

Activity-area Analysis: A Comprehensive Theoretical Model

Peter Pfälzner, University of Tübingen

The Positioning of Activity-area Research in the Theoretical Debate

Activity-area analysis in archaeology is strongly based on two influential books, edited by Susan Kent in 1987 and 1990, entitled *Method and Theory for Activity Area Research: An Ethnoarchaeological Approach* and *Domestic Architecture and the Use of Space: An Inter-disciplinary, Cross-cultural Study* (Kent 1987 and 1990). These books can be understood as an offshoot of processual archaeology (Binford 1962; Flannery 1972a; Redman 1991; Watson 1991; Bernbeck 1997; Kienlin 1998). Today, the principles of processual archaeology are often regarded as old-fashioned or are even ignored, despite generating concepts which are still very valuable. One of these powerful concepts is activity-area analysis.

The basic assumption of activity-area analysis is that the distribution of objects in one specific context is a reflection of the use of space through human action (Wilk and Rathje 1982; Wilk and Ashmore 1988; Kent 1987; Kent 1990, pp. 3–6; Rapoport 1990, pp. 11–18; Pfälzner 2001, p. 17). By the latter is meant daily human activities and specific single actions. Thus, activity-area analysis enables two things: the reconstruction of single activities, which happened at one specific point in time, and the reconstruction of a structure of repetitive activities which create a specific pattern of objects in the archaeological record. What can be deduced is a system of activities. These activities can be located on the household level, as well as on the economic, political, or religious level. And they can contain activities in former living contexts as well as in contexts of the dead, as is illustrated below. Together, these activities reflect important aspects of the functioning of human societies on all social levels. This understanding is based on a functionalist approach to anthropological research.¹ It follows Binford's argument that archaeology, when conceived as an anthropological research, can arrive at an explanation of social processes and of social systems (Binford 1962, 1964, 1968, 1972; see also Flannery 1972b; Hammond 1971; Fritz and Plog 1970; Deetz 1972). Thus activity-area analysis has the potential to considerably increase our understanding of social behavior in past societies.

What needs to be emphasized at this point is that post-processual archaeology can also add to the concept of activity-area analysis. Based on the assumption that past societies

¹ According to the concept of functionalism as defined by Branislaw Malinowski (1944 and 1945; cf. Haviland 1987, pp. 39–40, and Kohl 1990).

are structured around a system of meanings and connected symbols (Hodder 1982, 1987a, 1989), the patterning of objects can be understood as a patterning of symbols. This understanding follows the premises of Structuralism, as defined by Lévi-Strauss, which has found its way into archaeology (Lévi-Strauss 1963, 1969; see also Gellner 1982; Hage and Harary 1983; Hodder 1982, 1989; Leone 1998). It is also in accordance with the ideas of Interpretive Culture Theory, as it has been most articulately expressed by Clifford Geertz.² Based on this theoretical assumption, object patterns in specific archaeological contexts reflect not only social actions and processes, but also cultural activities and structures. Thus we can conclude that activity-area analysis increases our understanding of the social, as well as the cultural, behavior in past societies.

Taken together, activity-area analysis, from a theoretical point of view, is widely applicable to different paradigms of archaeology. It can be efficiently utilized in the frame of a systems-theory approach to ancient societies³ and in a symbolic approach to ancient civilization. However, the meticulous methodological concerns need to be considered when using activity-area analysis in a productive and accurate way. This paper aims at both presenting a comprehensive theoretical model for activity-area analysis, which allows for the inclusion of the systemic and the symbolic aspects of societies, and formulating detailed methodological guidelines for the accurate application of this kind of research.

The Archaeological Contexts for Activity-area Analysis

Activity-area analysis has most frequently been applied to the study of domestic architecture and households in archaeology and anthropology.⁴ This kind of analysis is most fruitfully utilized when well-preserved archaeological house structures exist, still containing parts of their original inventory. The aim is to identify behavior in daily household activities. In this respect, it is an important tool of household analysis. The combination of activity-area analysis with micro-archaeology can result in a particularly detailed understanding of households, even when the preservation of room inventories is poor, as the example of Çatalhöyük and other sites demonstrates.⁵ Although both activity-area analysis and micro-archaeology — including micro-morphology and micro-stratigraphy — have a similar explanatory value, they need to be differentiated methodologically and analytically.

The application of activity-area analysis is not only confined to the study of households, but it can also be utilized in other functional contexts, such as the analysis of public political buildings or of religious buildings. A *Palace Analysis* based on activity-area analysis, for example, will produce data on the organization of palatial activities and on the structuring of the palace system. A *Temple Analysis* based on activity-area analysis will contribute to our understanding of religious activities including ceremonies, rituals, and social activities of religious institutions. It can also be applied to grave contexts. This is possible when a tomb

² Geertz 1973, 1983; see also Kaplan 1972; Kroeber 1952, 1963. For a critical review, see Stellrecht 1993, pp. 31–37, 47–52.

³ As described in Binford 1962; Clarke 1968; Plog 1975; Flannery 1972b; and Salmon 1978.

⁴ Kent 1987, 1990; Chavalas 1988; Allison 1999; Pfälzner 2001; Otto 2006; Yasur-Landau, Ebeling, and Mazow 2011; Parker and Foster 2012.

⁵ Matthews 2005 and 2012, pp. 190–207; Tringham 2012, pp. 91–97; Ullah 2012; Rainville 2012, pp. 153–58; Rosen 2012, pp. 171–78.

is found un-looted or at least with a certain portion of its grave inventory preserved. The existence and distribution of objects in a grave can be seen as the result of specific human actions. Objects were brought and placed by people as a result of specific funeral activities. Furthermore, the distribution of objects can be seen to reflect specific meanings of the objects in different places. Thus, *Grave Analysis* on the basis of activity-area analysis can throw a light on burial activities, on rituals, and on meanings in association with the dead world. In conclusion, activity-area analysis of contexts of the dead may have a similar explanatory value for ancient living societies as the living contexts themselves. It needs to be emphasized that grave analysis by activity-area analysis helps to increase our understanding of social behavior and cultural behavior in connection with death. A processual, systems-theory approach to grave analysis allows the detection of social behavior, while a post-processual, symbolic approach to grave analysis focuses on cultural behavior. Both approaches add valuable information to the understanding of how death and the netherworld were conceived in past societies.

All contexts that can be studied on the basis of activity-area analysis have two things in common: They require common methodological concepts and they imply common methodological difficulties and constraints for the application of this type of analysis. The methodological issues of activity-area analysis are fundamental and similarly relevant to all archaeological contexts.

In this paper, the theoretical model and the methodological issues for household analysis are exemplified by two case studies. Both represent two completely different functional contexts, which, however, necessitate the rigid observance of the same methodological principles.

Case study 1 deals with Early Bronze Age domestic contexts from the excavations at Tell Bderi in Syria. This site is located on the Middle Habur River in the Syrian Jezirah. It is a small urban settlement dating to the third millennium B.C. It was excavated as part of the Habur Dam rescue excavations between 1985 and 1991 (Pfälzner 1986/87a, 1986/87b, 1988, 1998/90, 1990, 1994). The main focus of the project was the study of houses, households, and household activities (Pfälzner 1996, 2001). The houses were excavated on a large scale so that complete house plans and groupings of houses in a domestic quarter are available and can be studied. In addition, substantial house inventories were preserved in several levels due to destructions which repeatedly affected the site during the third millennium B.C. The availability of complete house plans, the observation of changes in the single domestic structures over time on the basis of the stratigraphic sequence of the site, and the well-preserved inventories in many of the houses made detailed household analyses possible.

Case study 2 concerns the site of Tell Mishrife, ancient Qatna, located in western Syria northeast of Homs. Qatna was a major kingdom of the second millennium B.C. in Syria. The examples for activity-area analysis used and presented in this paper are taken from the results of the Syrian-German excavations of the Royal Palace of Qatna, carried out between 1999 and 2010.⁶ Below the Royal Palace two tombs were discovered, the Royal Hypogeum and Tomb VII (al-Maqdissi et al. 2003; Pfälzner 2002/03; idem 2011; Pfälzner and Dohmann-Pfälzner

⁶ For this project in general, see Novák and Pfälzner 2003, 2005; Dohmann-Pfälzner and Pfälzner 2006, 2007, 2008, 2011; Pfälzner 2007; al-Maqdissi, Morandi Bonacossi, and Pfälzner 2009.

2011). Both were undisturbed and contained large inventories. The objects were found as they had been positioned during the last phase of the long use of the grave chambers (Pfälzner 2011a; 2012). Thus, both contexts offer ideal conditions for activity-area analysis. In this paper, the results will not be presented; instead, the main focus will be on demonstrating the suitability and the constraints when applying the proposed theoretical and methodological framework to specific archaeological cases.

In conclusion, it needs to be pointed out that the archaeological contexts to which activity-area analysis can be applied are flexible and include nearly all functional types of ancient structures. Thus, not the type of context is pivotal but the quality of the context. Only contexts with specific kinds of archaeological deposits are suitable for the study of activity areas. The kind of archaeological deposit, therefore, plays a significant role in a comprehensive concept for activity-area analysis.

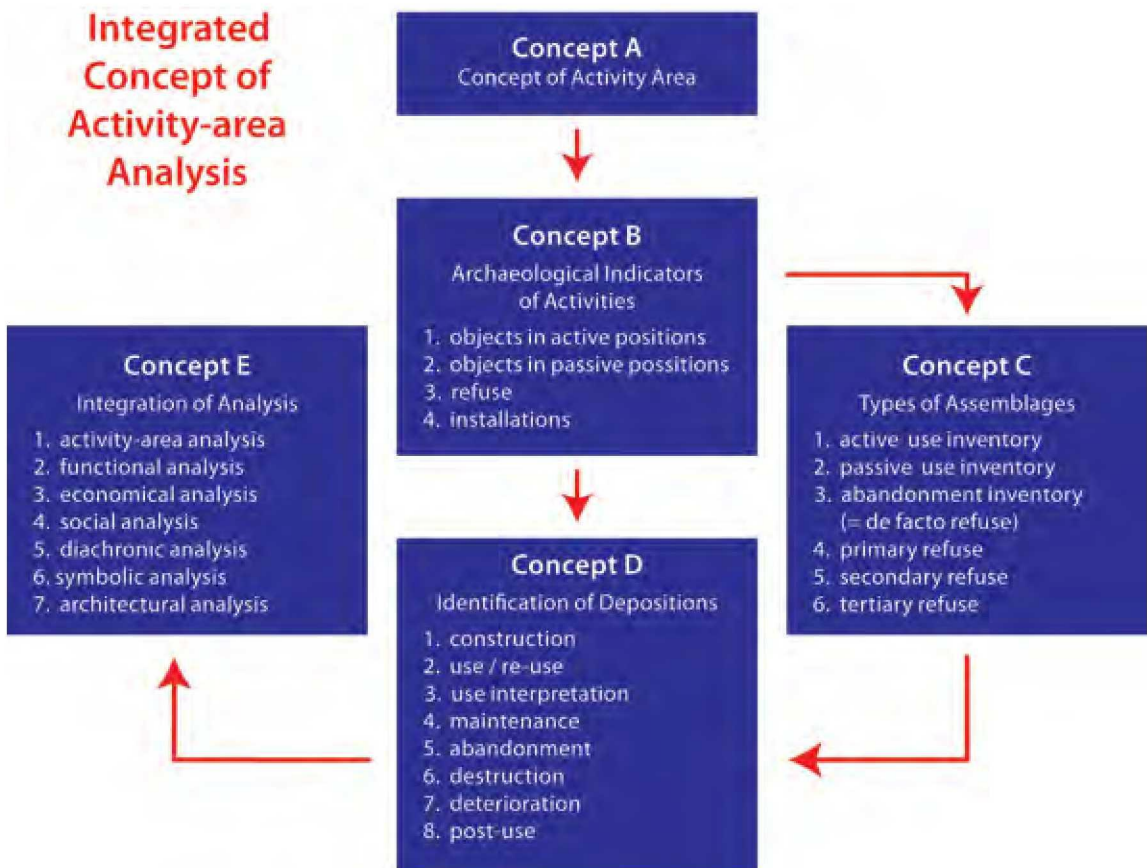


Figure 2.1. The integrated concept of activity-area analysis: a scheme (all images copyright of the author if not otherwise stated)

An Integrated Model for Activity-area Analysis

A comprehensive model for activity-area analysis needs to include several concepts, here labeled Concepts A to E. All concepts are interconnected in one or several ways, and all need to be combined in order to enable an integrated approach to the study of activity areas (fig. 2.1).

Concept A: The Concept of Activity Area

As a basic requirement for the integrated model the concept of *Activity Area* needs to be precisely defined.⁷ To do so one needs to start with a clear definition of the term “activity”:

Activities are single or repetitive actions of single persons or a group of persons at a specific place and a specific time.

These single actions can be ubiquitous and (possibly) accidental. If they are repetitive these actions are indicators of social and cultural behavior. Repetitive actions in houses are an indicator of household behavior, while repetitive actions in tombs indicate ritual behavior. In archaeological studies both types of activities are equivalent from an analytical point of view. This understanding of activities leads to a definition of “activity area”:

Activity areas are specific locations, where one or a set of single or repetitive activities can be traced.

Thus a room, a courtyard, or a grave-chamber can be identified as an activity area. However, it is also possible to define parts of rooms, chambers, or courtyards as separate activity areas, as long as they can be distinguished from other sets of activities in the other parts of the same spatial unit. The smallest kind of activity areas can be attributed to certain installations within rooms, or to single points within a larger spatial unit, where things were dropped, hidden, deposited, worked on, or discarded, or where any other traceable human action took place.

Methodological Considerations

In order to identify an activity area, five successive steps need to be carefully considered: (a) an exact recording and documenting of the positions of the objects; (b) an investigation of the functions of the individual objects in the specific context; (c) establishing the spatial and functional relationship between the objects; (d) reconstructing the actions that created the specific clustering of the objects; and (e) identifying the type and function of activities that took place.

The example of a third-millennium B.C. house in Area 2965 at Tell Bderi shows how, based on the exact spatial documentation and a precise functional interpretation of all objects within one room, a reconstruction of a number of different activity areas in a multifunctional living room could be achieved. The activities in Room A comprised food preparation, grinding, cooking, storing, sitting, and family gathering (figs. 2.2 and 2.3; Pfälzner 1986/87a,

⁷ This is based on earlier research on household activities and activity areas, such as Wilk and Rathje 1982; Wilk and Ashmore 1988; Kent 1987; Rapoport 1990; Pfälzner 2001.



Figure 2.2. Tell Bderi, active use inventory of Room A in a third-millennium B.C. house of Area 2965

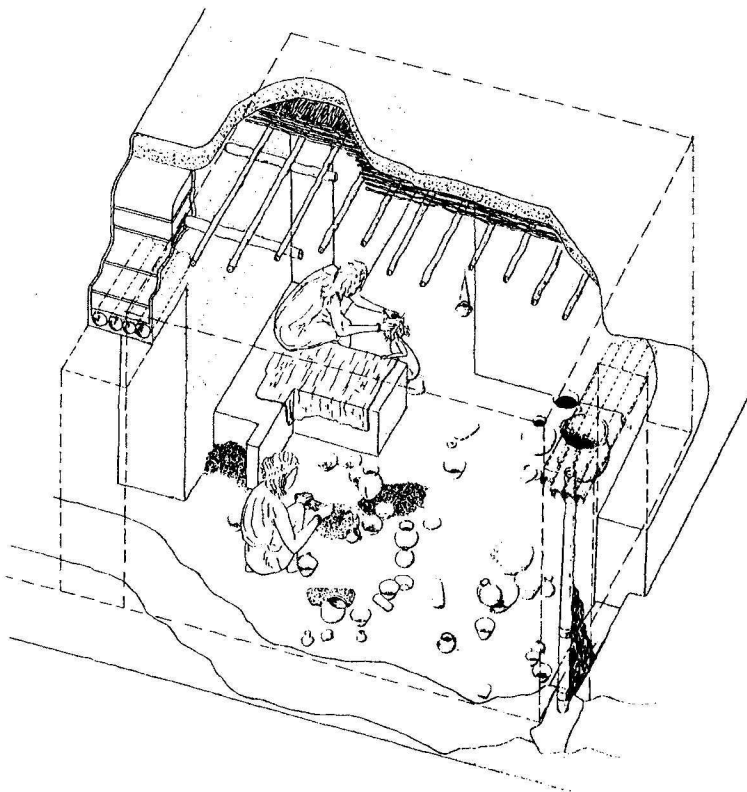


Figure 2.3. Tell Bderi, reconstruction of the activity areas in Room A of the house in Area 2965

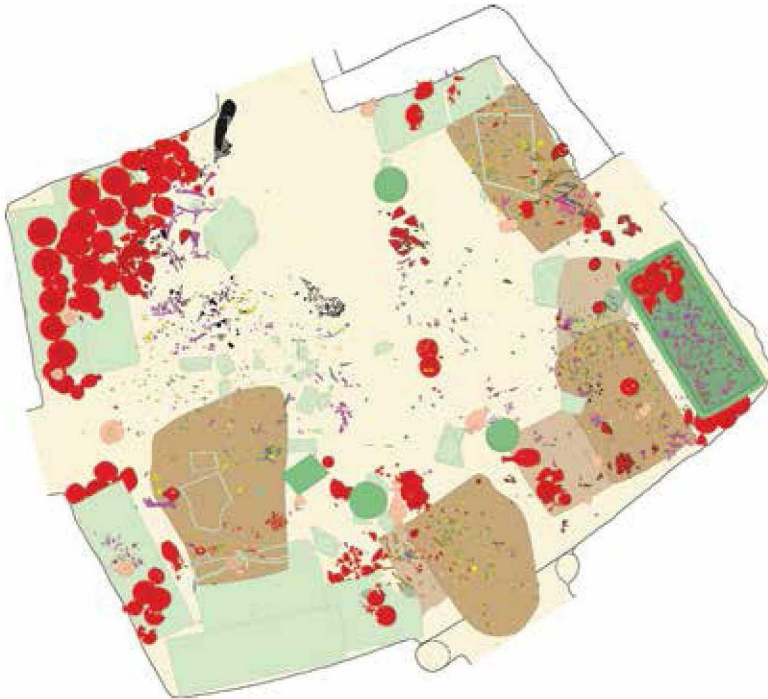


Figure 2.4. Computer-rendered hand drawing of the active use inventory in the main chamber of the Royal Hypogeum at Qatna

pp. 277–78, figs. 6–8; 1988, pp. 239–49, figs. 7–10). The set of domestic activities could be enlarged through detailed analyses of more contemporary houses at Tell Bderi and other Early Bronze Age settlements in northern Mesopotamia, so that a comprehensive list of household activities and associated activity areas could be deduced (Pfälzner 1996, pp. 118–26; 2001, pp. 139–79). A very similar approach was followed in the case of the second-millennium B.C. houses in the Middle Euphrates region of Syria.⁸ At Qatna the documentation of the inventories of the royal tombs below the palace was made by exact drawings documenting the positions of all objects. This was done by conventional hand drawing, as in the case of the Royal Hypogeum (fig. 2.4). For Tomb VII both hand drawings were made and 3-D laser scanning took place, documenting the exact positions of and the spatial relations between all objects (fig. 2.5).⁹ A functional interpretation of the objects within the grave chambers was undertaken.¹⁰ This was based on a theoretical concept concerning the function of objects in grave contexts (Pfälzner 2011a, pp. 48–49). Thus it was possible to identify activity areas within the burial chambers, particularly in the Royal Hypogeum. The activities comprised distinct primary and secondary burial events, the laying down of objects, the re-arrangement of objects, storing activities, eating and feasting actions, refuse disposal, offering actions,

⁸ Otto 2006, pp. 149–50, 233–50; here, the activity areas are labeled “functional zones” (Funktionszonen). See also Otto, this volume.

⁹ Project partner: Institute for Spatial Information and Surveying Technology (i3mainz) at Mainz; execution: Tobias Reich and Carsten Krämer.

¹⁰ See the different contributions in Pfälzner 2011.



Figure 2.5. 3-D laser-scanning of the inventory in Tomb VII at Qatna

and the carrying out of rituals, for example, for the ancestor cult. The various activities could be spatially attributed to different chambers within the hypogeum (al-Maqdissi et al. 2003, pp. 204–10; Pfälzner 2002/03; 2011b, pp. 80–84; 2012, pp. 207–16). Especially within the main chamber it was even possible to distinguish different activity areas at specific places. A precondition for this procedure was the detailed identification and careful interpretation of the depositional and post-depositional processes, which were responsible for the creation of the inventories in the tomb (Pfälzner 2011a, pp. 39–48).

To sum up, the carrying out of activity-area analysis is only legitimate when a rigid documentation method is applied and when an ideal find situation exists. Disrupted or disturbed contexts create distorted and incomplete results. In fact, there are only very few archaeological contexts of the required quality. Thus, the choice of archaeological contexts suitable for activity-area analysis needs to be carefully evaluated. The chosen contexts must then be documented in an extremely accurate and detailed way.

Concept B: Archaeological Indicators of Activities

In archaeological contexts activities can only be identified when certain indicators are present. These can be mobile objects or fixed installations. Four main categories of activity indicators can be distinguished:

B.1. Objects in Active Positions

Objects are the clearest indicators of activities, especially when they were found on the same spot where they were originally used. If it is clear that the objects must have been used where they were found or excavated, then one can talk of active positions.

Methodological Considerations

When a house is suddenly destroyed, as, for example, in the case of House I (Room N) at Tell Bderi, all objects are principally deposited in the position of their last use (fig. 2.6). This is the ideal variant of an in-situ position. It allows us to investigate and interpret the positioning and distribution of an object in relation to other objects in a precise way. The objects in active positions, thus, allow conclusions regarding the range of activities which took place in one room. This, in turn, makes it possible to indicate these activities on the floor plan of the house, thus, illustrating the patterning of activity areas (fig. 2.7; Pfälzner 1996, pp. 118–22; 2001, pp. 281–83, table 10, plates 1–5). In addition, it is even possible to restore the objects and physically re-install the activity areas using the original objects (fig. 2.8; Pfälzner 1986/87b, pp. 293–94, figs. 1–2).

The sudden destruction of the Royal Palace at Qatna led to a sudden inaccessibility of the Royal Hypogeum. The tomb shaft was instantly filled with the collapsing walls of the palace, so that no further access to the tomb chambers was possible. This led to an abrupt end of the tomb's active use. As a consequence, all objects remained and were preserved in the position of their last use (Pfälzner 2011a, pp. 39–45). As a clear testament to this we encountered a ceramic plate covering a meat offering, still standing in front of ancestor statues where it had been left, and a ceramic bowl, which had been placed balancing on the edge of the sarcophagus in the western side chamber of the tomb.

A similar situation was observed in Tomb VII at Qatna. Here, an oil lamp still stood in a niche of the tomb wall (Pfälzner and Dohmann-Pfälzner 2011, pp. 81–82, fig. 13). The wick of the lamp was still as it had been left after the tomb had been entered for the last time. This pinpoints a single activity of a very short duration. This brief activity can even be assigned a C14 date by radiocarbon dating the wick.¹¹

The problem with objects in active positions is that there are only very few cases in archaeology where they exist, and that these cases are difficult to identify with certainty. Superficial, ambiguous, or misconceived assignments of active positions open many possibilities for misinterpretation.

B.2. Objects in Passive Positions

In many cases, objects, which are an indicator of former activities, are not found in the very spot they had been used. This might be due to various circumstances; they might have been removed after each use, they could have been broken and were discarded, or were stored elsewhere for later use. These passive locations, where the objects were not actively used, are nevertheless important indicators for activities. They permit the reconstruction of more general and larger areas of activities. In addition, storing or discarding objects are an activity by itself. The passive positions, therefore, present valuable information regarding secondary activities related to the objects.

¹¹ The sample produced a calibrated date of 1514–1436 B.C.



Figure 2.6. Tell Bderi, objects deposited in active use in Room N of House I (level 8)

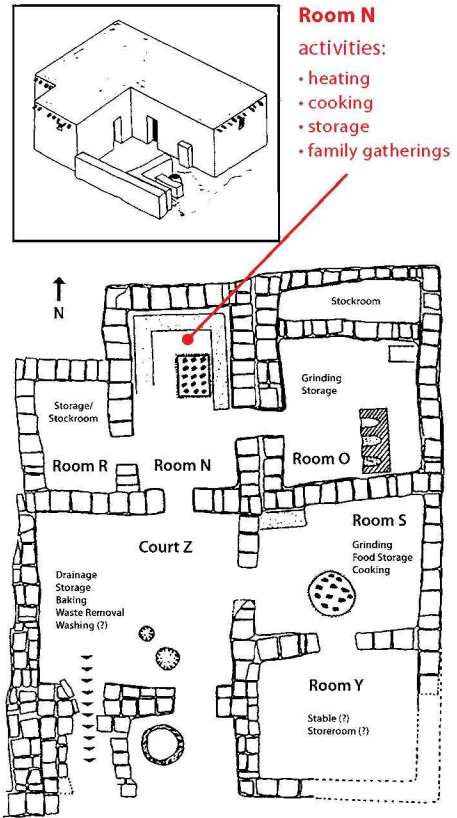


Figure 2.7. Tell Bderi, plotting of the activity areas in House I (level 8)



Figure 2.8. Tell Bderi, physically reconstructed activity areas in Room N of House I (level 8)

B.3. Refuse

Refuse is the most abundant category of archaeological finds. Nevertheless, refuse is often not spatially analyzed in a sufficient way, as it is believed to be of minor significance. However, refuse is important for the reconstruction of activity areas because a large number of activities produce refuse of some form or another (cf. Schiffer, Downing, and McCarthy 1981; Shahack-Gross 2011, pp. 32–35). When refuse is left in the position where it originated (Primary Refuse; Schiffer 1987, pp. 48ff.; Pfälzner 2001, pp. 49–50), it can give invaluable hints relating to activities carried out at this spot. In contrast, refuse which has been discarded elsewhere (Secondary Refuse; Schiffer 1987, pp. 58ff.; Pfälzner 2001, p. 50), gives an indication of nearby activities. This distinction, again, influences the definition of the spatial extension of activity areas.

Methodological Considerations

Refuse can not only give detailed information on food preparation and consumption practices of ancient households, but can also be an important indicator of craft activities. This is exemplified by an example from Tell Bderi: In House III the refuse of pottery production and of bronze smelting was found in two side rooms (Pfälzner 2001, pp. 223–31). Together with indications of normal, daily household activities, this proves that the household produced pottery and bronze objects in addition to the usual domestic activities. At House XIV at Tell Bderi there was refuse of animal fodder and sheep/goat droppings in one room (Room DL), which enables the reconstruction of a barn within the house and proves that the household practiced animal husbandry besides the usual household activities (ibid., pp. 270–72, 293).

In the Royal Hypogeum of Qatna substantial amounts of refuse of discarded animal bones — of caprids, cows, and a goose — were found below a stone bench in the southwestern corner of the main chamber of the tomb (Vila 2011, pp. 385–91, tables 6–8). This can be interpreted as refuse of meals consumed in the tomb chamber (ibid., pp. 401–02). The most probable place for this activity was on the stone benches themselves, especially as there were no other grave goods deposited on top of them. Thus, there is evidence of communal feasting within the tomb chambers. This can be concluded from activity-area analysis.¹²

The difficulty with regard to refuse is to distinguish between primary, secondary, and tertiary refuse (see below). These different categories of refuse strongly influence the interpretation, as each category implies different kinds of actions in specific areas within an archaeological context.

B.4. Installations

It needs to be taken into consideration that even when objects are lacking or an area has been carefully cleared of all objects in ancient times the reconstruction of activity areas is possible. For this purpose installations are most indicative. These comprise all fixed features which were built or otherwise generated in order to fulfill certain actions. The installations in houses normally comprise hearths and ovens, grinding tables and storage pits, benches and working platforms, shelves and containers, and many more. At the same time, minor

¹² For other examples of the use of animal bones in household analyses, see Marom and Zuckermann 2011.

installations — like holes stemming from wooden installations, shallow fireplaces, and individual stone settings for working activities — are to be considered. A perfect situation for activity-area analysis is given when both installations and objects are preserved together at one place, or when refuse is associated with installations (Pfälzner 2001, pp. 64–67, fig. 25).

Methodological Considerations

Installations can be indicators for activity areas, even if no objects are found and even if the installations were not in active use during the final stage of the use of a building. However, installations are often difficult to understand. This is illustrated by an example from Tell Bderi and other Early Bronze Age sites in northeastern Syria. In many houses lime-plastered mudbrick installations with several parallel channels on their upper side were found (fig. 2.9). At many sites they often were interpreted as cultic libation benches. However, ethno-archaeological comparisons from West Africa demonstrate that they are used for grinding (fig. 2.10). In consequence, the mentioned installations can be reconstructed as grinding tables in the houses of Tell Bderi. The channels were used to collect the ground flour to both sides of the grinding stones, which originally were installed on top of the tables (fig. 2.11). The grinding tables form a very important, nearly indispensable element of Early Bronze Age houses in northern Mesopotamia (Pfälzner 2001, pp. 139–46).

However, grinding tables are not omnipresent in ancient cultures. As the example of Egypt demonstrates, there was a different type of grinding installation in use in the third millennium B.C. A First Intermediate Period representation shows large grinding stones put



Figure 2.9. Grinding table with flour channels and cavities for the insertion of grinding stones, Tell Bderi, House I, Room BI, Early Bronze Age



Figure 2.10. Ethno-archaeological comparison: grinding table in use in a house at the village of Tiébele, Burkina Faso, West Africa (author's photo, 1992)

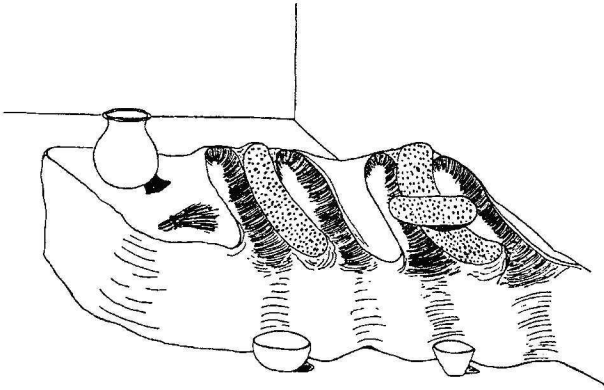


Figure 2.11. Reconstruction of a grinding table in an Early Bronze Age house at Tell Bderi, based on ethno-archaeological analogy



Figure 2.12. Model kitchen with grinding scene, Egypt, First Intermediate Period, Dynasty 9, ca. 2200 B.C. (Oriental Institute Museum Chicago, OIM E10514)

on the floor, instead of a constructed grinding table (fig. 2.12).¹³ Interestingly, these also have parallels in modern East Africa.¹⁴ It can be seen that there exist principal differences in the types of grinding installations, which leave different traces in the archaeological record. The identification of activity areas needs to take this pre-knowledge into account.

In conclusion, this example demonstrates the importance of ethno-archaeology and cross-cultural comparisons for identifying the exact function of installations, despite the functional and cultural variety of the forms of installations.¹⁵

Concept C: The Types of Assemblages

The assemblage is the complete group of all objects present in one archaeological or stratigraphical unit. In order to carry out an activity-area analysis it is of crucial importance to identify the assemblage type. If this is omitted or done erroneously, activity-area analysis will produce incorrect results. Due to different depositional contexts, five categories of assemblages can be distinguished:

¹³ In Egypt, these large grinding stones were later, in the Middle Kingdom, replaced by so-called quern emplacements, built in mudbricks, that resemble the table-like constructions known from Syria. These quern emplacements have been found in many settlements in Egypt, e.g., at Elephantine (von Pilgrim 1996, p. 213) or Deir el-Medina (Bruyère 1939, pp. 75–78), and they consist of a box-like structure constructed in mudbricks with a stone quern set into the sloping top of the structure. The flour could be collected in the lower basin (see, e.g., Samuel 1999,

p. 132, pl. 2; Robins 1990, p. 58, cat. nos. 29–30); gratitude to Miriam Müller (personal communication) for suggesting this footnote.

¹⁴ See, for example, the photo at the following link: <http://3scape.com/pic/6649/Iraqw-woman-demonstrating-grain-grinding-techniques> (accessed 11/10/2013).

¹⁵ For a discussion of ethno-archaeological analogies in order to reconstruct domestic installations, see Krafeld-Daugherty 1994, pp. 1–10, 20–152.

C.1. Active Use Inventories

An active use inventory is defined as an assemblage being deposited in a specific spatial unit, for example, a room, a grave chamber, or a courtyard, placed in the situation of its last use. Thus, the individual objects lie distributed at those places where they were used for the last time before a building was destroyed or otherwise came to an abrupt end of usage (Pfälzner 2001, pp. 47, 50–52).

Methodological Considerations

Active use inventories are in most instances created when a house or other context is destroyed suddenly, at a moment when most objects were actively used. It has to be taken into account, however, that objects in passive positions also find their way into active use inventories. These are objects which were not used at the time of the destruction. Furthermore, there might be refuse in an active use inventory, that is, material that had already been discarded during the last phase of use before the destruction. Thus, an active use inventory is a heterogeneous assemblage.

Certainly, the most famous active use inventory is the case of Pompeii. It has often been regarded as an ideal example for reconstructing the former life and activities of an ancient population. It has frequently been emphasized, however, that Pompeii by no means represents the ideal case of a completely conserved city with its whole inventory frozen in time through the sudden event of the eruption of Mount Vesuvius. The inventories of Pompeii were modified in many ways before, during, and after the deposition of the archaeological assemblage (Schiffer 1985; Sommer 1991, pp. 115–30; Allison 1999b, pp. 58–73; Pfälzner 2001, pp. 46–47; see Dickmann, this volume). The pre-destruction partial abandonment of houses and deficiencies in the archaeological sampling procedures are the main causes for this.

In the same way, it is unjustified to apply the so-called “Pompeii Premise” to other cases where fatal destruction created what is falsely argued to be a completely preserved inventory (fig. 2.13). This assumption is derived from a misleading model, because such a situation does not exist in archaeological reality (Schiffer 1987, pp. 99–120). It is never the case in archaeology that all objects of a former context are preserved and found. A reduction of the inventory is caused by depositional and post-depositional events, such as contemporary plundering, pre-destruction partial abandonment, deterioration, later stratigraphic disruptions, or shortcomings in archaeological sampling and documentation procedures (Pfälzner 2001, pp. 46–47; 2011a, pp. 45–48; Otto 2006, pp. 28–29).



Figure 2.13. Active use inventory of a kitchen discovered at Pompeii, obviously re-arranged by the archaeologists (after Corti 1944, fig. 77)

It can be concluded that archaeology never reflects the “systemic inventory,” that is, the inventory as it originally existed. Instead, the “archaeological inventory,” that is, the inventory which we have at our disposal through an archaeological excavation, is a reduced, degraded, and manipulated form of the systemic inventory (see also Otto, this volume, fig. 3.1; Schiffer 1972, 1976, 1987). The dichotomy between the systemic and the archaeological inventory is a very important principle for activity-area analysis.

Two examples might illustrate this methodological principle. As for Tell Bderi, it can be observed that in House II (phase 8a) there is a room with a grinding table, but no grinding stones were found in the active use inventory of the house (Pfälzner 2001, pp. 284–85, tables 13–14, pl. 5). When trying to find explanations for this situation, one could argue that the grinding table might not have been in use at the moment of destruction. Alternatively, it could be argued that somebody removed the grinding stone immediately before the destruction or after it. Whatever the real reason might be, the manipulation of the active use inventory should not be understood as a sign of the non-existence of an active use inventory. Instead, one has to keep in mind that an active use inventory is not a systemic inventory, but an archaeological one.

Manipulations of grave contexts are a well-known phenomenon in archaeology (Kümmel 2008, pp. 480–83; 2009). There is virtually no example of a tomb which contained a full systemic inventory. However, this does not mean that tombs do not contain active use inventories. When understood as an archaeological inventory, this type of inventory can be assigned to a number of grave contexts. This can be exemplified by the active use inventory of the Qatna Royal Hypogeum. The tomb was actively used over a long time to continuously perform various funerary rituals (Pfälzner 2011c, pp. 59–65). This resulted in the creation of a diversified and complex active use inventory. The rapid destruction of the palace and the following inaccessibility of the tomb chambers prevented people from looting this inventory. Therefore, the inventory is very rich, comprising over 2,000 objects; however, it is not necessarily complete. A possible loss of objects could have happened in various ways (Pfälzner 2011a, pp. 40–48). Theoretically, this could be due to the theft of large gold objects, a deliberate removal of prestige objects, or a deliberate taking out of metal artifacts in order to recycle them into the palatial context. These actions could have happened long before, or shortly before the end of the use of the tomb. In addition, post-depositional events might have taken place, like the large-scale deterioration of organic objects and possible destruction by intruding animals. The number and type of lost items will never be determinable. Nonetheless, the existing archaeological inventory of this un-looted tomb¹⁶ can, for the most part, be regarded as an active use inventory. In addition, some of the objects that had not been actively used during the last phase of the tomb can be regarded as a passive use inventory (see below). Thus, both types of inventories co-exist in the Royal Hypogeum, as it is often the case in archaeological grave contexts.

¹⁶ An “un-looted tomb” is here defined as a grave, which was not robbed out at a later period, i.e., after the deliberate closure of the tomb or after the mo-

ment of unintentional inaccessibility of the grave chambers.

C.2. Passive Use Inventories

On first impression, passive use inventories are very similar to active use inventories. They differ from the latter by being deposited where the objects were not actively used.¹⁷ This applies when objects, like tools, were stored for later use or when an entire room with its objects was not in active use at the moment of destruction or sudden abandonment of a building.

Methodological Considerations

Passive use inventories have a rather frequent occurrence in grave contexts (see above). In domestic or other living contexts they exist as well, but are rather difficult to identify. Therefore, there are only a few cases attested in houses or other buildings.¹⁸ The entrance door to House XIV at Tell Bderi was found blocked by mudbricks (fig. 2.14; Pfälzner 2001, pp. 176–79, 293–94, tables 64–65, pls. 19–20). This was clearly done before the house was suddenly destroyed at the end of phase 14. Thus, the house was inaccessible and temporarily unoccupied during the last period of its existence. Nevertheless, the rooms of the house contained substantial inventories (fig. 2.15). This evidence at first appears to be contradictory and requires further explanation. It can be assumed that the inhabitants of the house were temporarily absent, for example, because the household was semi-nomadic. The residents took only those objects with them which were deemed necessary for the planned activities during their absence; the remaining objects were left at home and stored in the house. The destruction of the house happened during the absence. Therefore the assemblage in the house is a passive use inventory. The composition of such an inventory has some significant characteristics: household objects are only partly present, they only have a restricted functional spectrum, and the objects are arranged in passive positions, that is, they do not indicate where these objects were actively used. Therefore, the activity areas within this

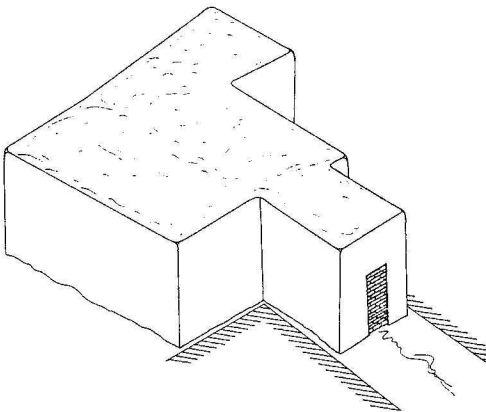


Figure 2.14. Tell Bderi, House XIV (level 14), isometric reconstruction of the house with its door blocked by mudbricks



Figure 2.15. Tell Bderi, House XIV (level 14), passive use inventory inside Room CM

¹⁷ Pfälzner 2001, pp. 47–49, 52–53; adopted by Otto, 2006, p. 27 and renamed “Inventar II.”

¹⁸ Besides the mentioned cases from Tell Bderi, see also examples from Tell Bazi (Otto 2006, pp. 258–60) and Tell Chuera (Pfälzner 2001, p. 178).

building have to be defined with more prudence than in the case of an active use inventory. Apart from this, the act of putting away objects for long-term storage within the house is an activity in itself.

C.3. Abandonment Inventories (= De Facto-Refuse)

This kind of inventory occurs when a room or other functional unit is abandoned in a planned way, so that there is time to take out those things which are still functional and usable in another context (Pfälzner 2001, pp. 49, 53–54). What remains in an abandonment inventory are broken, unusable, or undesired objects. Schiffer labeled this kind of partial inventory “de facto-refuse,” because the things left behind might have been qualified by ancient people as equal to refuse (Schiffer 1987, pp. 89–92). However, abandonment inventories occasionally contain usable things, left behind because of a lack of means of transport, so that the qualification as refuse is slightly misleading (Pfälzner 2001, pp. 45–46, 49).

Methodological Considerations

Abandonment inventories are probably the most frequent of all inventories in archaeology. However, they are often mistaken as an active use inventory, because many broken pottery vessels and other objects can be found. It is difficult to distinguish between those objects which were regarded as useless and were left behind when the house was abandoned, and those objects which were still in use. Especially with regard to pottery this distinction is difficult. The pottery vessels might have broken prior to abandonment, or later as part of the destruction of the context. Therefore, it needs to be carefully investigated whether there are — besides broken pottery — any other objects in the same inventory which represent usable, intact artifacts. If other objects of this kind are lacking, an abandonment inventory seems the most likely.

An example for this is House III at Tell Bderi (phase 9c1) (Pfälzner 2001, p. 286, tables 27–28, pi. 10). In this house there is production refuse of pottery making and bronze smelting (see above). The refuse has been left on the floor of the rooms, which is normally avoided during the use of a house, but is a frequent practice shortly before buildings are abandoned (Schiffer 1987, p. 97; Sommer 1991, p. 106). In addition, there are several broken pottery vessels in some of the rooms and very few usable artifacts. Taken together, these are indications for an abandonment inventory. In conclusion, a very careful investigation is necessary in order to reliably identify an abandonment inventory.

C.4. Primary Refuse

Primary refuse includes all unusable items which were left behind and deposited archaeologically at the spot where an activity took place that generated these items (Schiffer 1987, pp. 58ff.; Pfälzner 2001, pp. 49–50).

C.5. Secondary Refuse

Secondary refuse consists of those unusable items which were not left behind at the place where they were generated, but which were removed and discarded elsewhere (Schiffer 1987, pp. 58ff.; Pfälzner 2001, p. 50).

C.6. Tertiary Refuse

The last category of refuse is defined as those unusable items which were transported to other than the primary or secondary refuse places by later, post-depositional processes (Pfälzner 2001, p. 50). In archaeological practice, this is the most frequent of all refuse types.

Concept D: The Identification of Depositional Processes

Another indispensable prerequisite of activity-area analysis is the identification of the processes which were responsible for the creation of archaeological depositions in a specific spatial unit. These processes are in most cases created by human actions, but can also be attributed to natural factors during an intermittent lack of human action. It is necessary to determine the nature of the depositional processes in order to pinpoint and contextualize individual activities more precisely through an activity-area analysis. The functional interpretation of objects and activities may differ considerably depending on the various depositional processes. As houses or other buildings, including open areas between buildings, principally provide the spatial frame for activity-area analysis the depositional processes connected to the existence of buildings need to be investigated. There exists a cycle of processes in relation to the construction, use, and disappearance of buildings. The most important cyclical processes, which result in the creation of deposits and assemblages, are the following:¹⁹

D.1. Construction Processes

They comprise all depositions connected to the initial construction of a building, including the built structures themselves, unused building material, and debris, which accumulated during the construction process. Also all other possible activities of the construction workers at a building site (eating, cooking, etc.) can leave traces in construction process depositions.

D.2. Use and Re-use Processes

The intended use of buildings results in the creation of depositions in principally the same way as other processes of the lifecycle of a building. It has to be pointed out that various forms of usage can follow consecutively during the existence of a building. The originally intended use is called primary use, while phases of re-use could have the same or different function. It has to be noted that processes of use and re-use very often do not lead to the creation of substantial, thick accumulations.

D.3. Processes of Use Interruption

Interruptions of the active use of buildings can often be observed. During these periods natural depositions or building debris can accumulate within the rooms. In many cases these can often be more substantial than depositions deriving from use processes.

D.4. Maintenance Processes

During the lifecycle of a building regular maintenance work has to be carried out. Especially in mudbrick architecture, regular maintenance is of great importance for the longevity of

¹⁹ For a detailed discussion of the causes of deposition, see Pfälzner 2001, pp. 39–42.

a building. This can include a re-plastering of walls, a re-building of individual walls, or a renewal of floors. Furthermore, during maintenance processes edifices can be adapted to changing functional demands occurring during the lifecycle of a building by adding new installations, new rooms, or additional new units.

D.5. Abandonment Processes

Abandonment is the most frequent process to be observed in archaeology when the use of a building comes to an end. This results in the accumulation of large quantities of slowly collapsing building materials within the rooms, while an abandonment inventory very often remains on the floors (cf., e.g., Stevenson 1982).

D.6. Destruction Processes

Destruction processes are very favorable for the creation of rich archaeological accumulations, however, they occur relatively rarely, especially with regard to domestic constructions. They result in the deposition of active or passive use inventories in addition to heavy accumulations of destruction debris consisting of suddenly collapsed and often burned architectural elements.

D.7. Deterioration Processes

Even after the end of the use of a building through abandonment or destruction the accumulation of material does not come to an end. In most cases depositions stemming from long-term processes of decay of the architecture or of surrounding structures through human and natural forces accumulate within and on top of the ruined structures of a building.

D.8. Processes of Post-use

It can often be observed that ruined buildings, which are already in the state of decay, are used secondarily for different purposes, such as the dumping of refuse, the digging of graves, or squatter-like dwelling activities (LaMotta and Schiffer 1999, pp. 20–24, table 2.1; Pfälzner 2001, pp. 41–42). While the remaining architectural structures of the building are mostly not modified during these processes, the post-use of a building can lead to the accumulation of numerous objects and even substantial inventories.²⁰

The Cycle of Depositional Processes

A subset or all of the eight principal depositional processes described can appear in one and the same house during different stages of its existence. As the development of a house is cyclical, the depositional processes principally appear in a fixed sequence. Within this, each depositional process can theoretically recur twice or more (fig. 2.16).

The developmental cycle of a house starts with the construction process. This is followed by a first process of use. Following on from maintenance processes a re-use can happen. Several maintenance processes, which can also include substantial modifications of a building, are each followed by another re-use phase. Alternatively, a use-interruption can take place. Again, this might be followed by another re-use process. After this repetitive sub-cycle ceases, there are two major variants for marking an end to the use of a house. It can happen

²⁰ For a carefully investigated archaeological example, see Kreppner and Schmid 2014.

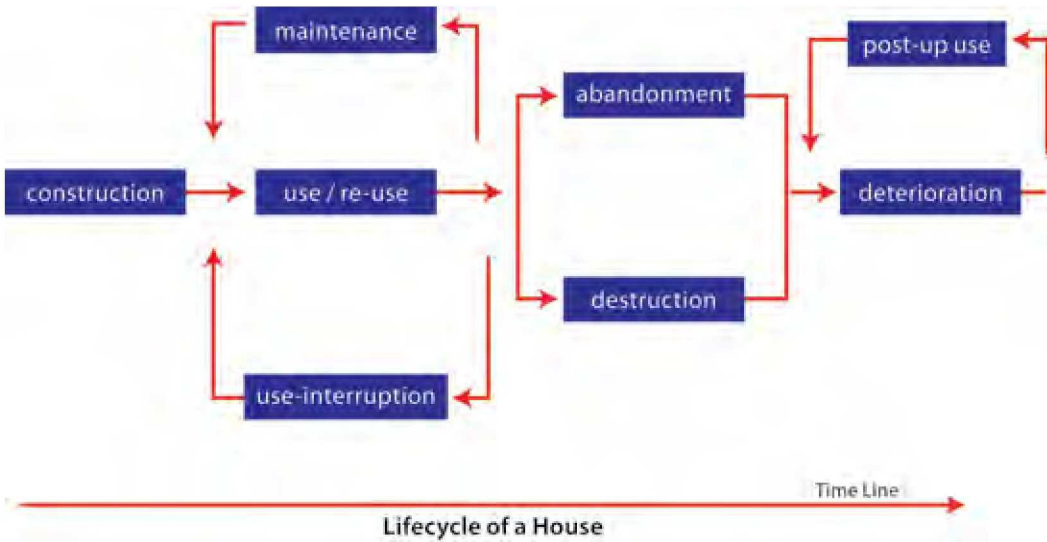


Figure 2.16. Scheme for the lifecycle of a house

either through abandonment or through destruction, each associated with different causes and a variant nature of the process. These two alternative processes are followed by a process of structural deterioration. Within this, often long-lasting, process, one or more processes of post-use can take place.

In view of this complex structure of subsequent depositional processes in one building it should be kept in mind that each of the mentioned processes creates a distinct character of deposition. This fact makes it possible to distinguish the individual depositional processes in the archaeological record. The necessary indicators have to be gained from the material quality of the deposition. The character of a deposition can, for example, be mudbrick collapse, mudbrick debris, mud-earth, burnt debris, ashes, or ash-mud mixtures. They all render important information on the underlying depositional process (Pfälzner 2001, pp. 42–45). Therefore, the thorough study and identification of the depositional character is one of the biggest challenges of activity area research, and it is a frequent reason for misinterpretations.

Concept E: Combined Analytical Procedures

Activity-area analysis is a basic tool which produces specific and detailed results on the micro-level. In order to achieve more general and far-reaching results activity-area analysis has to be combined with a number of other analytical procedures. Together, these procedures add up to a full-fledged, comprehensive household analysis.

The methodological procedures for this kind of comprehensive household analysis are the following:

E.1. Activity-area Analysis

Activity-area analysis needs to be applied to all spatial units of a functional context under study. It is based on a thorough study of the archaeological indicators for activities (Concept B). Indispensable prerequisites for a successful accomplishment of activity-area analysis are

an identification of the types of assemblages under study (Concept C), and an identification of the depositional processes responsible for the creation of the studied assemblages (Concept D).

E.2. Functional Analysis

Functional analysis needs to be built on activity-area analysis. It seeks to achieve a functional identification of all spatial units of a context under study, for example, a house (Pfälzner 2001, p. 25). It must be pointed out that the multi-functionality of rooms, which is a particular characteristic of ancient and modern Near Eastern domestic architecture,²¹ has to be taken into account. The functional analysis leads to a reconstruction of the spatial patterning and structuring of activities within a building.

Examples

At Tell Bderi, Room N of House I (phase 8) illustrates the combination of different functions within one room (see fig. 2.6). It was a multifunctional room which can be interpreted as a so-called nuclear room. This is the main living room of a nuclear family, the basic social unit in third-millennium Syria (Pfälzner 2001, pp. 149–50, fig. 77).

The Royal Hypogeum of Qatna was a multi-functional room, too. Here, many different activities could be distinguished. They range from primary to secondary and even tertiary burial. All these stages were accompanied by rituals. For the primary burial alone, a multi-stage sequence of rituals could be identified (Pfälzner 2012, pp. 207–11, table 1).

E.3. Economical Analysis

Economic analysis aims at investigating the economic activities and the subsistence basis of a household. Through the study of objects, installations, plant remains, and animal bones it is possible to identify the proportional amount of daily household activities, household craft activities, as well as agricultural and animal husbandry activities (Faust 2011, pp. 257–66; Graham and Smith 2012, pp. 248–50). Storage practices are another important focus of economic household analysis (Chesson 2012, pp. 60–70). It is also desired to assess the relative economic wealth of a household and the eventual integration of the household into larger economic units (Pfälzner 2001, pp. 25–27; Singer-Avitz 2011, pp. 294–98).

Example

It could be determined that House III at Tell Bderi lived on agriculture, but not exclusively. In addition, the household carried out pottery production and metallurgy as a household handicraft (Pfälzner 2001, pp. 223–31, 286–87). This fact resulted in an economic diversity of the household. Furthermore, a certain degree of economic independence of the household from central institutions can be deduced from the attested household production. The house even contained a store for selling its products. Here, strings of lead rings were discovered, which served as money in the third and second millennia B.C. (Boehmer 1972, p. 166, pi. 59:1725–1728; Pfälzner 2001, p. 247).

²¹ See Kramer 1982, pp. 99ff.; Krafeld-Daugherty 1994, pp. 27–33; Pfälzner 2001, p. 25; contrary to this understanding, a methodologically criticizable concept

of pre-supposed individual room functions has been proposed by Yoko Nishimura (2012, pp. 353–55, table 1).

E.4. Social Analysis

Social analysis aims at a reconstruction of the social and demographic composition of a household. This includes an estimate of the number of occupants of a house, which corresponds to the number of household members (Pfälzner 2001, pp. 27–34, figs. 2–9; Otto 2006, p. 33). Also gender aspects of households have been discussed (Lawrence 1999; Goldberg 1999). Comparative ethnographic data and models as well as the specific results of the activity-area analysis form the basis for this kind of analysis. The form of household and the type of family are other categories to be investigated on the basis of ethnological and sociological models (Pfälzner 2001, pp. 27–34; Brody 2011).

Examples

In the case of House I at Tell Bderi it is possible to reconstruct an extended household, consisting of two nuclear families (fig. 2.17). This is based on the identification of two residential units in the house, each comprising a nuclear room and a grinding facility. The two nuclear families might have included three generations, for example, one couple of a father and a mother, and a second couple, probably of a married son or daughter with children (Pfälzner 2001, p. 384, figs. 115–16).

Another example is House III at Tell Bderi (fig. 2.18). Again, two nuclear families can be reconstructed on the basis of two residential units, each with an own nuclear room and grinding facility. Interestingly, though, there is a third room for grinding in this house. The latter has, however, no heating and cooking facilities. This means that two grinding rooms must belong to one nuclear room. On the basis of ethno-archaeological data it can be argued that two wives were present in the house. Thus, it seems to have been a polygamous household (*ibid.*, pp. 384–85, fig. 117–18).

E.5. Diachronic Analysis

Each household has a lifecycle, which reflects the development of the family and its home — children grow up, found new families, and new generations occupy the house. The diachronic analysis of houses serves as the basis for an examination of the developmental cycle of a household. The detailed stratigraphic record of an excavated domestic structure — including the observation of changes in the formal layout of a house over time — in combination with an activity-area analysis of each documented phase of the building enables a reconstruction of the development of the house and the household residing in it (Tourtellot 1988; Pfälzner 2001, pp. 34–35).

Example

As an example for the diachronic study of a household, House I at Tell Bderi can again be presented. In phase 10 the house was occupied by one nuclear family. There was only one nuclear room and one grinding room. In level 8 the household grew into two nuclear families, as has been noted above. This happened probably because one child grew up, married, and founded one's own family, residing within the same house (Pfälzner 2001, p. 384, figs. 115–16).

E.6. Symbolic Analysis

Besides the functional aspects of a house, which are related to the economic and social background of the household, there are symbolic aspects inherent in domestic structures (Hodder 1987b; Rapoport 1990; Allison 1999a, pp. 11–12; Pfälzner 2001, pp. 35–36). They convey the

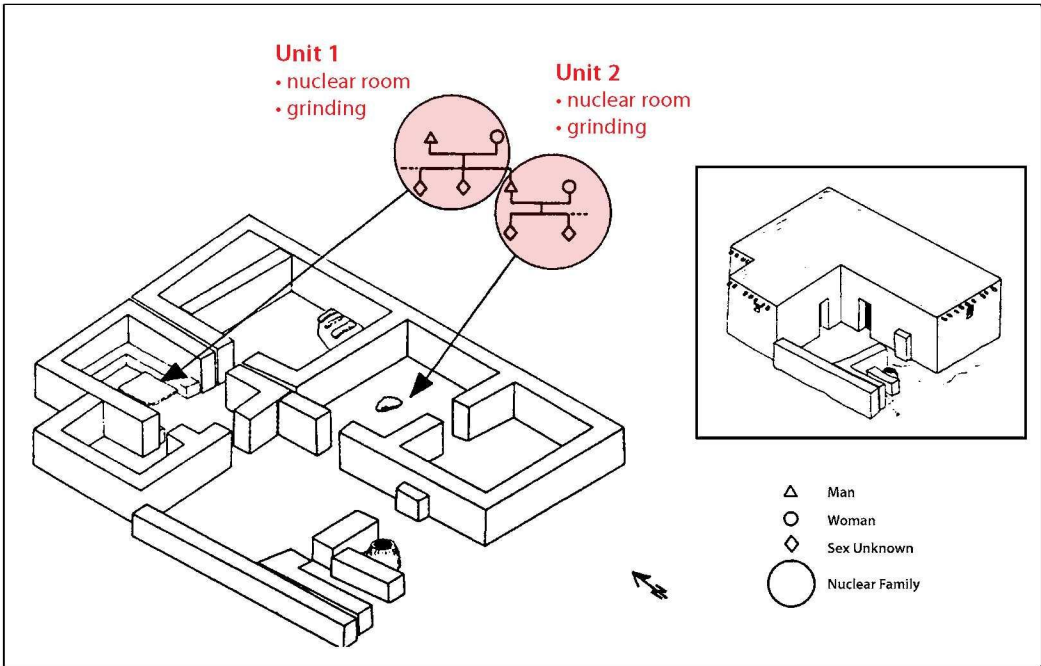


Figure 2.17. Tell Bderi, House I (phase 8), reconstruction of the household composition

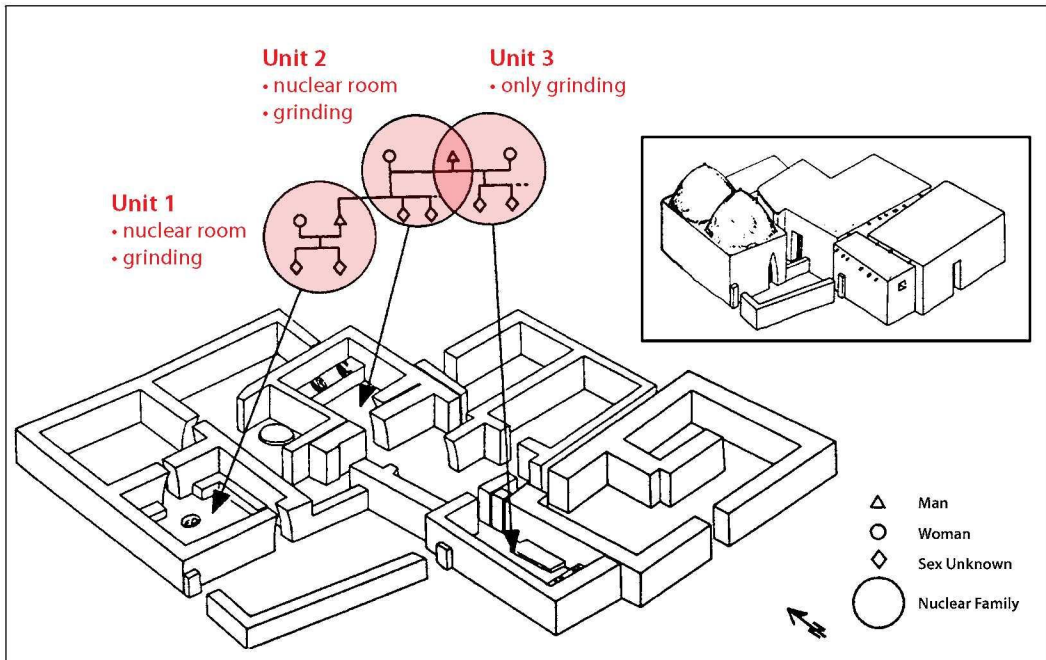


Figure 2.18. Tell Bderi, House III (phase 9c2), reconstruction of the household composition

visual communication of information on the social status, the cultural and ethnic identity, the privacy, or the ideology of the household (Hodder 1982, 1987a; Sanders 1990, pp. 49–50; McGuire and Schiffer 1983, p. 282). The formal layout of houses, non-functional, decorative features of houses, and the spatial distribution of the inventory serve as a basis for symbolic analysis. The study of these aspects needs the same attention as the functional aspects of a house, especially when a structuralistic approach is applied, as it is demanded by post-processual archaeology. The symbolic aspects of houses are first and foremost culturally determined. This makes their study an interpretive, hermeneutic endeavor, which at the same time needs intuition and careful argumentation.

E.7. Architectural Classification

The architectural classification of buildings on the basis of their formal aspects is one of the foremost methodological approaches in household studies and in archaeology in general. This normally leads to the definition of a formal “building type.”²² However, due to the developmental cycle of households and houses (see above) there exists in many, if not most, cases no constant layout of a building. Instead, a number of formal modifications occur over the lifespan of a house. This makes the attribution of a specific architectural “type” a difficult and rather arbitrary procedure. As an alternative, “house-forms” should be defined. These describe the specific formal concept of a house at one stage of its cycle. Thus, the house-form might change over time for one and the same building. The results of the activity-area analysis and the functional analysis of a house, together with observations on its structure, its accessibility, and its construction technique, provide the necessary indications for the identification of the house-form (Pfälzner 2001, pp. 36–37, fig. 10).

The Integration of Analytical Procedures

It has to be pointed out that the mentioned analytical procedures (Concept E) are integral parts of household analyses when applied to the study of domestic structures. When applied to other functional units, such as palace buildings, temples, or grave chambers, they contribute to the comprehensive contextual analysis of these kinds of structures. These can be labeled *Contextual Palace Analyses*, *Contextual Temple Analyses*, and *Contextual Tomb Analyses*. The individual procedures will have different contents in each of these types of analyses, but the methodological principles remain principally the same.

Conclusions

Concepts A to E have to be combined in order to fully exploit the explanatory potential of archaeological remains of houses, public buildings and tombs. This combined approach can be labeled the *Integrated Concept of Activity-Area Analysis*. It demonstrates that activity-area analysis is not only an important methodological tool in archaeology, but also has particular significance as the basic procedure for contextual analyses of houses, palaces, temples, and tombs.

²² See, e.g., the formal house typology proposed for the ancient Orient by Ernst Heinrich (1972–75).

It has been demonstrated that activity-area analysis requires a high level of methodological awareness, an exact archaeological documentation, broad theoretical assumptions, ethno-archaeological reasoning — and the luck of discovering well-preserved archaeological inventories. At the same time, it enables far-reaching insights into past societies and their social structure. Among other perspectives, it can illustrate how the lifecycles of families are cross-culturally similar and even to some extent reflected in those of our modern times. The concept of the nuclear family was very well established in the ancient Near East and the growing up of children and the departure of new generations occupying and re-organizing houses over time is an ever-repeating cycle.

Bibliography

- Allison, Penelope M.
 1999a “Introduction.” In *The Archaeology of Household Activities: Dwelling in the Past*, edited by Penelope M. Allison, pp. 1-18. London: Routledge.
 1999b “Labels for Ladles: Interpreting the Material Culture of Roman Households.” In *The Archaeology of Household Activities: Dwelling in the Past*, edited by Penelope M. Allison, pp. 57-77. London: Routledge.
- Allison, Penelope M., editor
 1999 *The Archaeology of Household Activities: Dwelling in the Past*. London: Routledge.
- Al-Maqdissi, Michel; Heike Dohmann-Pfälzner; Peter Pfälzner; and Antoine Suleiman
 2003 “Das königliche Hypogäum von Qatna.” *Mitteilungen der Deutschen Orient Gesellschaft* 135: 189-218.
- Al-Maqdissi, Michel; Daniele Morandi Bonacossi; and Peter Pfälzner, editors
 2009 “Landesmuseum Württemberg.” In *Schätze des Alten Syrien: Die Entdeckung des Königreichs Qatna*, Stuttgart: Landesmuseum Württemberg.
- Bernbeck, Reinhard
 1997 *Theorien in der Archäologie*. Uni-Taschenbücher 1964. Tübingen: A. Francke Verlag.
- Binford, Lewis R.
 1962 “Archaeology as Anthropology.” *American Antiquity* 28/2: 217-25.
 1964 “A Consideration of Archaeological Research Design.” *American Antiquity* 29: 425-41.
 1968 “Archaeological Perspectives.” In *New Perspectives in Archaeology*, edited by Sally R. Binford and Lewis R. Binford, pp. 5-32. Washington, D.C.: Society for American Archaeology.
 1972 “Archaeological Systematics and the Study of Culture Process.” In *Contemporary Archaeology: A Guide to Theory and Contributions*, edited by Mark P. Leone, pp. 125-32. Carbondale: Southern Illinois University Press.
- Boehmer, Rainer M.
 1972 *Die Kleinfunde von Boğazköy aus den Grabungskampagnen 1931-1939 und 1952-1969*. Wissenschaftliche Veröffentlichungen der Deutschen Orient-Gesellschaft 87. Berlin: Gebr. Mann Verlag.
- Brody, Aaron J.
 2011 “The Archaeology of the Extended Family: A Household Compound Iron II Tell en-Naşbeh.” In *Household Archaeology in Ancient Israel and Beyond*, edited by Assaf Yasur-Landau, Jennie R. Ebeling, and Laura B. Mazow, pp. 237-54. Culture and History of the Ancient Near East 50. Leiden: Brill.

- Bruyère, Bernard
1939 *Rapport sur les Fouilles de Deir el Médineh 1934/35: le village, les décharges publiques, la station de repos du col de la Vallée de Rois*. Fouilles de l'Institut Français d'Archéologie Orientale du Caire 16. Cairo: Institut Français d'Archéologie Orientale.
- Chavalas, Mark W.
1988 *The House of Puzurum: A Stratigraphic, Distributional, and Social Analysis of Domestic Units from Tell Ashara/Terqa, Syria, from the Middle of the Second Millennium B.C.* Ph.D. dissertation, University of California Los Angeles.
- Chesson, Meredith S.
2012 "Homemaking in the Early Bronze Age." In *New Perspectives on Household Archaeology*, edited by Bradley J. Parker and Catherine P. Foster, pp. 45–79. Winona Lake: Eisenbrauns.
- Clarke, David L.
1968 *Analytical Archaeology*. London: Methuen.
- Corti, Egon Caesar
1944 *Untergang und Auferstehung von Pompeji und Herculaneum*. 6th edition. Munich: F. Bruckmann.
- Deetz, James F.
1972 "Archaeology as a Social Science." In *Contemporary Archaeology: A Guide to Theory and Contributions*, edited by Mark P. Leone, pp. 108–17. Carbondale: Southern Illinois University Press.
- Dohmann-Pfälzner, Heike, and Peter Pfälzner
2006 "Ausgrabungen und Forschungen in Tell Mišrife – Qaṭna 2004 und 2005. Vorbericht der deutschen Komponente des internationalen Kooperationsprojektes." *Mitteilungen der Deutschen Orient Gesellschaft* 138: 57–107.
2007 "Ausgrabungen und Forschungen 2006 im Königspalast von Qaṭna. Vorbericht des syrisch-deutschen Kooperationsprojektes in Tall Mišrife/Qaṭna." *Mitteilungen der Deutschen Orient Gesellschaft* 139: 131–72.
2008 "Die Ausgrabungen 2007 und 2008 im Königspalast von Qaṭna: Vorbericht des syrisch-deutschen Kooperationsprojektes in Tall Mišrife/Qaṭna." *Mitteilungen der Deutschen Orient Gesellschaft* 140: 17–74.
2011 "Die Ausgrabungen 2009 und 2010 im Königspalast von Qaṭna: Vorbericht des syrisch-deutschen Kooperationsprojektes in Tall Mišrife/Qaṭna." *Mitteilungen der Deutschen Orient Gesellschaft* 143: 5–62.
- Faust, Avraham
2011 "Household Economies in the Kingdom of Israel and Judah." In *Household Archaeology in Ancient Israel and Beyond*, edited by Assaf Yasur-Landau, Jennie R. Ebeling, and Laura B. Mazow, pp. 255–73. Leiden: Brill.
- Flannery, Kent V.
1972a "Culture History v. Cultural Process: A Debate in American Archaeology." In *Contemporary Archaeology: A Guide to Theory and Contributions*, edited by Mark P. Leone, pp. 102–07. Carbondale: Southern Illinois University Press.
1972b "Archaeological Systems Theory and Early Mesoamerica." In *Contemporary Archaeology: A Guide to Theory and Contributions*, edited by Mark P. Leone, pp. 222–34. Carbondale: Southern Illinois University Press.
- Fritz, John M., and Fred T. Plog
1970 "The Nature of Archaeological Explanation." *American Antiquity* 35/4: 405–12.

- Geertz, Clifford
 1973 "Thick Description: Toward an Interpretive Theory of Culture." In *The Interpretation of Cultures*, edited by Clifford Geertz, pp. 3–30. New York: Basic Books.
 1983 "Dichte Beschreibung: Bemerkungen zu einer deutenden Theorie von Kultur." In *Dichte Beschreibung: Beiträge zum Verstehen kultureller Systeme*, edited by Clifford Geertz, pp. 7–43, Frankfurt: Suhrkamp.
- Gellner, Ernest
 1982 "What is Structuralism?" In *Theory and Explanation in Archaeology: The Southampton Conference*, edited by Colin Renfrew, M. J. Rowlands, and Barbara Abbott Segraves, pp. 97–123. New York: Academic Press.
- Goldberg, Marilyn Y.
 1999 "Spatial and Behavioural Negotiation in Classical Athenian City Houses." In *The Archaeology of Household Activities*, edited by Penelope M. Allison, pp. 142–61. New York: Routledge.
- Graham, Philip J., and Alexia Smith
 2012 "Integrating Household Archaeology and Archaeobotany: A Case Study from Ubaid Kenan Tepe, Southeastern Anatolia." In *New Perspectives on Household Archaeology*, edited by Bradley J. Parker and Catherine P. Foster, pp. 247–65. Winona Lake: Eisenbrauns.
- Hage, Per, and Frank Harary
 1983 *Structural Models in Anthropology*. Cambridge Studies in Social Anthropology 46. Cambridge: Cambridge University Press.
- Hammond, A. H.
 1971 "The New Archaeology: Toward a Social Science." *Science* 172: 119–20.
- Haviland, William A.
 1987 *Cultural Anthropology*. 5th edition. New York: Holt, Rinehart, & Winston.
- Heinrich, Ernst
 1972–75 "Haus, B. Archäologisch." *Reallexikon der Assyriologie* 4: 176–220.
- Hodder, Ian
 1982 *Symbols in Action: Ethnoarchaeological Studies of Material Culture*. Cambridge: Wiley.
 1987a "The Contextual Analysis of Symbolic Meanings." In *The Archaeology of Contextual Meanings*, edited by Ian Hodder, pp. 1–10. New Directions in Archaeology. Cambridge: Cambridge University Press.
 1987b "The Meaning of Discard: Ash and Domestic Space in Baringo." In *Method and Theory for Activity Area Research: An Ethnoarchaeological Approach*, edited by Susan Kent, pp. 424–48. New York: Columbia University Press.
 1989 "Post-Modernism, Post-Structuralism and Post-Processual Archaeology." In *The Meaning of Things. Material Culture and Symbolic Expression*, edited by Ian Hodder, pp. 64–78. London: Unwin Hyman.
- Kaplan, David
 1972 *Culture Theory*. Englewood Cliffs: Prentice-Hall.
- Kent, Susan
 1990 "Activity Areas and Architecture: An Interdisciplinary View of the Relationship between Use of Space and Domestic Built Environments." In *Domestic Architecture and the Use of Space: An Interdisciplinary Cross-cultural Study*, edited by Susan Kent, pp. 1–8. New Directions in Archaeology. Cambridge: Cambridge University Press.

- Kent, Susan, editor
 1987 *Method and Theory for Activity Area Research: An Ethnoarchaeological Approach*. New York: Columbia University Press.
 1990 *Domestic Architecture and the Use of Space: An Interdisciplinary Cross-cultural Study*. New Directions in Archaeology. Cambridge: Cambridge University Press.
- Kienlin, Tobias L.
 1998 "Die britische Processual Archaeology und die Rolle David L. Clarkes und Colin Renfrews: Herausbildung, Struktur, Einfluß." In *Theorie in der Archäologie: Zur englischsprachigen Diskussion*, edited by Manfred K. H. Eggert and Ulrich Veit, pp. 67–113. Tübinger archäologische Taschenbücher 1. Münster: Waxmann.
- Kohl, Karl-Heinz
 1990 "Bronislaw Kasper Malinowski (1884–1942)." In *Klassiker der Kulturanthropologie: Von Montaigne bis Margaret Mead*, edited by Wolfgang Marschall, pp. 227–47. Munich: Beck.
- Krafeld-Daugherty, Maria
 1994 *Wohnen im Alten Orient: Eine Untersuchung zur Verwendung von Räumen in altorientalischen Wohnhäusern*. Altertumskunde des Vorderen Orient 3. Münster: Ugarit-Verlag.
- Kramer, Carol
 1982 *Village Ethnoarchaeology: Rural Iran in Archaeological Perspective*. New York: Academic Press.
- Kreppner, Florian Janoscha, and Jochen Schmid
 2014 *Stratigraphie und Architektur des "Roten Hauses" von Tall Šēḫ Ḥamad/Dūr-Katlimmu mit Beiträgen von Jens Rohde und einer Abhandlung über die Holzkohlefunde von Rainer Gerisch*. Berichte der Ausgrabung Tall Šēḫ Ḥamad/Dūr-Katlimmu 11. Wiesbaden: Harrassowitz.
- Kroeber, A. L.
 1952 *The Nature of Culture*. Chicago: University of Chicago Press.
 1963 *Anthropology: Culture Patterns and Processes*. New York: Harcourt, Brace & World.
- Kümmel, Christoph
 2008 "Recht der Toten, rituelle Konsumtion oder Objektsammlung? Zur Konzeption von Grabbeigaben und ihrer Rückwirkung auf die Interpretation von Grabstörungen." In *Körperinszenierung, Objektsammlung, Monumentalisierung: Totenritual und Grabkult in frühen Gesellschaften; Archäologische Quellen in kulturwissenschaftlicher Perspektive*, edited by Christoph Kümmel, Beat Schweizer, and Ulrich Veit, pp. 473–94. Tübinger archäologische Taschenbücher 6. Münster: Waxmann.
 2009 *Ur- und frühgeschichtlicher Grabraub: Archäologische Interpretation und kulturanthropologische Erklärung*. Tübinger Schriften zur Ur- und Frühgeschichtlichen Archäologie 9. Münster: Waxmann.
- LaMotta, Vincent M., and Michael B. Schiffer
 1999 "Formation Processes of House Floor Assemblages." In *The Archaeology of Household Activities*, edited by Penelope M. Allison, pp. 19–29. New York: Routledge.
- Lawrence, Susan
 1999 "Towards a Feminist Archaeology of Households: Gender and Household Structure on the Australian Goldfields." In *The Archaeology of Household Activities*, edited by Penelope M. Allison, pp. 121–41. New York: Routledge.

- Leone, Mark P.
1998 "Symbolic, Structural, and Critical Archaeology." In *Reader in Archaeological Theory: Post-processual and Cognitive Approaches*, edited by David S. Whitley, pp. 49–68. New York: Routledge.
- Lévi-Strauss, Claude
1963 *Structural Anthropology*. Translated from the French by C. Jacobson and B. G. Schoepf. London: Penguin. Originally published in 1958.
1969 *The Elementary Structures of Kinship*. Translated from the French by James Harle Bell, John Richard von Sturmer, and Rodney Needham. Boston: Beacon Press.
- Malinowski, Bronislaw K.
1944 *A Scientific Theory of Culture and Other Essays*. Chapel Hill: University of North Carolina Press.
1945 *The Dynamics of Culture Change: An Inquiry into Race Relations in Africa*. New Haven: Yale University Press.
- Marom, Nimrod, and Sharon Zuckerman
2011 "Applying On-site Analysis of Faunal Assemblages from Domestic Contexts: A Case Study from the Lower City of Hazor." In *Household Archaeology in Ancient Israel and Beyond*, edited by Assaf Yasur-Landau, Jennie R. Ebeling, and Laura B. Mazow, pp. 37–54. Culture and History of the Ancient Near East 50. Leiden: Brill.
- Matthews, Wendy
2005 "Micromorphological and Microstratigraphic Traces of Uses of Space. In *Inhabiting Çatalhöyük: Reports from the 1995–99 Seasons*, edited by Ian Hodder, pp. 355–98. Çatalhöyük Research Project 4, McDonald Institute Monographs 38. Cambridge: McDonald Institute for Archaeological Research.
2012 "Defining Households: Micro-contextual Analysis of Early Neolithic Households in the Zagros, Iran." In *New Perspectives on Household Archaeology*, edited by Bradley J. Parker and Catherine P. Foster, pp. 183–216, Winona Lake: Eisenbrauns.
- McGuire, Randall H., and Michael B. Schiffer
1983 "A Theory of Architectural Design." *Journal of Anthropological Archaeology* 2: 277–303.
- Nishimura, Yoko
2012 "The Life of the Majority: A Reconstruction of Household Activities and Residential Neighborhoods at the Late-Third-Millennium Urban Settlement at Tiriş Höyük in Northern Mesopotamia." In *New Perspectives on Household Archaeology*, edited by Bradley J. Parker and Catherine P. Foster, pp. 347–72, Winona Lake: Eisenbrauns.
- Novák, Mirko, and Peter Pfälzner
2003 "Ausgrabungen im bronzezeitlichen Palast von Tall Mišrife/Qaṭna 2002: Vorbericht der deutschen Komponente des internationalen Kooperationsprojektes." *Mitteilungen der Deutschen Orient Gesellschaft* 135: 131–66.
2005 "Ausgrabungen im bronzezeitlichen Palast von Tall Mišrife/Qaṭna 2003: Vorbericht der deutschen Komponente des internationalen Kooperationsprojektes." *Mitteilungen der Deutschen Orient Gesellschaft* 137: 57–78.
- Otto, Adelheid
2006 *Alltag und Gesellschaft zur Spätbronzezeit: Eine Fallstudie aus Tall Bazi (Syrien)*. Subartu 19. Turnhout: Brepols.
- Parker, Bradley J., and Catherine P. Foster, editors
2012 *New Perspectives on Household Archaeology*. Winona Lake: Eisenbrauns.

Pfälzner, Peter

- 1986/87a "A Short Account of the Excavations in Tell Bdēri 1985." *Annales Archéologiques Arabes Syriennes* 36/37: 276–91.
- 1986/87b "The Excavations at Tell Bdēri 1986." *Annales Archéologiques Arabes Syriennes* 36/37: 292–303.
- 1988 "Tell Bdēri 1985. Bericht über die erste Kampagne mit Beiträgen von C. Becker, H. Dohmann und S. Kulemann." *Damaszener Forschungen* 3: 223–386.
- 1998/90 "Tall Bdēri 1985–1987," In "Archäologische Forschungen in Syrien (4)," *Archiv für Orientforschung* 36/37: 212–21.
- 1990 "The Development of a Bronze Age Town." In *The Near East in Antiquity: German Contributions to the Archaeology of Jordan, Palestine, Syria, Lebanon and Egypt*, edited by Susanne Kerner, pp. 63–79. Amman: Goethe-Institute.
- 1994 "Wohnen vor 4500 Jahren: Ergebnisse der Ausgrabungen auf dem Tall Bdēri/Nordost-Syrien." *Nürnberger Blätter zur Archäologie* 9: 1992–93.
- 1996 "Activity Areas and the Social Organisation of 3rd Millenium B.C. Households." In *Houses and Households in Ancient Mesopotamia* (papers read at 40th Rencontre Assyriologique Internationale, Leiden, July 5–8, 1993), edited by Klaas R. Veenhof, pp. 117–27. Publications de l'Institut Historique-Archéologique Néerlandais de Stamboul 78. Leiden: Nederlands Historisch-Archaeologisch Instituut te Istanbul.
- 2001 *Haus und Haushalt: Wohnformen des dritten Jahrtausends vor Christus in Nordmesopotamien*. Damaszener Forschungen 9. Mainz am Rhein: Philipp von Zabern.
- 2002/03 "Die Politik und der Tod im Königtum von Qatna." *Nürnberger Blätter zur Archäologie* 19: 85–102.
- 2007 "Archaeological Investigations in the Royal Palace of Qaṭna." In *Urban and Natural Landscapes of an Ancient Syrian Capital: Settlement and Environment at Tell Mishrifeh/Qatna and in Central-Western Syria* (proceedings of the International Conference held in Udine, 9–11 December 2004), edited by Daniele Morandi Bonacossi, pp. 29–64. Studi Archeologici su Qaṭna 1. Udine: Forum.
- 2011a "Das systemische und das archäologische Inventar der Königsgruft von Qatna und seine Interpretationsmöglichkeiten." In *Interdisziplinäre Untersuchungen zur Königsgruft von Qaṭna*, edited by Peter Pfälzner, pp. 39–52. Qaṭna Studien 1. Wiesbaden: Harrassowitz.
- 2011b "Die Königsgruft von Qaṭna als architektonisches Ensemble." In *Interdisziplinäre Untersuchungen zur Königsgruft von Qaṭna*, edited by Peter Pfälzner, pp. 69–84. Qaṭna Studien 1. Wiesbaden: Harrassowitz.
- 2011c "Die Chronologie der Königsgruft von Qaṭna." In *Interdisziplinäre Untersuchungen zur Königsgruft von Qaṭna*, edited by Peter Pfälzner, pp. 55–67. Qaṭna Studien 1. Wiesbaden: Harrassowitz.
- 2012 "How did They Bury the Kings of Qatna?" In *(Re-)Constructing Funerary Rituals in the Ancient Near East* (proceedings of the First International Symposium of the Tübingen Post-Graduate School "Symbols of the Dead" in May 2009), edited by Peter Pfälzner, Herbert Niehr, and Ernst Pernicka, pp. 205–20. Qaṭna Studien Supplementa 1. Wiesbaden: Harrassowitz.

Pfälzner, Peter, editor

- 2011 *Interdisziplinäre Untersuchungen zur Königsgruft von Qaṭna*. Qaṭna Studien 1. Wiesbaden: Harrassowitz.

Pfälzner, Peter, and Heike Dohmann-Pfälzner

- 2011 "Die Gruft VII. Eine neu entdeckte Grabanlage unter dem Königspalast von Qaṭna." *Mitteilungen der Deutschen Orient Gesellschaft* 143: 63–139.

Plog, Fred T.

- 1975 "Systems Theory in Archaeological Research." *Annual Review of Anthropology* 4: 207–24.

- Rainville, Lynn
2012 "Household Matters: Techniques for Understanding Assyrian Houses." In *New Perspectives on Household Archaeology*, edited by Bradley J. Parker and Catherine P. Foster, pp. 139–64. Winona Lake: Eisenbrauns.
- Rapoport, Amos
1990 "Systems of Activities and Systems of Settings." In *Interdisziplinäre Untersuchungen zur Königsgruft von Qaṭna*, edited by Peter Pfälzner, pp. 9–20. Qaṭna Studien 1. Wiesbaden: Harrassowitz.
- Redman, Charles L.
1991 "In Defence of the Seventies: The Adolescence of New Archeology." *American Anthropologist* 93: 295–307.
- Robins, Gay
1990 *Beyond the Pyramids: Egyptian Regional Art from the Museo Egizio, Turin*. Atlanta: Emory University Museum of Art and Archaeology.
- Rosen, Arlene M.
2012 "Shifting Household Economics of Plant Use from the Early to Late Natufian Periods of the Southern Levant." In *New Perspectives on Household Archaeology*, edited by Bradley J. Parker and Catherine P. Foster, pp. 165–82. Winona Lake: Eisenbrauns.
- Salmon, Merrilee H.
1978 "What Can Systems Theory Do for Archaeology?" *American Antiquity* 43: 174–83.
- Samuel, Delwen
1999 "Bread Making and Social Interactions at the Workmen's Village of Amarna." *World Archaeology* 31/1: 121–44.
- Sanders, Donald
1990 "Behavioural Conventions and Archaeology: Methods for the Analysis of Ancient Architecture." In *Domestic Architecture and the Use of Space: An Interdisciplinary Cross-cultural Study*, edited by Susan Kent, pp. 43–72. Cambridge: Cambridge University Press.
- Schiffer, Michael B.
1972 "Archaeological Context and Systemic Context." *American Antiquity* 37/2: 156–65.
1976 *Behavioral Archaeology*. New York: Academic Press.
1985 "Is There a Pompeii Premise in Archaeology?" *Journal of Anthropological Research* 41: 18–41.
1987 *Formation Processes of the Archaeological Record*. Albuquerque: University of New Mexico Press.
- Schiffer, Michael B.; Theodore E. Downing; and Michael McCarthy
1981 "Waste Not, Want Not: An Ethnoarchaeological Study of Refuse in Tucson, Arizona." In *Modern Material Culture: The Archaeology of Us*, edited by R. A. Gould and M. B. Schiffer, pp. 68–86. New York: Academic Press.
- Shahack-Gross, Ruth
2011 "Household Archaeology in Israel: Looking into the Microscopic Record." In *Household Archaeology in Ancient Israel and Beyond*, edited by Assaf Yasur-Landau, Jennie R. Ebeling, and Laura B. Mazow, pp. 27–35. Culture and History of the Ancient Near East 50. Leiden and Boston: Brill.

- Singer-Avitz, Lily
2011 "Household Activities at Tel Beersheba." In *Household Archaeology in Ancient Israel and Beyond*, edited by Assaf Yasur-Landau, Jennie R. Ebeling, and Laura B. Mazow, pp. 275–301. Culture and History of the Ancient Near East 50. Leiden and Boston: Brill.
- Sommer, Ulrike
1991 *Die geographische Ausrichtung bandkeramischer Häuser: Zur Entstehung archäologischer Fundvergesellschaftungen; Versuch einer archäologischen Taphonomie*. Universitätsforschungen zur Prähistorischen Archäologie 6, Studien zur Siedlungsarchäologie 1. Bonn: Habelt.
- Stellrecht, Irmtraut
1993 "Interpretative Ethnologie: Eine Orientierung." In *Handbuch der Ethnologie*, edited by Thomas Schweizer, Margarete Schweizer, and Waltraud Kokot, pp. 29–78. Berlin: D. Reimer.
- Stevenson, Marc G.
1982 "Toward an Understanding of Site Abandonment Behavior: Evidence from Historic Mining Camps in the Southwest Yukon." *Journal of Anthropological Archaeology* 1: 237–65.
- Tourtellot, Gair
1988 "Developmental Cycles of Households and Houses at Seibal." In *Household and Community in the Mesoamerican Past*, edited by Richard R. Wilk and Wendy Ashmore, pp. 97–120. Albuquerque: University of New Mexico Press.
- Tringham, Ruth
2012 "Households through a Digital Lens." In *New Perspectives on Household Archaeology*, edited by Bradley J. Parker and Catherine P. Foster, pp. 81–120. Winona Lake: Eisenbrauns.
- Ullah, I. I. T.
2012 "Particles of the Past: Microarchaeological Spatial Analysis of Ancient House Floors." In *New Perspectives on Household Archaeology*, edited by Bradley J. Parker and Catherine P. Foster, pp. 123–38, Winona Lake: Eisenbrauns.
- Vila, E.
2011 "Les restes de faune dans le complexe funéraire royal de Qatna." In *Interdisziplinäre Untersuchungen zur Königsgruft von Qatna*, pp. 383–402. Qatna Studien 1. Wiesbaden: Harrassowitz.
- von Pilgrim, Cornelius
1996 *Elephantine XVIII. Untersuchungen in der Stadt des Mittleren Reiches und der Zweiten Zwischenzeit*. Archäologische Veröffentlichungen 91. Mainz am Rhein: Philipp von Zabern.
- Watson, R.
1991 "What the New Archaeology Has Accomplished." *Current Anthropology* 32: 275–91.
- Wilk, Richard R., and Wendy Ashmore, editors
1988 *Household and Community in the Mesoamerican Past*. Albuquerque: University of New Mexico Press.
- Wilk, Richard R., and William L. Rathje
1982 "Household Archaeology." *American Behavioral Scientist* 25/6: 617–39.
- Yasur-Landau, Assaf; Jennie R. Ebeling; and Laura B. Mazow, editors
2011 *Household Archaeology in Ancient Israel and Beyond*. Culture and History of the Ancient Near East 50. Leiden and Boston: Brill.