaeology*. Edited by Justin Lev-Tov, Paula Hesse, and Allan Gilbert. Atlanta: Lockwood Press.

Houston, Walter. 1993. *Purity and Monotheism: Clean and Unclean Animals in Biblical Law*. JSOTSup 140. Sheffield: JSOT Press.

Hübner, Ulrich. 1989. "Schweine, Schweineknochen und ein Speiseverbot im alten Israel." *VT* 39:225–36.

Hunn, Eugene S. 1979. "The Abominations of Leviticus Revisited." Pages 103–16 in *Classifications in Their Social Context*. Edited by David Reason and Roy F. Ellen. London: Academic Press.

Ikram, Salima. 1995. *Choice Cuts: Meat Production in Ancient Egypt*. Leuven: Peeters.

Ilan, David. 1999. *Northeastern Israel in the Iron Age I: Cultural, Socioeconomic and Political Perspectives*. Ph.D. diss., Tel Aviv University.

–. 2019. *Dan IV: The Early Iron Age Levels*. Annual of the Nelson Glueck School of Biblical Archaeology 12. Jerusalem: Hebrew Union College.

Ingram, P.M. 1972. "Meat Preservation – Past, Present and Future." *Royal Society of Health* 92:121–30.

Jasnow, Richard L., and Karl-Theodor Zauzich. 2005. *The Ancient Egyptian Book of Thoth: A Demotic Discourse on Knowledge and Pendant to the Classical Hermetica*. Wiesbaden: Harrassowitz.

–. 2014. *Conversations in the House of Life: A New Translation of the Ancient Egyptian Book of Thoth*, Wiesbaden: Harrassowitz.

Jenson, Philip Peter. 1992. *Graded Holiness: A Key to the Priestly Conception of the World*. JSOTSup 106. Sheffield: JSOT Press.

Jiménez, Enrique and Selim F. Adali. 2015. "The 'Prostration Hemerology' Revisited: An Everyman's Manual at the King's Court." *ZA* 105:154–91.

Jones, Siân. 1997. *The Archaeology of Identity: Constructing Identities in the Past and Present*. London: Routledge.

Junker, Heinrich. 1913. *Das Götterdekret über das Abaton*. DAWW 105. Vienna: Akademie der Wissenschaft.

–. 1959. *Vorschriften für den Tempelkult in Philä*. Rome: Pontifical Biblical Institute.

Kadish, Gerald. 1979. "The Scatophagus Egyptian." *Journal of Society for the Study of Egyptian Antiquities* 9:203–17.

Kazen, Thomas. 2011. *Emotions in Biblical Law: A Cognitive Science Approach*. Hebrew Bible Monographs 36; Studia Theologica Holmiensia 19. Sheffield: Sheffield Phoenix Press.

Keel, Othmar. 2011. "Seals and Seal Impressions." Pages 341–57 in *Ashkelon 3: The Seventh Century B.C.* Edited by Lawrence Stager, Daniel Master, and J. David Schloen. Winona Lake, IN: Eisenbrauns.

Killebrew, Ann E. 2005. *Biblical Peoples and Ethnicity: An Archaeological Study of Egyptians, Canaanites, Philistines*. Leiden: Brill.

Killebrew, Ann E., and Justin Lev-Tov. 2008. "Early Iron Age Feasting and Cuisine: An Indicator of Philistine-Aegean Connectivity?" Pages 339–46 in *The Aegean Feast; Proceedings of the 12th International Aegean Conference/University of Melbourne, Center for Classics and Archaeology, 25–29 March 2008.* Edited by Louise A. Hitchcock, Robert Laffineur, and Janice Crowley. Liège: Université de Liège.

Kipp, Rita S., and Edward M. Schortman. 1989. "The Political Impact of Trade in Chiefdoms." *American Anthropologist* 91: 370–85.

Kislev, M. 2000. "Taxonomic Identification of the Ten Kosher Ruminants." *Sinai* 125:216–25. (Hebrew).

Kreimerman, Igor, and Débora Sandhaus. Forthcoming. "Political Trends as Reflected in the Material Culture: A New Look at the Transition between the Persian and the Hellenistic Periods." In *Judea in the Long Third Century BCE.* Edited by Christophe Nihan, Sylvie Honigman, and N. Shalom. Winona Lake, IN: Eisenbrauns.

Kreinath, Jens. 2012. "Taboo." *Religion Past and Present.* Edited by Hans Dieter Betz, Don S. Browning, and Bernd Janowski. Leiden: Brill.

Labat, René. 1951. *Traité akkadien de diagnostics et pronostics médicaux.* Collection de travaux de l'Académie internationale d'histoire des sciences 7. Paris: Académie internationale d'histoire des sciences. Leiden: Brill.

Laboury, Dimitri. 2010. *Akhénaton*. Paris: Pygmalion.

Labrique, Françoise. 2014. "Le taurillon exclu du sacrifice (Clère, *Porte d'Évergète*, pl. 40)." *Archimède* 1:64–70.

Lalhou, Saadi. 1998. *Penser, manger: les représentations sociales de l'alimentation.* Paris: Presses universitaires de France.

Lambert, Wilfred G. 1970. "The Sultantepe Tablets: IX. The Birdcall Text." *AnSt* 20:111–17.

–. 1993. "Donations of Food and Drink to the Gods in Ancient Mesopotamia." Pages 191–201 in *Ritual and Sacrifice in the Ancient Near East: Proceedings of the International Conference Organized by the Katholieke Universiteit Leuven from the 17th to the 20th of April 1991.* OLA 55. Edited by Jan Quaegebeur. Leuven: Peeters.

–. 1996, *Babylonian Wisdom Literature*. Winona Lake, IN: Eisenbrauns.

Langgut, Dafna, Frank Harald Neumann, Mordechai Stein, Allon Wagner, Elisa Joy Kagan, Elisabetta Boaretto, and Israel Finkelstein. 2014. "Dead Sea Pollen Record and History of Human Activity in the Judean Highlands (Israel) from the Intermediate Bronze into the Iron Ages (~2500–500 BCE)." *Palynology* 38:280–302.

–, Yuval Gadot, Naomi Porat, and Oded Lipschits. 2013. "Fossil Pollen Reveals the Secrets of Royal Persian Garden at Ramat Raḥel (Jerusalem)." *Palynology* 37: 115–29.

Lapp, Gunther. 2008. *Totenbruch Spruch 125: Synoptische Textausgabe nach Quellen des Neuen Reiches.* TbT 3. Basel: Orient Verlag.

Leach, Edmund. 1964. "Anthropological Aspects of Language: Animal Categories and Verbal Abuse." In *New Directions in the Study of Language*, edited by Eric H. Lenneberg, 23–63. Cambridge, MA: Massachusetts Institute of Technology Press.

Leitz, Christian. 1994. *Tagewählerei: Das Buch* ḫ3t nḥḥ ph.wy ḏt *und verwandte Texte.* ÄgAbh 55. Wiesbaden: Harrassowitz.

–. 2014. *Die Gaumonographien in Edfu und ihre Papyrusvarianten: Eine überregionaler Kanon kultischen Wissens im spätzeitlichen Ägypten.* SSR 9. Wiesbaden: Harrassowitz.

Lernau, Hanan, and Omri Lernau. 1989. "Fish Bone Remains." Pages 155–161 in *Excavations in the South of the Temple Mount.* Edited by Eilat Mazar and Benjamin Mazar. Qedem 29. Jerusalem: The Hebrew University.

–. 2008. "The Fish Bones." Pages 263–67 in *Neolithic Ashkelon*. Edited by Yosef Garfinkel and Doron Dag. Jerusalem: The Hebrew University.
–. 2011. "Fish Remains." Pages 646–57 in *Ashkelon 3: The Seventh Century B.C.* Edited by Lawrence Stager, Daniel Master, and J. David Schloen. Winona Lake, IN: Eisenbrauns.
Lev-Tov, Justin S.E. 2000. *Pigs, Philistines, and the Ancient Animal Economy of Ekron from the Late Bronze Age to the Iron Age II*. Ph.D. diss., University of Tennessee, Knoxville.
–. 2006. "The Faunal Remains: Animal Economy in Iron Age I." Pages 207–233 in *Tel Miqne Ekron Excavations 1995–1996: Field INE East Slope – Iron Age I (Early Philistine Period)*. Edited by Mark W. Meehl, Trude Dothan, and Seymour Gitin. Jerusalem: The Hebrew University.
–. 2010. "A Plebeian Perspective on Empire Economies: Faunal Remains from Tel Miqne-Ekron, Israel." Pages 90–104 in *Anthropological Approaches to Zooarchaeology: Complexity, Colonialism, and Animal Transformations*. Edited by Douglas V. Campana, Pamela Crabtree, S. D. deFrance, Justin Lev-Tov, and A. M. Choyke. Oxford: Oxbow Books.
Lévi-Strauss, Claude 1983. *The Raw and the Cooked*. Translated by J. Weightman and D. Weightman. Chicago: University of Chicago Press.
–. 1962. *Le totémisme aujourd'hui*. Paris: Presses Universitaires de France.
–. 1965. "Le triangle culinaire." *L'Arc* 26:19–29.
Levi, Danit, and Be'eri, Ron. 2010. "Excavations in the Crowne Plaza Hotel (Binyanei Ha'Uma)." Pages 119–129 in *Studies of the Archeology of Jerusalem and its Region*. Vol. 4. Edited by David Amit, Orit Peleg-Barkat and Guy Stiebel. Tel Aviv: Institute of Archaeology.
–. 2017. "The Potter's workshops at Binyanei Ha'Huma as a Tool for Understanding Historical and Cultural Changes in Jerusalem from the Second Century BCE to the Second Century CE." Pages 124–43 in *New Studies in the Archaeology of Jerusalem and its Region*. Vol. 11. Edited by Yuval Gadot, Yehiel Zelinger, Katia Cytryn-Silverman and Joseph (Joe) Uziel. Jerusalem: Israel Antiquity Authority.
Levine, Lee I. 2002. *Jerusalem: Portrait of the City in the Second Temple Period (538 BCE–70 CE)*. Philadelphia: Jewish Publication Society.
Levine, Tikva. 2003. "Pottery and Small Finds from Subterranean Complexes 21, 44, 70." Pages 70–130 in *Maresha Excavations Final Report I, Subterranean Complexes 21, 44, 77*. Edited by by Amos Kloner. Israel Antiquity Authority Report 17. Jerusalem: Israel Antiquity Authority.
Linssen, Marc J. H. 2004. *The Cults of Uruk and Babylon. The Temple Ritual Texts as Evidence for Hellenistic Cult Practice*. CM 25. Leiden: Brill.
Lion, Brigitte, and Cécile Michel, eds. 2006. *De la domestication au tabou. Le cas des suidés dans le Proche-Orient ancien*. Paris: De Boccard.
Lipovitch, David. 2009. "A Reconstruction of Achaemenid Period Ashkelon Based on the Faunal Evidence." Pages 263–72 in *Exploring the Long Durée: Essays in Honor of Lawrence E. Stager*. Edited by J. David Schloen. Winona Lake, IN: Eisenbrauns.
Lipschits, Oded. 2005. *The Fall and Rise of Jerusalem*. Winona Lake, IN: Eisenbrauns.
–, and Yuval Gadot. 2008. "Ramat Raḥel and the Emeq Rephaim Sites – Links and Interpretations." Pages 88–96 in *New Studies in the Archaeology of Jerusalem and Its Region*, eds. David Amit and Guy D. Stiebel. Jerusalem: Israel Antiquities Authority.

–, Omer Sergi, and Ido Koch. 2010. "The Date of the *lmlk* and 'Private' Stamp Impressions: A Fresh Look." *TA* 37:3–32.
–, Omer Sergi, and Ido Koch. 2011. "Judahite Stamped and Incised Jar Handles: A Tool for the Study of the History of Late Monarchic Judah." *TA* 38: –41.
–, Yuval Gadot, and Liora Freud. 2017. *Ramat Rahel III*. Monograph Series 35. Tel Aviv: Sonia and Marco Nadler Institute of Archaeology; Winona Lake, IN: Eisenbrauns.
–, Yuval Gadot, Benjamin Arubas, and Manfred Oeming. 2011. "Palace and Village, Paradise and Oblivion: Unraveling the Riddles of Ramat Raḥel." *NEA* 74:2–49.
–, and David S. Vanderhooft. 2011. *Yehud Stamp Impressions: A Corpus of Inscribed Stamp Impressions from the Persian and Hellenistic Periods in Judah*. Winona Lake, IN: Eisenbrauns.
Livingstone, Alistair. 2013. *Hemerologies of Assyrian and Babylonian Scholars*. CUSAS 25. Bethesda, MD: CDL Press.
Loud, Gordon. 1939. *The Megiddo Ivories*. Oriental Institute Publications 52. Chicago: University of Chicago Press.
Luley, Benjamin Peter. 2014. "Cooking, Class, and Colonial Transformations in Roman Mediterranean France." *AJA* 118:33–60.
Lundbom, Jack R. 2004. *Jeremiah 37–52*. AB 21C. New York: Doubleday.
–. 2013. *Deuteronomy: A Commentary*. Grand Rapids, MI: Eerdmans.
Lyman, R. Lee. 1994. *Vertebrate Taphonomy*. Cambridge: Cambridge University Press.
MacDonald, Nathan. 2008. *Not Bread Alone: The Uses of Food in the Old Testament*. Oxford: Oxford University Press.
Maeir, Aren M., Louise A. Hitchcock, and Liora K. Horwitz. 2013. "On the Constitution and Transformation of Philistine Identity." *OJA* 32:1–38.
Magness, Jodi. 2014. "Conspicuous Consumption: Dining on Meat in the Ancient Mediterranean World and Near East." Pages 33–59 in *Feasting in the Archaeology and texts of the Bible and Ancient Near East*. Edited by Peter Altmann and Janling Fu. Winona Lake, IN: Eisenbrauns.
Makarewicz, Cheryl A. 2016. "Toward an Integrated Isotope Zooarchaeology." Pages 189–209 in *Isotopic Landscapes in Bioarchaeology*. Edited by Gisela Grupe and George C. McGlynn. Berlin: Springer.
Markl, Dominik. 2012. *Gottes Volk im Deuteronomium*. BZABR 18. Wiesbaden: Harrassowitz.
Markoe, Glenn E. 1990. "The Emergence of Phoenician Art." *BASOR* 279:13–26.
Marti, K. 1904. *Das Dodekapropheton*. Tübingen: Mohr.
Marti, Lionel. 2014. "Chroniques bibliographiques 16. Les hémérologies mésopotamiennes." *RA* 108:161–99.
–. 2015. "Tabous et hémérologies en Assyrie." Pages 47–67 in *Tabou et transgression. Actes du colloque organisé par le Collège de France, Paris, les 11–12 avril 2012*. Edited by Jean-Marie Durand, Michaël Guichard, and Thomas Römer. OBO 274. Fribourg: Academic Press; Göttingen: Vandenhoeck & Ruprecht.
Master, Daniel M. 2003. "Trade and Politics: Ashkelon's Balancing Act in the Seventh Century B. C. E." *BASOR* 330:47–64.
–, and Lawrence E. Stager. 2014. "Buy Low, Sell High: The Marketplace at Ashkelon." *BAR* 40:36–45.
Maul, Stefan M. 1994. *Zukunftsbewältigung: eine Untersuchung altorientalischen Denkens anhand der babylonisch-assyrischen Löserituale (Namburbi)*. BagF 18. Mainz: Philipp von Zabern.

–. 2004. "Die 'Lösung vom Bann': Überlegungen zu altorientalischen Konzeptionen von Krankheit und Heilkunst." Pages 79–95 in *Magic and Rationality in Ancient Near Eastern and Graeco-Roman Medicine*. Edited by Herman F. J. Horstmanshoff and Marten Stol. Studies in Ancient Medicine 27. Leiden: Brill.

Mauss, Marcel. 1968. *Œuvres. 1. Les fonctions sociales du sacré*. Paris: Éditions de Minuit: 40–42 (= l'Année sociologique 9. 1906).

McInerney, Jeremy. 2014. *A Companion to Ethnicity in the Ancient Mediterranean*. Hoboken, NJ: Blackwell.

Meadows, Karen. 1994. "You Are What You Eat: Diet, Identity and Romanization." Pages 133–40 in *TRAC 94: Proceedings of the Fourth Annual Theoretical Roman Archaeology Conference, Durham, 1994*. Edited by Sally Cottam. Oxford: Oxbow.

Meeks, Dimitri. 1975. "Pureté et purification en Égypte." *DB* 9:430–52.

–. 2005. "L'introduction du cheval et son insertion dans les croyances religieuses." Pages 51–59 in *Les équidés dans le monde méditerranéen antique*. Edited by Armelle Gardeisen. Lattes: Association pour le développement de l'archéologie en Lanuedo-Roussillon.

–. 2012. "La hiérarchie des êtres vivants selon la conception égyptienne." Pages 517–47 in *Et in Ægypto et ad Ægyptum, Recueil d'études dédiées à Jean-Claude Grenier*. Edited by Annie Gasse, Frédéric Servajean, and Christophe Thiers. CENIM 5. Montpellier: Université Paul Valéry.

–, and Christine Favard-Meeks. 1993. *La vie quotidienne des dieux égyptiens*. Paris: Seuil.

Meiri, Meirav, Dorothee Huchon, Guy Bar-Oz, Elisabetta Boaretto, Liora K. Horwitz, Aren M. Maeir, Lidar Sapir-Hen, Greger Larson, Steve Weiner, and Israel Finkelstein. 2013. "Ancient DNA and Population Turnover in Southern Levantine Pigs-Signature of the Sea Peoples Migration?" *Scientific Reports* 3:3035–43.

Mélèze Modrzejewski, Joseph. 1997. *Les Juifs d'Égypte de Ramsès II à Hadrien*. Paris: Presses Universitaires de France.

Meshel, Naphtali. 2008. "Food for Thought: Systems of Categorization in Leviticus 11." *HTR* 101:203–29.

Milano, Lucio. 1998. "Aspects of Meat Consumption in Mesopotamia and the Food Paradigm of the Poor Man of Nippur." *SAAB* 12:111–27.

–, and Maria V. Tonietti. 2012. "Cerimonialità alimentare ad Ebla: offerte, pasti, sacrifici." Pages 33–81 in *Mangiare divinamente. Pratiche e simbologie alimentari nell'antico Oriente*. Edited by Lucio Milano. Eothen 20. Firenze: LoGisma.

Milgrom, Jacob. 1990. "Ethics and Ritual: The Foundations of the Biblical Dietary Laws." Pages 159–91 in *Religion and Laws: Biblical, Judaic and Islamic Perspectives*. Edited by Edwin B. Firmage, Bernard G. Weiss, and John W. Welch. Winona Lake, IN: Eisenbrauns.

–. 1991. *Leviticus 1–16: A New Translation with Introduction and Commentary*. AB 3. New York: Doubleday.

Miller, James C. 2008. "Ethnicity and the Hebrew Bible." *CBR* 6.2:170–213.

Mills, Barbara. 2008. "Colonialism and Cuisine: Cultural Transmission, Agency, and History at Zuni Pueblo." Pages 245–62 in *Cultural Transmissions and Material Culture: Breaking Down Boundaries*. Edited by Miriam T. Stark, Brenda J. Bowser, and Lee Horne. Tucson: University of Arizona Press.

Monchot, Hervé. 2012. "Le matériel faunique." Pages 179–92 in *Le parvis du temple d'Opet à Karnak*. Edited by Guillaume Charloux. Cairo: IFAO.

Monnickendam-Givon, Barak. 2018. "Southern Phoenicia and its Surroundings during the Persian, Hellenistic and Roman Periods." Ph.D. diss., Hebrew University of Jerusalem.

Montet, Pierre. 1950. "Le fruit défendu." *Kêmi* 11:85–116.

Moore, Stewart Alden. 2015. *Jewish Ethnic Identity and Relations in Hellenistic Egypt: With Walls of Iron?* Supplements to the Journal for the Study of Judaism 171. Leiden: Brill.

Moreno Garcia, Juan-Carlos. 1990. "J'ai rempli les pâturages de vaches tachetées … Bétail, économie royale et idéologie en Égypte, de l'Ancien au Moyen Empire." *Reg* 50:241–57.

–. 2001. "L'organisation sociale de l'agriculture dans l'Égypte pharaonique pendant l'Ancien Empire (2650–2150 av. J.-C.)." *JESHO* 44:411–50.

Mouton, Alice. 2012. "Le concept de pureté/impureté en Anatolie Hittite." Pages 69–87 in *How Purity Is Made*. Edited by Petra Rösch and Udo Simon. Wiesbaden: Harrassowitz.

–. 2015. "The Sacred in Hittite Anatolia: A Tentative Definition." *HR* 55:41–64.

Na'aman, Nadav. 1991. "The Kingdom of Judah Under Josiah." *TA* 18:3–71.

–. 2012. "The Kingdom of Geshur in History and Memory." *SJOT* 26:88–101.

–. 2013. *Canaan and Israel in Antiquity: A Textbook on History and Religion*. 2nd ed. New York: T&T Clark.

Naville, Edouard. 1886. *Das aegyptische Todtenbuch der XVIII. bis XX. Dynastie*. Berlin: Asher.

Nelson, Richard D. 2002. *Deuteronomy: A Commentary*. OTL. Louisville: Westminster John Knox.

Nihan, Christophe. 2007. *From Priestly Torah to Pentateuch: A Study in the Composition of the Book of Leviticus*. FAT, 2/25. Tübingen: Mohr Siebeck.

–. 2011. "The Laws about Clean and Unclean Animals in Leviticus and Deuteronomy and Their Place in the Formation of the Pentateuch." Pages 401–32 in *Pentateuch: International Perspectives on Current Research*, edited by Thomas B. Dozeman, Konrad Schmid, and Baruch J. Schwartz. FAT 78. Tübingen: Mohr Siebeck.

–. 2013. "Forms and Functions of Purity in Leviticus." Pages 311–67 in *Purity and the Forming of Religious Traditions in the Ancient Mediterranean World and Ancient Judaism*. Edited by Christian Frevel and Christophe Nihan. Dynamics in the History of Religion 3. Leiden: Brill.

Noll, Kurt L. 1998. "The God Who Is Among the Danites." *JSOT* 80:3–23.

Notario, Fernando. 2015. "Food and Counter-cultural Identity in Ancient Cynicism." *Greek, Roman and Byzantine Studies* 55:583–607.

Nowicki, Stefan. 2014. "Menu of the Gods: Mesopotamian Supernatural Powers and Their Nourishment, with Reference to Selected Literary Sources," *ArOr* 82:211–24.

O'Rourke, Paul. 2010. "The ama-Male." *ZÄS* 137:45–53.

Osing, Jurgen. 1998. *Hieratische Papyri aus Tebtunis I: The Carlsberg Papyri 2*. CNI Publications 17. Copenhagen: Museum Tusculanum.

Otto, Eckart. 2016. *Deuteronomium 12–34*. HTKAT. Freiburg im Breisgau: Herder.

Park, Seong H. 2011. "Beads and Other Jewelry." Pages 431–39 in *Ashkelon 3: The Seventh Century B.C.* Edited by Lawrence Stager, Daniel Master, and J. David Schloen. Winona Lake, IN: Eisenbrauns.

Parker, Robert. 1996 [1983]. *Miasma: Pollution and Purification in Early Greek Religion*. Oxford: Clarendon Press.

Payne, Sebastian. 1973. "Kill-off Patterns in Sheep and Goats." *Anatolian Studies* 23: 281–303.

–, and Gail Bull. 1988 "Components of Variation in Measurements of Pig Bones and Teeth, and the Use of Measurements to Distinguish Wild from Domestic Remains." *Archaeozoologia* 2:27–65.

Perry-Gal, Lee, Adi Erlich, Ayelet Gilboa, and Guy Bar-Oz. 2015a. "Earliest Economic Exploitation of Chicken outside East Asia: Evidence from the Hellenistic Southern Levant." *Proceedings of the National Academy of Sciences USA* 112:9849–54.

–. 2015b. "Livestock Animal Trends in Idumaean Maresha: Preliminary Analysis of Cultural and Economic Aspects." *Aram* 27:213–26.

Petrie, W. M. Flinders and Francis L. Griffith. 1889. Two Hieroglyphic Papyri from Tanis. London: Trübner.

Pfeifer, Gerhard. 1976. "Denkformenanalyse als exegetische Methode, erläutert an Amos 1, 2–2, 16." *ZAW* 88: 56–71.

Politis, Gustavo G. and Nicolas J. Saunders. 2002. "Archaeological Correlates of Ideological Activity: Food Taboos and Spirit-Animals in an Amazonian Rainforest Hunter-Gatherer Society." Pages 113–130 in *Consuming Passions and Patterns of Consumption.* Edited by Preston Miracle and Nicky Milner. Cambridge: McDonald Institute Monographs.

Poulain, Jean-Pierre. 2012. "Anthropo-sociologie/socio-anthropologie de l'alimentation." Pages 86–92 in *Dictionnaire des cultures alimentaires.* Edited by Jean-Pierre Poulain. Paris: Presses Universitaires de France.

Press, Michael. 2011. "Faience and Alabaster Vessels." Pages 421–29 in *Ashkelon 3: The Seventh Century B.C.* Edited by Lawrence Stager, Daniel Master, and J. David Schloen. Winona Lake, IN: Eisenbrauns.

Preuss, H. D. 2006. "תּוֹעֵבָה Tôʿēḇâ;* תעב Tʿb." *TDOT* 15:591–604.

Quack, Joachim Friedrich. 2013. "Conceptions of Purity in Egyptian Religion." Pages 115–58 in *Purity and the Forming of Religious Traditions in the Ancient Mediterranean World and Ancient Judaism*. Edited by Christian Frevel and Christophe Nihan. Dynamics in the History of Religion 3. Leiden: Brill.

Quaegebeur, Jan 1990. "Les rois saïtes amateurs de vin." *Ancient Society* 21:241–71.

Radcliffe-Brown, Alfred. 1939. *Taboo.* Cambridge: Cambridge University Press.

Redding, Richard. 1981. *Decision Making in Subsistence Herding of Sheep and Goats in the Middle East.* Ph.D. diss. University of Michigan.

–. 1984. "Theoretical Determinants of a Herder's Decision: Modeling Variation in the Sheep/Goat Ratio." Pages 223–411 in *Animals and Archaeology*. Edited by Juliet Clutton-Brock and Caroline Grigson. Vol. 3 of *Early Herders and Their Flocks.* BARIS 202. Oxford: B.A.R.

Redditt, Paul. 2012. *Zechariah 9–14.* IECOT. Stuttgart: Kohlhammer.

Regenstein, Joe M., Muhammad M. Chaudry, and Carrie E. Regenstein. 2003. "The Kosher and Halal Food Laws." *Comprehensive Reviews in Food Science and Food Safety* 2:111–27.

Reiner, Erica. 1958. Šurpu. *A Collection of Sumerian and Akkadian Incantations.* AfO Beih 11. Graz: Selbtverlag.

Robertson, Roland, 1995. "Glocalisation: Time-Space and Homogeneity-Heterogeneity." Pages 25–44 in *Global Modernities*. Edited by Mike Featherstone, Scott Lash, and Roland Robertson. London: SAGE Publication.

Rosen, Baruch. 1986. "Subsistence Economy of Stratum II." Pages 156–85 in *Izbet Sartah: An Early Iron Age Site near Rosh Ha'ayin, Israel.* BAR International Series 299. Edited by Israel Finkelstein, Irene Aranne, and Vronwy Hankey. Oxford: Archaeopress.

Rosenblum, Jordan. 2010. *Food and Identity in Early Rabbinic Judaism*. Cambridge: Cambridge University Press.
–. 2016. *The Jewish Dietary Laws in the Ancient World*. Cambridge: Cambridge University Press.
Rosenthal-Heginbottom, Renate. 2005. "The 1968 Excavations." Pages 229–83 in *Excavations on the Site of the Jerusalem Convention Center (Binyanei Ha'Uma): A Settlement of the Late First to Second Temple Period: The Tenth Legion's Kilnworks, and a Byzantine Monastic Complex. The Pottery and Other Finds.* Edited by Benny Arubas and Haim Goldfus. Journal of Roman Archaeology. Supplementary Series 60. Portsmouth, RI: Journal of Roman Archaeology.
Rouvière, Laurie. 2013. "Bata, seigneur de Saka: Dieu bélier ou dieu taureau?" *Égypte Nilotique et Méditerranéenne* 6:139–58.
Rozin, Paul, Jonathan Haidt, Clark McCauley, and Sumio Imada. 1997. "Disgust: Preadaptation and the Cultural Evolution of a Food-Based Emotion." Pages 65–82 in *Food Preferences and Taste: Continuity and Change.* Edited by Helen Macbeth. The Anthropology of Food and Nutrition 2. Providence, RI: Berghahn.
Russell, Nerissa. 2011. *Social Zooarchaeology: Humans and Animals in Prehistory*. Cambridge: Cambridge University Press.
Saayman, Andrea, Melville Saayman, and Agyapong Gyekye. 2014. "Perspectives on the Regional Economic Value of a Pilgrimage." *International Journal of Tourism Research* 16:407–14.
Sahlins, Marshall. 1980. *Au cœur des sociétés: Raison utilitaire et raison culturelle*. Gallimard: Paris.
Sallaberger, Walther. 2007. "Reinheit. A. Mesopotamien." *RlA* 11: 295–99.
–. 2011. "Körperliche Reinheit und soziale Grenzen in Mesopotamien." Pages 17–45 in *Reinheit: religiöse, soziale und politische Aspekte.* Edited by Peter Burschel and Christoph Marx. Veröffentlichungen des Instituts für Historische Anthropologie 12. Vienna: Böhlau.
Salonen, Armas. 1973. *Vögel und Vogelfang im alten Mesopotamien*. Annales Academiae scientiarum Fennicae. Ser. B 180. Helsinki: Suomalainen Tiedeakatemia.
Sandhaus, Débora. 2009. "Late Persian-Early Hellenistic Pottery." Pages 209–25 in *Excavation Report 2007–2008.* Vol. 1 of *Khirbet Qeiyafa*. Edited by Yosef Garfinkel and Saar Ganor. Jerusalem: Israel Antiquity Authority.
–. 2011. "The Pottery from the Khirbet er-Rasm: The Typology of the Pottery from the Hellenistic, Roman and Later Periods." Pages 105–30 in *The Excavations of Khirbet er-Rasm, Israel. The Changing Faces of the Countryside.* Edited by by Avi Faust and Adi Erlich. BAR International Series 2187. Oxford: Archaeopress.
–. 2018. "Stop, Border Ahead: The Settlement Pattern on Both Sides of the 'Ella Valley from the Persian to the Hasmonean Period." Pages 23–36 in *The Persian and Hellenistic Periods in Eretz Israel: A View from the South*. Edited by Daniel Varga. Beer-Sheva: Ben-Gurion University of the Negev and Israel Antiquities Authority. (Hebrew)
–, and Igor Kreimerman. 2015. "The Late 4th/3rd Centuries BCE Transition in the Judean Hinterland in Light of the Pottery from Khirbet Qeyiafa." *TA* 42:251–71.
–. 2017. "The Hellenistic Conquest of Israel and its Influence on the Settlement of the Hill Country and the Shephelah." Pages 202–14 in *New Studies in the Archaeology of Jerusalem and Its Region.* Vol. 11. Edited by Yuval Gadot, Yehiel Zelinger, Katia Cytryn-Silverman, and Joseph (Joe) Uziel. Jerusalem: Israel Antiquity Authority. (Hebrew).

Sapir-Hen, Lidar. 2011. "Dog Burials at Dor." *NEA* 74: 138.
–. 2016. "Pigs as an Ethnic Marker? You Are What You Eat." *BAR* 42.6:41–43, 70.
–, Guy Bar-Oz, Yuval Gadot, and Israel Finkelstein. 2013. "Pig Husbandry in Iron Age Israel and Judah: New Insights Regarding the Origin of the 'Taboo.'" *ZDPV* 129:1–20.
–, Yuval Gadot, and Israel Finkelstein, 2016. "Animal Economy in a Temple City and its Countryside: Iron Age Jerusalem as a Case Study." *BASOR* 375:103–18.
–, Meirav Meiri, and Israel Finkelstein. 2015. "Iron Age Pigs: New Evidence on their Origin and Role in Forming Identity Boundaries." *Radiocarbon* 57:307–15.
Sauneron, Serge. 1962. *Les fêtes religieuses d'Esna*. Cairo: IFAO.
Schipper, Bernd U. 2010. "Egypt and the Kingdom of Judah under Josiah and Jehoiakim." *TA* 37:2: 200–26.
Schlichting, R. 1984. "Speisege- und -verbote." Pages 1126–28 in vol. 5 of *Lexikon der Ägyptologie*. Edited by Wolfgang Helck, Eberhard Otto, and Wolfhart Westendorf. Wiesbaden: Harrassowitz.
Schwartz, Seth. 2001. *Imperialism and Jewish Society: 200 B.C.E. to 640 C.E.* Princeton: Princeton University Press.
Schwemer, Daniel. 2013. "Prescriptions and Rituals for Happiness, Success, and Divine Favor: The Compilation A 522 (*BAM* 318)." *JCS* 65:181–200.
Scurlock, Joann. 2002. "Animal Sacrifice in Ancient Mesopotamian Religion." Pages 389–403 in *A History of the Animal World in the Ancient Near East*. Edited by Billie Jean Collins. HdO 1/64. Leiden: Brill.
–. 2002a. "Animals in Ancient Mesopotamian Religion." Pages 361–87 in *A History of the Animal World in the Ancient Near East*. Edited by Billie J. Collins. HdO 1/64. Leiden: Brill.
–, and Burton R. Andersen. 2005. *Diagnoses in Assyrian and Babylonian Medicine. Ancient Sources, Translations, and Modern Medical Analyses*. Urbana and Chicago: University of Illinois Press.
Seligman, J., and O. Yogev. Forthcoming. "A Hellenistic Farmhouse at Hellenistic Aderet in the Judean Shephelah." In *Atiqot*.
Sergi, Omer. 2011. "Ramat Raḥel as an Administrative Center: The Early and Late *lmlk* Stamp Impressions." *NEA* 74:16.
Serra Mallol, Christophe. 2010. "Manger du chien à Tahiti: une affirmation identitaire?" *Anthropozoologica* 45:157–72.
Servajean, Frédéric. 2011a. "Le conte des Deux Frères (1): La jeune femme que les chiens n'aimaient pas." *Égypte Nilotique et Méditerranéenne* 4:1–37.
–. 2011b. "Le conte des Deux Frères (2): La route de Phénicie." *Égypte Nilotique et Méditerranéenne* 4:197–232.
Shatil, Noa. 2016. "The Persian and Hellenistic Pottery from the Renewed Archaeological Excavation at Tel Azekah." MA Thesis, Tel Aviv University.
Shipman, Pat. 1981. *Life History of a Fossil: An Introduction to Taphonomy and Paleoecology*. Cambridge, MA: Harvard University Press.
Silver, I.A. 1969. "The Ageing of Domestic Animals." Pages 283–302 in *Science in Archaeology: A Survey of Progress and Research*. Edited by Don R. Brothwell, and Eric S. Higgs. London: Thames and Hudson.
Simoons, Frederick J. 1994. *Eat Not This Flesh: Food Avoidances from Prehistory to the Present. Second Edition, Revised and Enlarged*. Madison and London: The University of Wisconsin Press.

Sobal, Jeffery. 2005. "Men, Meat, and Marriage: Models of Masculinity." *Food and Foodways* 13:135–58.

Soulier, Marie-Cecile and Sandrine Costamagno. 2017. "Let the Cutmarks Speak! Experimental Butchery to Reconstruct Carcass Processing." *JAS* 11:782–802.

Sparks, Kenton L. 1998. *Ethnicity and Identity in Ancient Israel: Prolegomena to the Study of Ethnic Sentiments and Their Expression in the Hebrew Bible*. Winona Lake, IN: Eisenbrauns.

Sperber, Dan. 1996a. *Explaining Culture: A Naturalistic Approach*. Oxford: Blackwell.

–. 1996b. "Why Are Perfect Animals, Hybrids, and Monsters Food for Symbolic Thought?" *Method & Theory in the Study of Religion* 8: 143–69.

Spieser, Cathie. 2014. "La nature ambivalente du sang, du lait, des figues et du miel dans les croyances funéraires égyptiennes." Pages 281–87 in *Le myrte & la rose: Mélanges offerts à Françoise Dunand par ses élèves, collègues et amis*. Edited by Gaëll Tallet and Christiane Zivie-Coche. Cenim 9/2. Montpellier: CNRS/Université Paul Valéry.

Stager, Lawrence E. 1989. "The Song of Deborah: Why Some Tribes Answered the Call and Others Did Not." *BAR* 15.1:50–64.

–. 1995. "The Impact of the Sea Peoples in Canaan (1185–1050 B.C.E.)." Pages 332–48 in *The Archaeology of Society in the Holy Land*. Edited by Thomas E. Levy. London: Leicester University Press.

–. 2011. "Ashkelon on the Eve of Destruction in 604 B.C.E." Pages 3–11 in *Ashkelon 3: The Seventh Century B.C.* Edited by Lawrence Stager, Daniel Master, and J. David Schloen. Winona Lake, IN: Eisenbrauns.

–, Daniel Master, and J. David Schloen. 2011. *Ashkelon 3: The Seventh Century B.C.* Winona Lake, IN: Eisenbrauns.

Starr, Ivan. 1990, *Queries to the Sungod: Divination and Politics in Sargonid Assyria*. SAA 4. Helsinki: Helsinki University Press.

Steiner, Franz. 1956. *Taboo*. London: Cohen & West.

Stern, Ian, and Mechael Osband. 2015. "Pottery and Small Finds." Pages 161–212 in *Excavations at Maresha: Subterranean Complex 90*, Final Report. Edited by Ian Stern. Jerusalem: Israel Antiquity Authorities.

Stockhammer, Philipp. 2012. "Entangled Pottery: Phenomena of Appropriation in the Late Bronze Age Eastern Mediterranean." Pages 89–103 in *Materiality and Social Practices. Transformative Capacities of Intercultural Encounters*. Edited by Joseph Maran and Philipp Stockhammer. Oxford: Oxbow.

Sweeney, Marvin. 2003. *Zephaniah: A Critical Commentary*. Hermeneia. Minneapolis: Fortress Press.

Tallet, Pierre. 2003. *La cuisine des pharaons*, Paris: Sindbad/Actes Sud.

Tambiah, Stanley J. 1969. "Animals Are Good to Think and Good to Prohibit." *Ethnology* 8: 423–59.

–. 1985. *Culture, Thought and Social Action*. Cambridge & London: Harvard University Press.

Tarot, Camille. 2008. *Le symbolique et le sacré*. Paris: La Découverte.

Thareani, Yifat. 2016. "Enemy at the Gates? The Archaeological Visibility of the Aramaeans at Dan." Pages 169–97 in *In Search of Aram and Israel: Politics, Culture, and Identity*. Edited by Omer Sergi, Manfred Oeming, and Izaak J. de Hulster. Orientalische Religionen in der Antike, 20. Tübingen: Mohr Siebeck.

Toorn, Karel van der. 1985. *Sin and Sanction in Israel and Mesopotamia: A Comparative Study*. Studia Semitica Neerlandica 22. Assen and Maastricht: Van Gorcum.

Topmann, Doris. 2002. *Die "Abscheu"-Sprüche der altägyptischen Sargtexte: Untersuchungen zu Textemen: und Dialogstrukturen*. GöF 4.39. Wiesbaden: Harrassowitz.

Touzeau, Alexanra, Romain Amiot, Janne Blichert-Toft, Jean-Pierre Flandrois, François Fourel, Vincent Grossi, François Martineau, Pascale Richardin, Christophe Lécuyer. 2014. "Diet of Ancient Egyptians Inferred from Stable Isotope Systematics." *Journal of Archaeological Science* 46:114–24.

Traunecker, Claude. 1984. "La revanche du crocodile de Coptos." Pages 219–29 in *Mélanges Adolphe Gutbub*. Montpellier: Université Paul Valéry.

Tsoukala, Victoria. 2009. "Honorary Shares of Sacrificial Meat in Attic Vase Painting: Visual Signs of Distinction and Civic Identity." *Hesperia* 78: 1–40.

Twiss, Katheryn C. 2008. "Transformations in an Early Agricultural Society: Feasting in the Southern Levantine Pre-Pottery Neolithic." *JAA* 27:418–42.

–. 2012. "The Archaeology of Food and Social Diversity." *JAR* 20:357–95.

–. ed. 2007. *The Archaeology of Food and Identity*. Center for Archaeological Investigations Occasional Paper 34. Carbondale, IL: Southern Illinois University.

Uziel, Joe. 2007. "The Development and Process of Philistine Material Culture: Assimilation, Acculturation, and Everything in Between." *Levant* 39:165–73.

Van Gennep, Arnold. 1909. *Les rites de passage*. Paris: Picard.

Van Neer, Wim, Omri Lernau, Renee Friedman, Gregory Mumford, Jeroen Poblóme, and Marc Waelkens. 2004. "Fish Remains from Archaeological Sites as Indicators of Former Trade Connections in the Eastern Mediterranean." *Paléorient* 30:101–47.

Vandier, Jacques. 1962. *Le papyrus Jumilhac*. Paris: CNRS.

Veijola, Timo. 2004. *Das fünfte Buch Mose: Deuteronomium: Kap. 1,1–16,17*. ATD, 8,1. Göttingen: Vandenhoeck & Ruprecht.

Vercoutter, Jean. 1962. *Textes biographiques du Sérapeum de Memphis*. Bibliothèque de l'École pratique des Hautes Études. Paris: Champion.

Vernus, Pascal. 2012. "Des cochons pour Sakhmis! À propos du porc comme animal sacrificiel." Pages 1059–74 in *"Parcourir l'éternité": Hommages à Jean Yoyotte*. Edited by Christiane Zivie-Coche and Ivan Guermeur. Bibliothèque de l'École pratique des Hautes Études. Sciences religieuses 156/2. Turnhout: Brepols.

–, and Yoyotte, Jean. 2005. *Bestiaire des Pharaons*. Paris: Perrin.

Vigne, Jean-Denis, F. Audouin, C. Lefèvre, M.-C. Marinval-Vigne, J. Pichon, and François Poplin. 1987. "Introduction." Pages 7–8 in *La découpe et le partage du corps à travers le temps et l'espace: actes de la table ronde organisée par la R. C. P. 717 du C. N. R. S. les 14 et 15 novembre 1985 à Paris (Muséum national d'histoire naturelle)*. Edited by Jean-Denis Vigne. Anthropozoologica Special Issue 1. Paris: "L'homme et l'animal."

Volokhine, Youri. 2014. *Le porc en Égypte ancienne: Mythes et histoire à l'origine des interdits alimentaires*. Religions 3. Liège: Presses Universitaires de Liège.

–. 2015. "La question de l'interdit du porc en Égypte ancienne." Pages 273–86 in *Tabous et transgressions, Actes du Colloque organisé par le Collège de France, Paris, les 11–12 avril 2012*. Edited by Jean-Marie Durand, Michaël Guichard, and Thomas Römer. OBO 274. Göttingen: Vandenhoeck & Ruprecht; Fribourg: Academic Press.

–. 2019. "Les interdits alimentaires en Égypte ancienne." Pages 557–91 in *Religion et alimentation en Égypte et Orient anciens*. Edited by Marie-Lys Arnette. RAPH 43; vol. 2. IFAO: Le Caire.

–. Forthcoming. "Le mouton en Égypte ancienne: la question de l'interdit." In *Actes du Colloque Religions et Interdits alimentaires (3–5 avril 2014)*. Edited by Béatrice Caseau and Hervé Monchot. UMR 8167. Paris: Université Paris-Sorbonne /Labex Resmed.

von Känel, Frédérique. 1984. *Les prêtres-ouâb de Sekhmet et les conjurateurs de Serket*. Bibliothèque de l'École pratique des Hautes Études. Sciences religieuses 87. Paris: Presses Universitaires de France.

Von Lieven, Alexandra. 2011. "Where There is Dirt There is System: Zur Ambiguität der Bewertung von körperlichen Ausscheidungen in der ägyptischen Kultur." *Studien zur Altägyptischen Kultur* 40:287–300.

von Stuckrad, Kocku. 2012. "Hemerology." in *Brill's New Pauly. Antiquity Volumes*. Edited by Hubert Cancik, and Helmuth Schneider. English edition by Christine F. Salazar; Classical Tradition volumes edited by Manfred Landfester, English Edition by Francis G. Gentry.

Waitkus, Wolfgang. 2014. *Die Kulttopographische Inschrift am Sanktuar des Tempels von Edfu*. Die Inschriften des Tempels von Edfu 7. Gladbeck: PeWe.

Waldbaum, Jane C. 2011. "Greek Pottery." Pages 127–338 in *Ashkelon 3: The Seventh Century B.C.* Edited by Lawrence Stager, Daniel Master, and J. David Schloen. Winona Lake, IN: Eisenbrauns.

Walton, Joshua T. 2011. "Egyptian Pottery." Pages 123–25 in *Ashkelon 3: The Seventh Century B.C.* Edited by Lawrence Stager, Daniel Master, and J. David Schloen. Winona Lake, IN: Eisenbrauns.

–. 2015. "The Regional Economy of the Southern Levant in the 8th–7th centuries BCE." Ph.D. diss., Harvard University.

Wapnish, Paula. 1993. "Archaeozoology: The Integration of Faunal Data with Biblical Archaeology." Pages 426–42 in *Biblical Archaeology Today, 1990. Proceedings of the Second International Congress on Biblical Archaeology. Jerusalem, June-July 1990.* Edited by Avraham Biran and Joseph Aviram. Jerusalem: Israel Exploration Society.

–. 1991. "Faunal Remains from Tel Dan: Perspectives on Animal Production at a Village, Urban, and Ritual Center." *Archaeozoologia* 4:9–86.

–, and Brian Hesse. 1993. "Pampered Pooches or Plain Pariahs? The Ashkelon Dog Burials." *BA* 56:55–80.

–, Brian Hesse, and Anne Ogilvy. 1977. "The 1974 Collection of Faunal Remains from Tell Dan." *BASOR* 227:35–62.

Watanabe, Chikako E. 2002. *Animal Symbolism in Mesopotamia: A Contextual Approach.* Wiener Offene Orientalistik 1. Vienna: Institut für Orientalistik der Universität Wien.

Whitekettle, Richard. 2003. "Of Mice and Wren: Terminal Level Taxa in Israelite Zoological Thought." *SJOT* 17:163–82.

–. 2009. "One if by and: Conjunctions, Taxonomic Development, and the Animals of Leviticus 11,26." *ZAW* 121:481–97.

Wilson, Penelope. 1997. *A Ptolemaic Lexikon: A Lexicographical Study of the Texts in the Temple of Edfu. OLA* 78. Leuven: Peeters.

Wood, John G. 1869. *Bible Animals*. London: Longmans et al.

Younger, K. Lawson. 2015. "The Assyrian Impact on the Southern Levant in the Light of Recent Study." *IEJ* 65:79–204.

Yoyotte, Jean. 1961. "Le jugement des morts dans l'Égypte ancienne." Pages 15–80 in *Le jugement des morts*. Sources Orientales 4. Paris: Seuil.

Zeder, Melinda A. 1986. "Urbanism and Animal Exploitation in Southwest Highland Iran 3400–1500 B.C. (Volumes I and II)." Ph.D. diss., University of Michigan, Ann Arbor, MI.

–. 1996. "The Role of Pigs in Near Eastern Subsistence: A View from the Southern Levant." Pages 297–312 in *Retrieving the Past: Essays on Archaeological Research and*

Methodology in honor of Gus W. Van Beek. Edited by Joe D. Seger. Winona Lake, IN: Eisenbrauns.

–. 1998. "Pigs and Emergent Complexity in the Ancient Near East." Pages 109–22 in *Ancestors for the Pigs: Pigs in Prehistory*. Edited by Sarah M. Nelson. Philadelphia: University of Pennsylvania Museum.

–. 2001. "A Metrical Analysis of a Collection of Modern Goats (*Capra hircus aegargus* and *C. h. hircus*) from Iran and Iraq: Implications for the Study of Caprine Domestication." *JAS* 28:61–79.

–, and Heather A. Lapham. 2010. "Assessing the Reliability of Criteria Used to Identify Postcranial Bones in Sheep, *Ovis*, and Goats, *Capra*." *Journal of Archaeological Science* 37:2887–905.

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