

HOUSEHOLD STUDIES IN COMPLEX SOCIETIES

**HOUSEHOLD STUDIES
IN COMPLEX SOCIETIES**
(MICRO) ARCHAEOLOGICAL
AND TEXTUAL APPROACHES

edited by

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with contributions by

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Cynthia Robin, Kate Spence, Neal Spencer, Elizabeth C. Stone,
and Tasha Vorderstrasse

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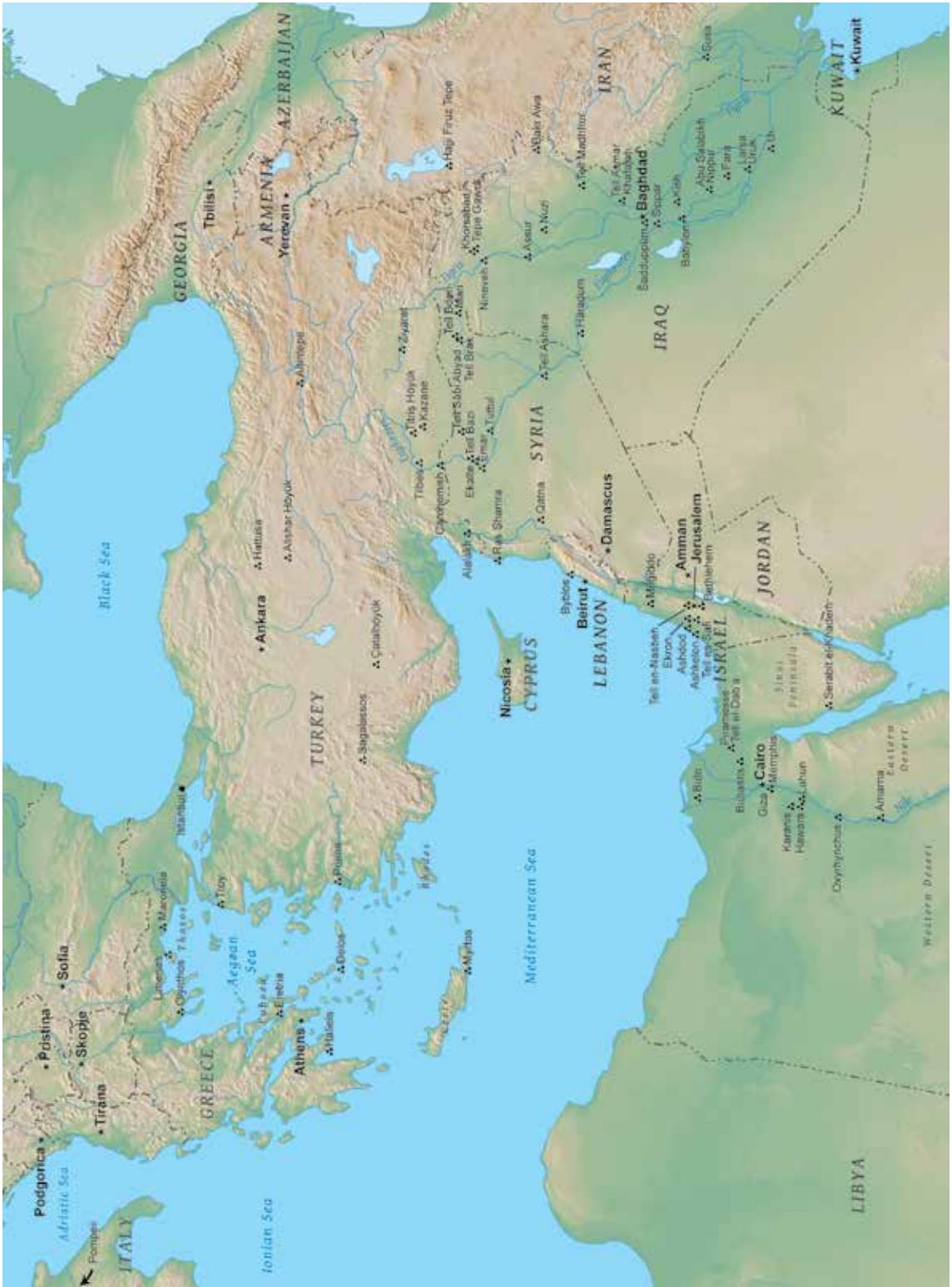
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PREFACE

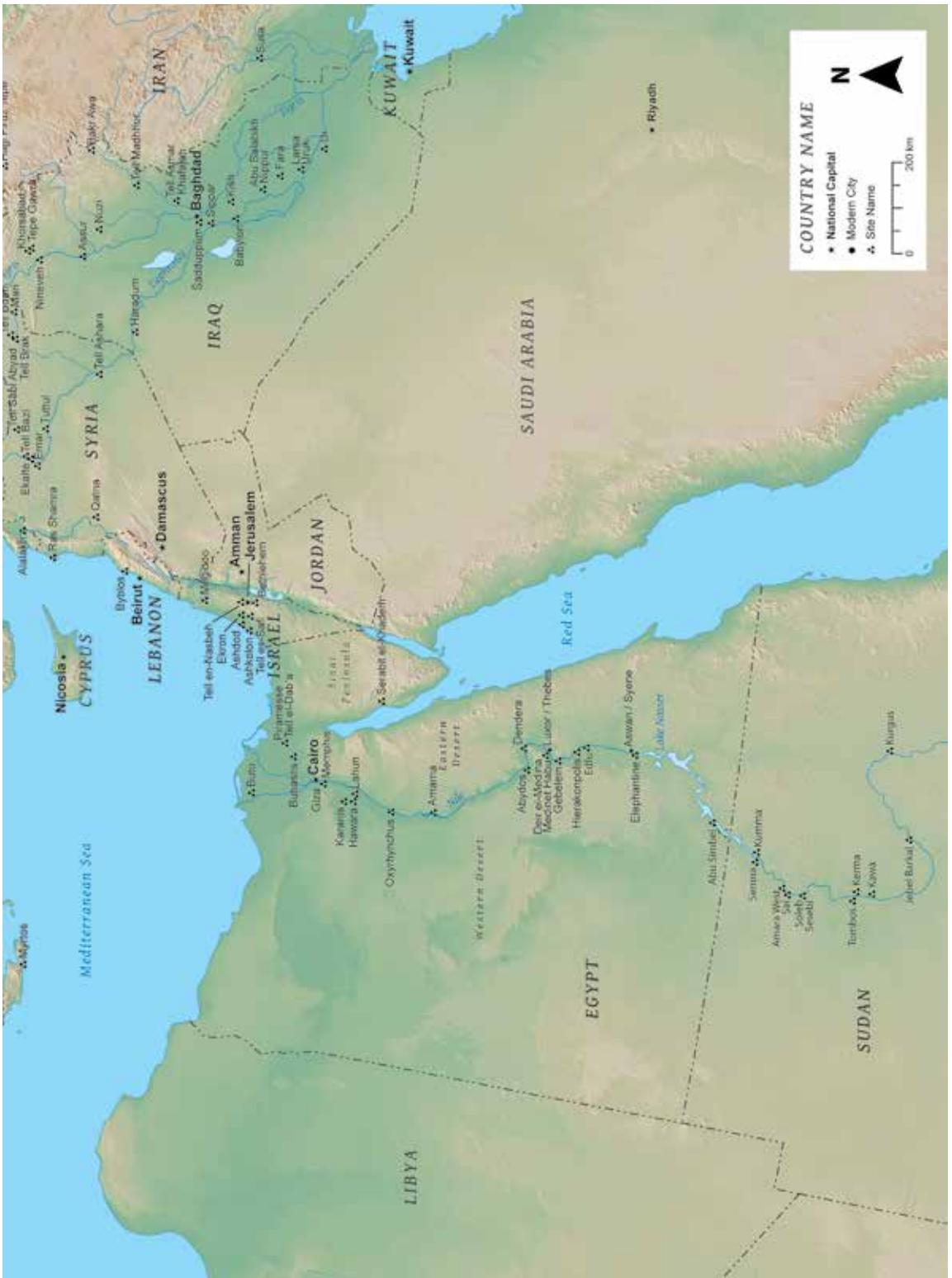
The current volume is the result of a two-day seminar at the Oriental Institute of the University of Chicago held on March 15–16, 2013. A wide-ranging group of scholars specialized in the Old and New World assembled from all over Europe and the US to find fruitful new approaches in the study of households in complex societies. By bringing together archaeology, science, and texts the speakers and participants in the conference exchanged their different approaches and techniques in uncovering household behavior from the material record and discussed their suitability for the respective region and site. Building on the methodological groundwork laid out in a number of recent publications on household archaeology the conference and assembled papers open up new avenues of research in this new subdiscipline and revealed problems and disparities with which the field is still struggling. It is hoped that the variety of case studies presented in this volume will further inspire the interested reader to establish research and excavation strategies that contribute to the development of household archaeology in the various regions covered in the different papers and beyond.

The idea for this conference sprang from my dissertation research on a neighborhood of the ancient city Avaris, modern Tell el-Dabʿa in the eastern Nile delta, once capital of the first foreign rulers over Egypt. I am particularly grateful to Manfred Bietak for his constant support, advice, and encouragement throughout my studies and in developing this project. In the same way I am indebted to Kate Spence for many fruitful discussions and thought-provoking ideas that shaped the outline of this conference and publication.

I would like to thank the Oriental Institute Chicago for welcoming me and providing such a stimulating work environment. My thanks go to Gil Stein, Director of the Oriental Institute, for his many ideas on the topic and generous funding of a large group of particularly international speakers. In addition, Neal Spencer and Adelheid Otto were able to participate in the conference due to the funding of the British Museum in London and the German Archaeological Institute in Berlin. I would like to thank Christopher Woods for his guidance and advice throughout the organization of the conference and his continuous support. The logistics of this conference would have been impossible without the knowledge and skills of Mariana Perlinac and Brittany Mullins. Thank you for dedicating your time to the success of this endeavor and creating such a welcoming atmosphere for all the participants. I would like to extend my gratitude to Yorke Rowan, Donald Whitcomb, and Jack Green for chairing sessions, and David Schloen for leading the roundtable discussion. My thanks go to the editors Tom Urban and Leslie Schramer for their expertise and skills in producing such a high-quality publication. Many thought-provoking and helpful comments were added by the anonymous reviewers. Last but not least I would like to thank all the speakers and the three additional authors, Aren Maeir, Brian Muhs, and Tasha Vorderstrasse, for their diverse and stimulating contributions to this book.



Map of sites in this volume



Map of sites in this volume

Time Line

Anatolia	Mesopotamia	Years B.C.	Levant	Egypt
		10000	Pre-Pottery Neolithic A	
Aceramic Neolithic		8000	Pre-Pottery Neolithic B	
Ceramic Neolithic	Jarmo Hassuna Samarra Halaf	6000	Pottery Neolithic Period A Pottery Neolithic Period B	Neolithic
Chalcolithic	Ubaid	4300	Chalcolithic	Predynastic Period Naqada I-III
	South: Uruk North: Tepe Gawra	3300		
Early Bronze Age I A-B	Protoliterate Jemdet Nasr	3000	Early Bronze I	
	Early Dynastic I	2900		Early Dynastic Period Dynasties 1-2
		2800	Early Bronze II	
	Early Dynastic II	2700		
Early Bronze Age II A-B		2600		
	Early Dynastic III	2500	Early Bronze III	Old Kingdom Dynasties 3-8
		2400		
	Akkadian Period	2300		
Early Bronze Age III A-C		2200	Intermediate Bronze Age (Early Bronze IV / Middle Bronze I)	First Intermediate Period Dynasties 9-10
	Gutian Period: Dynasty of Lagash	2100		
	Ur III Dynasty	2000		
Assyrian Colonists (Middle Bronze I-III)	Isin-Larsa	1900	Middle Bronze I (Middle Bronze IIA)	Middle Kingdom Dynasties 11-12
		1800		
	Old Assyrian Period	1700	Middle Bronze II-III (Middle Bronze IIB-C)	Second Intermediate Period Dynasties 13-17
Old Hittite Kingdom (Middle Bronze IV- Late Bronze IIA)	Middle Assyrian Period	1600		
		1500	Late Bronze I (Late Bronze IA-B)	New Kingdom Dynasties 18-20

Anatolia	Mesopotamia	Years B.C., A.D.	Levant	Egypt
New Hittite Kingdom (Late Bronze IIA-B)	Kassite Period	1400		
		1300	Late Bronze II (Late Bronze IIA-B)	
Assyrian Domination		1200	Assyrian Domination	
Neo-Hittites (Iron I)		1100	Iron I (Iron IA-B)	
		1000		Third Intermediate Period Dynasties 21-25
		900		
Phrygians (Iron II)	Neo-Assyrian Empire	800	Iron II (Iron IIA-C)	
		700		
Lydians (Iron III) Carians Cimmerians	Neo-Babylonian Empire	600	Iron III	Late Period Dynasties 26-31
Achaemenid Empire		500	Achaemenid Empire	1st Achaemenid Period Dynasty 27
		400		2nd Achaemenid Period Dynasty 31
Hellenistic Period		300	Hellenistic Period	Greco-Roman Period
Attalid Period	Seleucid Period	200	Seleucid Period	Ptolemaic Period
		100		
Roman Period		0		Roman Period
	Parthians	100		
	Sassanians	200		
Byzantine Period		300	Byzantine Period	Coptic Period
		400		
		500		
		600		
Islamic Period			Islamic Period	



Seminar participants

From left to right: Top row: Adelheid Otto, Neal Spencer

Second row: Kate Spence, Lisa Nevett, Nadine Moeller, Heather Baker, Elizabeth Stone, Jens-Arne Dickmann

Third row: Peter Miglus, Peter Pfälzner, Kristin De Lucia, Nicholas Picardo, Aaron Brody

Front row: Miriam Müller, Felix Arnold, Lynn Rainville, Cynthia Robin, Paolo Brusasco, David Schloen.

Not pictured: Aren Maeir, Brian Muhs, and Tasha Vorderstrasse who did not participate in the seminar.

Photo by Craig Tews

Introduction

Household Studies in Complex Societies: (Micro) Archaeological and Textual Approaches

Miriam Müller, The Oriental Institute

A house is medium and outcome of social practice (after Bourdieu 1977)

The picture on the cover of this book is an ancient Egyptian model of a baking and brewing scene from the First Intermediate Period.¹ It is one example of numerous wooden models that were found in elite tombs of this period and the following early Middle Kingdom. As inherent to the ancient Egyptian belief, these models functioned as guarantee for an enduring provision with staples in the afterlife. The model from the Oriental Institute collections (OIM E10514) depicts the manufacture of the two most important supplies that were wished for — bread and beer — essentials that were produced in almost every single household. But these models were not only highly significant within the ancient Egyptian imagination of the afterlife; they also depict the production of a specific good in its different stages. These models thus furnish the present-day viewer with an idea of a simple household activity that at a second glance is not that simple when it comes to locating the different steps of the manufacturing process in the archaeological record.

Apart from models, ancient Egyptian culture presents us with plenty of other sources for typical household activities. Not only tomb paintings, but also accompanying texts naming the various steps in the process give us a great deal of information. This wealth of data has always made Egypt a distinguished candidate for comparisons with neighboring cultures lacking a similar set of sources. The ancient Egyptian presentation of activities such as metal-working, spinning, weaving, or pottery-making in text and image has strongly influenced the interpretation of these manufacturing processes in the entire ancient Near East (e.g., Ziffer 1990, p. 26; Daviau 1993, pp. 43–47). Depictions and models were for a long time considered the primary source for an understanding of these activities. It was only in the late nineteenth and the beginning of the twentieth century that large-scale excavations of ancient Egyptian cities and villages such as Amarna (Peet and Woolley 1923; Frankfort and Pendlebury 1933; Pendlebury 1951) and Deir el-Medina (Bruyère 1939) revealed a considerable sample of house layouts and thus added the archaeological record to the picture of household activities known from the artistic representations.² These excavations were, however, focused on the exposure of large areas with up to two hundred workmen uncovering whole neighborhoods in only a

¹ Compare the time line in the front of the book for the chronological range of the different case studies presented in this volume.

² Compare the map in the front of the book for the location of the different sites and case studies presented in this volume.

couple of days. Detailed investigations of house contents and accounts of all the finds in their respective findspots were almost always lacking. Studies of houses and households in Egyptology have been traditionally focused on the analysis of house architecture, especially size and specific built-in features (exemplary Ricke 1932). Investigations of social concepts such as household composition, family models, and social hierarchy have been almost exclusively based on textual evidence (e.g., D. Franke 1983; Moreno García 2012). These studies until quite recently did not consider artifacts found within the domestic sphere that could give evidence for the activities carried out inside the house and thus display household behavior. This approach is all the more understandable in view of the late focus on settlement archaeology from the mid-twentieth century onward and the usual separation of architecture and finds in the publications. With this desideratum, but on the other hand a purportedly good knowledge of household activities as they were represented in the artistic record, household archaeology as it is already well integrated in the archaeological research of neighboring regions has not yet attracted much attention in Egyptology. With the experience of now long-term settlement excavations and refined techniques in the recovering of arti- and ecofacts as well as new approaches in the presentation of results (e.g., Kemp and Stevens 2010), the archaeology of the domestic sphere has received a stronger consideration in Egyptology. The 2013 Oriental Institute Postdoctoral Seminar and conference proceedings present for the first time a wide array of different case studies within the latest developments in household studies in Egypt. It is embedded into the contextual frame of innovative research in household archaeology in the entire Near East and the Mediterranean as well as an overview on household archaeology in the New World, where the development of this new subdiscipline took its beginnings.

The integration of Egyptology in this very promising new field of archaeological research was, however, only the initial idea for this conference. By advocating an integrated approach of examining the archaeological, micro-archaeological, and textual evidence for the study of households, it was hoped to stimulate the discussion in an innovative way and present new avenues in the analysis of households that promise to tackle the array of problems that the discipline is still struggling with. Two recent conferences on household archaeology in the Near East and their resulting publications, *Household Archaeology in Ancient Israel and Beyond* (Yasur-Landau, Ebeling, and Mazow 2011) and *New Perspectives on Household Archaeology* (Parker and Foster 2012) contributed significantly to laying out the methodological groundwork for household studies in this region. The 2012 publication especially discusses important aspects such as terminology, the problem of site-formation processes, and the requirement of representative samples and explores ways of innovative future approaches such as the possibilities of digital household archaeology, online presentation, 3-D reconstructions, and online forums of exchange. The 2011 volume, on the contrary, is a fine example of a publication with a regional focus that engages in new directions in archaeology in an area where households were primarily investigated to understand the interaction of different ethnicities heavily influenced by the predominant text source, the biblical narrative. The different case studies thus focus on artifact analysis and the implementation of new scientific techniques to avoid the strong bias imposed by the texts. The scientific approach subsumed under the term micro-archaeology allows examining the microscopic record, minuscule objects, so-called micro-debris, but also different materials, sediments, ecofacts — typically invisible to the excavator's eye (Weiner 2010). Micro-archaeology is also strongly featured in the case studies of the 2012 volume, here however applied mostly at prehistoric sites. These publications

created an excellent platform for the integration of household archaeology in the Near East and inspired the exploration of this new field for neighboring regions.

In this respect, the present publication seeks to further household studies in a concerted effort for the entire Near East and Mediterranean and tries to benefit from the already long history of household archaeology in the New World by combining an overview on recent advances and a response from the Mesoamerican perspective. The presentation of a wide array of case studies from different regions pursues the goal of exhibiting a large selection of approaches in household archaeology with their specific ways of accessing the material, but also problems of tackling the study of households. As often as texts are mentioned as a source for a strong bias in the interpretation of households and are therefore explicitly excluded from household studies in various publications (e.g., Yasur-Landau, Ebeling, and Mazow 2011), the conference and proceedings specifically included the integration of texts as one major source of evidence. The different contributions were thus aimed at presenting a combined archaeological, historical, and scientific approach, the integration of the archaeological, the micro-archaeological, and the textual records, as far as this was possible for the respective study and site. In order to complement previous publications, the case studies focus on historical periods and literate societies and are subsumed under the term “household studies in complex societies.” It is hoped that the selection of examples will encourage future projects in this context benefitting from the broad range of options presented in this volume.

Household Archaeology in the Ancient Near East and Mediterranean

Household archaeology is a recent trend that has been adopted by the different archaeological disciplines in very divergent ways. Naturally, regions with a large sample of settlement remains such as the Levant are at the forefront of implementing new techniques and developing this new subfield in archaeology. Areas traditionally focused on sacred and funerary architecture such as Egypt have neglected the domestic sphere for a long time and lag behind those recent developments in household archaeology. Before I explore the different themes of the conference and the proceedings, I would like to review the state of household archaeology in the areas that are touched upon in the different contributions to this volume. Since recent publications have summarized the history of the discipline extensively (Hardin 2011; Parker and Foster 2012, pp. 1–12), I refrain from doing so here, but rather include important methodological steps that were taken over the years in an overview of the different regions. Since the Near East and Egypt are the main focus of this volume they are treated in three separate sections, on Mesopotamia, the Levant, and Anatolia, followed by Egypt including ancient Nubia (Sudan). A short overview is given on household studies in the Mediterranean with Greece, the Aegean, and Italy. Cross references for the influential advances in coining and carving out theoretical and methodological principles of the discipline in New World archaeology are interspersed throughout the text (see also Rainville, this volume).

It was in the 1980s that the term “household archaeology” was formulated for the first time in Richard Wilk and William Rathje’s seminal issue of the *American Behavioral Scientist* (Wilk and Rathje 1982) and it quickly moved into the spotlight of processual and post-processual debates in archaeology. Based on the principles laid out in Wilk and Rathje’s, but also Arnould’s, Ashmore’s, and Netting’s publications (Wilk, Netting, and Arnould 1984; Wilk and Ashmore 1988), household archaeology filled the gap by a stronger focus on the individual,

his activities, and the material correlate. Extrapolating behavior in the archaeological record promised to lead to a better comprehension of social processes and could thus contribute to answer the big questions that have always driven scholars in the understanding of ancient cultures. The focus on households as “the smallest and most abundant activity group” (Wilk and Rathje 1982, p. 618) was thus a natural consequence. Household archaeology differs from the study of the built environment in the way that it tries to infer behavior from the archaeological record. The new field comprises the social, material, and behavioral components, the demographic unit often based on kinship, the dwelling, its installations, and artifacts found therein and the activities conducted by the household inside the dwelling. It is important to make clear distinctions between all three components — family, house, and household — that are mostly intertwined, but do not necessarily have to be (Bender 1967; Yanagisako 1979). In the same way, the terminology, especially the terms “house” and “household,” need to be defined by the respective author (Parker and Foster 2012, p. 5; see Rainville, this volume). They are used here as the architectural frame, the dwelling and the underlying social concept, the co-residential group.

Ever since archaeologists excavated the city of Babylon and exposed vast neighborhoods with a multitude of private houses, scholars have been interested in domestic architecture, its concept, and origins (e.g., Reuther 1926). But just as for Egypt, artifacts were not meticulously recorded and as a consequence not considered for inferences on household activities. Lagging behind the development of this major part in household studies, it comes as no surprise that the advances made in the development of the new field of household archaeology by mostly Mesoamerican scholars in the 1980s and 1990s (see already Flannery 1976) were only rarely integrated in the archaeological research in the Near East. However, as early as the 1960s a functional analysis of four houses was included in the excavation publication of the prehistoric site Tal-i-Iblis in Iran (Evet 1967; Caldwell and Sarraf 1967). The authors raised a number of important questions and concerns about their model of examination, but nevertheless formulated a first approach to the study of households. It was not until the 1980s that the interest for household analyses returned to the literature. Three contributions in the thorough consideration of domestic buildings and their contents dealt with Early Dynastic houses in the Diyala region (Henrickson 1981, 1982), the Neolithic settlement of Hajji Firuz Tepe in northwestern Iran (Voigt 1983), and the Level 2 house at Tell Madhhur in central Iraq (Roaf 1989).³ Elizabeth Henrickson examines house sizes and artifact patterning in order to differentiate wealth distribution and family structure. By analyzing architecture, specific built-in features, pottery, and small finds, taking into account ecofacts and considering ethnographic data, both Mary Voigt and Michael Roaf attempt to draw conclusions on household composition, economy, and social structure — Roaf, however, in a very cautious and negativistic attitude toward the accuracy of his assumptions. Voigt’s major contribution is the discussion of activity-area analysis, the application to the archaeological record, and the recognition of its limitations. A pioneering work in the integration of archaeology and texts is Elizabeth Stone’s investigation of two different neighborhoods from the Old Babylonian

³ Three dissertations — by Gnivecki (1983), J. A. Franke (1987), and Chavalas (1988) — dealing with spatial organization and discard behavior in an Akkadian dwelling, artifact patterning in Old Babylonian houses at Nippur, and a functional analysis based on

artifact distribution in two dwellings at Tell Ashara, Terqa, have unfortunately never been published, but essentially made use of methods and theory of household archaeology (see, however, Gnivecki 1987).

period in Nippur (1981, 1987; see also Gates 1988). Stone is able to correlate cuneiform tablets found in the houses with the built environment and can hence deduce important aspects of the households' composition, also using ethnographic analogy. In an excellent review of Stone's highly regarded work, Nicholas Postgate (1990) predicts the invaluable role of micro-archaeology, at that time only in its beginnings, in support of the analysis of activity areas based on artifact distribution and specific architectural features (Matthews and Postgate 1994; see Rainville 2005a, 2012, this volume for an overview on the techniques adopted in excavations today). In 1992 and 1993, two conferences, an international colloquium in Damascus and the 40th Rencontre Assyriologique Internationale, dealt for the first time in a diachronic perspective with the long neglected topic of domestic architecture. *Les maisons dans la Syrie antique du III^e millénaire aux débuts de l'Islam* (Castel, al-Maqdissi, and Villeneuve 1997) and *Houses and Households in Ancient Mesopotamia* (Veenhof 1996) presented a variety of case studies from different sites, ethno-archaeological perspectives, textual studies, and in a few instances the useful integration of archaeology and texts. In particular, first attempts were made in the formulation of methodological steps for the investigation of domestic architecture that created a starting point for the development of this new subfield in archaeology (see also Nicholas 1990). The first study making use of principles of household archaeological theory is Marc Verhoeven's examination of the late Neolithic Burnt Village of Tell Sabi Abyad in northern Syria (Verhoeven 1999). In applying theories of space and spatial analysis (Clarke 1977), Verhoeven draws on ethnographic data (Krafeld-Daugherty 1994; Kramer 1979, 1982; Watson 1979), recent developments in the study of activity areas (Kent 1984, 1987, 1990; see also Pfälzner, this volume), material culture (Hodder 1982, 1989; Hodder et al. 1995), and the built environment as social space (Bourdieu 1977, 1990; Lévi-Strauss 1963, 1991; Rapoport 1969, 1982; see also Picardo, this volume). He considers a number of important factors for a successful spatial analysis: the availability of analyses of all recovered arti- and ecofacts and thus a collaboration of specialists from different areas, a representative sample in the quantity of objects, and site formation processes (exemplary Schiffer 1987), which essentially determine the potential of a spatial (household) analysis. Determining the vertical and horizontal distribution of artifacts and what factors led to their final position is crucial for the analysis of activity areas. Following Verhoeven, Peter Pfälzner's (2001) publication on third-millennium houses from northern Mesopotamia inspires in many aspects. The author presents a detailed discussion of the theoretical and methodological principles of household archaeology and considers the taphonomy of finds. By using an individual approach for the analysis of households and ethno-archaeological models he examines a large number of dwellings from nineteen different sites in Syria, thus drawing conclusions about society and urbanism from a representative sample in a diachronic perspective. In the same context, Adelheid Otto (2006), with her detailed functional analysis of the houses in the Weststadt of Tell Bazi in northern Syria, exemplifies household archaeological approaches for a large sample of houses from one neighborhood and includes scientific analyses and textual sources for her examination of Late Bronze Age society.⁴ Stone's trigger into the direction of an integrated archaeological and historical analysis has stood for a long time on its own, until scholars such as Paolo Brusasco (1999–2000, 2004, 2007) and Beate Jahn (2005) dealing with

⁴ See also Starzmann 2007 for an analysis of the domestic architecture of Early Dynastic Fara/Shuruppak and Ascalone, Peyronel, and Spreafico 2014

for a residential area at Tell Mardikh/Ebla from the Middle Bronze Age.

house archives of the second millennium, and Heather Baker (2004) with the first millennium B.C. in Babylonia, took up on this important endeavor. This worthwhile approach is, however, surprisingly underrepresented in current overviews on household studies in the Near East (Parker and Foster 2012; also noted by Routledge 2013, p. 215).

Especially in recent years, household archaeology in the Levant has developed in a different direction than in the neighboring disciplines. It is the region of modern-day Israel and Palestine, Jordan, Lebanon, western Syria, and southeastern Turkey where most of the innovative research is undertaken that furthers the new field to a great extent. Scholars have always been interested in understanding the interaction of the different ethnicities in this region, in particular between Israelites and Philistines, which very much relies on analyzing the private sphere and thus the realm of the household (see papers by Brody and Maeir, this volume). Extensive settlement remains have been excavated in the Levant and in more than a few instances this comprises the favorable situation of dwellings buried in a “moment of time” due to earthquakes and military conflicts in this troubled region that saw the intervention of foreign powers and provided the ground for many battles. In particular, two publications introduced a new perspective on Bronze and Iron Age domestic architecture, its potential for retrieving behavior from the archaeological record, and its relevance for the understanding of wider social processes in this region (Stager 1985; Daviau 1993). Lawrence Stager also stresses the importance of integrating textual sources in the study of households — with the biblical narrative both blessing and curse for its potential and bias (Yasur-Landau, Ebeling, and Mazow 2011). In the late 1990s and early 2000s, many scholars then included household archaeological approaches in the investigation of their respective site (see already Levy and Holl 1987; Singer-Avitz 1996, 2011; Ilan 2001; Chesson 2003, 2012; Gadot and Yasur-Landau 2006; Panitz-Cohen 2006, 2011; Hardin 2010, 2011; Brody 2011; Shai et al. 2011; Chadwick and Maeir 2012; Özbal 2012)⁵ and also brought to light aspects of the long overlooked Canaanite culture (Yasur-Landau 2010). Based on his detailed examination of households in Late Bronze Age Ugarit and domestic space in Iron Age Israel, David Schloen (2001) proposes a patrimonial household model for the Canaanite and Israelite societies. A diachronic perspective on housing in the southern Levant gives a collection of articles dealing with Neolithic housing, constructional, functional, and social aspects of the four-room house, the model Israelite dwelling, and Roman and Byzantine houses published in a special issue of *Near Eastern Archaeology* with the theme *House and Home in the Southern Levant* (Herr 2003). Excavations in the Levant are also at the forefront of implementing the wide array of new micro-archaeological approaches in the study of households (see Yasur-Landau, Ebeling, and Mazow 2011, and Parker and Foster 2012, pp. 1–12, for an overview). The Levant is thus an inspiring example for a successful integration of household archaeology in research agendas and excavations projects that will certainly stimulate the development of this new field in neighboring regions within the coming years.

In Anatolian archaeology,⁶ Neolithic households have attracted most attention for their unusual composition in neighborhood clusters without separating public space, prominently expressed by the multitude of articles dealing with households in all their different aspects at Çatalhöyük (e.g., Hodder and Cessford 2004; recently Tringham and Stevanovic 2012). The

⁵ See also Laura Mazow’s dissertation on Tell Miqne/Ekron (2005).

⁶ This part focuses on the Anatolian plateau while southeastern Turkey is treated as part of the northern Levant and upper Mesopotamia.

site is also the birthplace of what is now called micro-archaeology with extensive studies such as micro-stratigraphy and micro-morphology (e.g., W. Matthews 2005; see also Rainville, this volume). A major problem of household studies of these early sites is the distinction of separate units as Neolithic sites are often characterized by room clusters. The strong focus on Neolithic sites is so far only rarely paralleled by household studies from later periods such as from the Lydian period at Sardis (Cahill 2000) and the Roman and Byzantine periods at Sagalassos (Putzeys et al. 2004).

As already outlined, Egypt lags considerably behind the neighboring disciplines in the integration of household archaeology and developments in this new subfield. Impressive monumental and funerary remains have always steered attraction away from the humbler vestiges. However, with a renewed focus on settlement archaeology from the 1960s onward, the archaeology of the domestic sphere regained attention with refined excavation techniques and thus the exposure of smaller areas with the meticulous recording of arti- and ecofacts (see the papers by Spence and Picardo, this volume). One of the first attempts to consider artifact distribution and the role of post-depositional processes in the archaeological record of houses are the excavations in the Amarna workmen's village (or Walled Village) in the 1980s (for an overview, see Kemp 1984, 1986, 1987, 1989, 1995; see also Kemp, Samuel, and Luff 1994). Apart from the New Kingdom capital Amarna in Middle Egypt, the village for the workmen in the tombs of the Valleys of the Kings and Queens Deir el-Medina, the pyramid settlement of Sesostri II at Lahun (or Kahun), the Nubian fortresses with civic architecture within the fortifications, and Greco-Roman settlements in the Fayum that had been investigated at the beginning of the twentieth century, many new settlements have been excavated over the last fifty years. Books and exhibitions on private life in ancient Egypt are, however, still solely focused on the first two sites for their wealth of data, an abundance of different house layouts, and additional information from textual finds and adjacent tombs such as well-preserved house furniture placed in the tombs as well as paintings of everyday life, and texts and notes about all kinds of social interaction (e.g., Kemp 2012). The archaeological record for other settlements is comparably meager. With the uncovering of more and more houses, neighborhoods, villages, and cities of all different types, scholars nonetheless had to start managing the sheer amount of material, develop pottery typologies, and address the restrictions for exporting and testing samples. This new development in Egyptology found its vivid expression in a conference on *House and Palace in Ancient Egypt* (Bietak 1996) featuring twelve studies with a focus on domestic architecture. An innovative article on the "ideal home" presents an integration of archaeology, texts, and ethnographic records (Shaw 1992). The first publication of a settlement including finds and considering themes of household archaeology is Cornelius von Pilgrim's (1996) examination of the Middle Kingdom and Second Intermediate Period settlement on Elephantine. However, the author rejects the significance of artifacts in the archaeological context of an abandoned settlement and thus builds his functional analysis of rooms on layout, built-in features, and details of construction. Aikaterini Koltsida (2007) reviews the data from two workmen's villages, Deir el-Medina and Amarna (including examples from the Main City), by comparing house models and textual information in order to come to a functional separation of rooms in the different house types. Other contributions approach the study of households with a focus on potential status symbols in domestic architecture, the socioeconomic background, and subsistence strategies at the household level, the question of gender-specific areas, the three-dimensional experience, household lifecycles, and access routes in houses (Crocker 1985; Tietze 1985, 1986, 2008a,

2008b; Meskell 1998, 2002; Arnold 1998; Samuel 1999; Kóthay 2001; Spence 2004b, 2010, based on Hillier and Hanson 1984). In line with Schloen's argumentation for the patrimonial household model, Mark Lehner (2000) characterizes ancient Egyptian society as one big household with multiple subdivisions. In recent years, new projects in the investigation of urban life increasingly incorporate theoretical and methodological approaches of household studies and in areas where exportation of samples is still possible such as modern-day Sudan also the application of micro-archaeology (Picardo 2006; Spencer 2009, 2010, 2014; Tavares and Yeomans 2009; Lehner and Tavares 2010; Kemp and Stevens 2010; Müller 2011). The exploration of family archives, tracing household lifecycles (Goody 1958) and linking them to the archaeological record is a new field of research for Late Period Egypt, the Greco-Roman and Islamic era (van Minnen 1994; Muhs 2008; Nevett 2011; Vorderstrasse 2013; see also papers by Muhs and Vorderstrasse, this volume).

Scholars in Classical Antiquity have embraced the advances of household archaeology quite differently. Whereas Archaic and Classical Greek houses were strongly subjected to their image in the texts and individual approaches to the study of houses based on the architecture and finds were almost non-existent, investigations of houses in Roman archaeology also focused on artifact assemblages extraordinarily well preserved in the cities buried by the ashes of Vesuvius. With the exception of an early example of a settlement excavation with a thorough recording of the finds at Olynthos (Robinson 1929–52; see also Jones et al. 1962, 1973), the study of artifact assemblages in combination with architecture has only recently gained attention in Aegean and Classical Greek archaeology (Nevett 1999, 2010; Cahill 2002; Ault 2005; Darcque 2005; Souvatzki 2008; see also Ault and Nevett 2005; Westgate, Fisher, and Whitley 2007; Ladstätter and Scheibelreiter 2010; Glowacki and Vogeikoff-Brogan 2011; and see Nevett, this volume). The proceedings of a Centre National de la Recherche Scientifique conference in 1987 (Darcque and Treuil 1990) presents studies in prehistoric Aegean domestic architecture that set an early stage in the functional analysis of dwellings in much the same way the above-mentioned conferences on Near Eastern and Egyptian domestic architecture anticipated the development of household archaeology in the 1990s and 2000s. Investigations of domestic life heavily concentrated on gender separation, as it was strongly reflected in the texts. This example of a strong bias evoked by the textual sources could partly be refuted by the thorough study of artifact distribution in the different house types (see Nevett, this volume). It was Allison's work in the 1990s on the study of domestic space through artifact assemblages in the Roman world that introduced and stimulated household archaeology in the Mediterranean and eventually the Near East (summarized in Allison 2004).⁷ The study of households in the Roman world is centered on the Campanian cities, especially Pompeii for its unique preservation and wealth of material. In her seminal work, Penelope Allison carves out the discrepancies between commonly held assumptions about the Roman house – the labeling of different rooms deriving from the written sources such as Vitruvius and Pliny and decorations such as mosaics and wall paintings – and the information evolving from a thorough study of artifact assemblages. She particularly tackles the interplay of archaeology and texts in her study of Pompeian households (e.g., Allison 1999, 2001). Because of Pompeii's prominent position it has, however, also raised questions on the validity of its purportedly undisturbed record. The so-called Pompeii Premise meant to characterize

⁷ Also see the publication of the 1995 Archaeological Institute of America meeting on household archaeol-

ogy in *Classical Archaeology and beyond*, edited by Allison (1999).

all those cases where a city, a neighborhood, or a single house was preserved like the supposedly undisturbed record of the city of Pompeii that was sealed by ash of the volcanic eruption of Mount Vesuvius (Binford 1981; Schiffer 1985). Later considerations of Pompeii's archaeological record made it clear, however, that even this site and a few favorable others that were burnt or sealed "in a moment of time" do not reveal a complete and undisturbed record (see papers by Otto and Pfälzner, this volume). A conference on the organization of *Domestic Space in the Roman World* in 1994 assembled a growing number of scholars following Allison's example who significantly contributed to the furthering of the discipline (Laurence and Wallace-Hadrill 1997; in particular, Berry 1997; see also Wallace-Hadrill 1994; Dickmann 1999; Vanhaverbeke et al. 2008; Rawson 2011).

Themes — (Micro) Archaeology and Texts

The main objective of this conference and publication is to present a wide array of case studies covering a broad area and range of historical periods in the Near East and Mediterranean that approach the study of households by integrating the archaeological, micro-archaeological, and textual data available for the respective site. The different papers were divided into six sessions covering the most relevant themes in household archaeology, followed by three responses. The introductory session, on method and theory, discussed the integrated approach of (micro) archaeology and texts from the perspectives of the different disciplines. A special focus was given to the study of activity areas and artifact assemblages in the following session. How social stratification, identity, and ethnicity can be revealed by household studies was examined in two further sessions, followed by an investigation of households' private and political economy and urban-rural and core-periphery interactions. Naturally, most of the papers could have been included in more than one session, and for the publication broader categories were chosen with the addition of a new chapter on the perception of space that came up as an important new direction in the study of households during the conference. In each chapter the papers are arranged in chronological order related to the presented case studies.

Method and Theory

Household archaeology links the built environment, the dwelling, with the material culture, the artifacts found therein, in order to trace household behavior. In the contributions to this volume there is thus an equally strong focus on the domestic architecture of the different regions and on the study of artifact assemblages. Both components can inform us about the structural setting as well as activity areas in houses, potentially leading to a functional differentiation of rooms. Being aware of the importance of the study of artifacts, down to the smallest particles, is, however, only the first step in critically evaluating the nature of the evidence. The five case studies subsumed under this first theme review distinctive methods used in household archaeology and give an overview on the status of the discipline and recent developments from the perspective of their respective fields of study.

Lynn Rainville embarks upon her methodological considerations of tracing everyday life in ancient households by giving a clear definition of the related terminology — "house," "household," and "family" — that can also be applied to its use in the other contributions. She introduces the growing field of micro-archaeology with a selection of the different techniques

at hand, their prerequisites, adaptability, and implications for the interpretation of the archaeological record (see also Maeir, this volume). Rainville furthermore addresses the difficulty of reconstructing the actual inventory of a house and specific rooms. Her answer to the problem of formation processes of the archaeological record is micro-archaeology and in particular micro-debris studies. As a matter of fact, miniscule objects that were trampled into the floors of the houses display a more adequate picture of the activities undertaken in a specific area compared to the information that can be gained from macro-artifacts. By giving an in-depth insight in her work on Early Bronze and Iron Age sites in southeastern Turkey (Titriş Höyük, Kazane, and Tilbes Höyük) she is able to present a considerably different picture of, for example, a specific room in a house than it is provided by the study of the macro-artifacts.

The problem of site-formation processes is further explored by Peter Pfälzner. He thoroughly examines the method of activity-area analysis and its necessary prerequisites, contrasting an example of a household analysis at Early Bronze Age Tell Bderi in northern Syria with a grave analysis at Middle Bronze Age Tell Mishrife/Qatna. Pfälzner stresses that only very few examples yield the possibility to reconstruct objects and the related activity in their actual in-situ position. But he also highlights the value of objects in secondary positions for the reconstruction of more general and larger areas of activities as well as their discard and relocation as an activity in itself. In the same way, areas devoid of objects can be analyzed for activities conducted therein based on fixed installations. Eventually, Pfälzner also emphasizes the importance of including ethnographic data to reconstruct the specific use of installations or objects common in a certain region in many cases until today.

The integrated approach using archaeology, micro-archaeology, and texts is exemplified by Adelheid Otto's case study on Late Bronze Age Tell Bazi in northern Syria. Based on the fifty excavated houses of the Weststadt that were destroyed in a violent attack, Otto is able to reconstruct an ideal house type, taking account of recurring patterns observed within this large sample. By using the archaeological, micro-archaeological, and textual evidence, Otto reveals important insights in the inhabitants' diet, ritual activities, and societal structure. Constituting an ideal type furthermore allows her to trace deviations from the common layout that highlight individual choices. Otto subjects her study of the Weststadt houses to the important considerations of Michael Schiffer and others on formation processes of the archaeological record and defines the different types of house inventories, essential for the interpretation of artifact assemblages.

Kate Spence's contribution critically reviews recent studies of ancient Egyptian households via artifact assemblages and emphasizes the importance of the architecture as principal tool for an understanding of the inhabitants' and visitors' perception of domestic space. She discusses the textual evidence for household organization in Egypt and is able to relate specific concepts to the archaeological record based on her case study of New Kingdom Amarna in Middle Egypt. Spence creates a setting of structured encounters between inhabitants and visitors, but also between the different members of a household based on room size and proportion, accessibility, as well as the control of lighting and variation in temperature. She makes an important point in arguing that the primary conceptual structure of an ancient Egyptian house was not functionally ordered by presenting different examples of smaller and larger houses where functions of rooms and activity areas were clearly dependent on space restrictions. The obvious patterning in the architecture that can be observed in examples of houses of all sizes, however, suggests the primary purpose of the domestic space in a focus

on the head of the household and the mediation of social relations between the different members of a household.

Lisa Nevett reflects in her contribution on the status of household archaeology in Classical and Hellenistic Greek archaeology and draws a picture of a considerable backwardness of the discipline when it comes to integrating all the available lines of evidence in studying households. This relies heavily upon the nature of the excavations, the available data, and the quality of the texts. In her analysis of Olynthos on the Chalkidiki peninsula, besieged and subsequently destroyed by the Macedonian king Philip II and one of the rare examples of a settlement with carefully recorded artifacts within the domestic space, Nevett tests Ingold's taskscape model (1993, 2000) in relation to the Classical Greek, domestic, built environment. By focusing on artifacts within the domestic setting not limited by physical boundaries such as rooms, she can reconstruct more general activities yielding evidence for multifunctionality and a more fluid nature in household behavior that might result from seasonal settings within the dwelling. Nevett advocates the initiation of new field projects expanding the thus far limited published data sets for concise stratigraphical investigations and complete artifact recordings including the implementation of micro-archaeology.

Perception of Space

Kate Spence's analysis of ancient Egyptian houses highlights how specific structural settings in houses might have mediated social relations between different members of a household and outsiders. Her examination is foremost based on the architecture and she rightly points out that a strong focus on artifact assemblages alone can miss this level of structural encounters or convey an incorrect picture if not all available lines of evidence are taken into account. Spence's contribution introduces a new perspective and approach in reconstructing household behavior: the study of non-verbal communication systems and proxemic behavior, thus the unconscious use and organization of micro-space analyzed by factors such as distance, vision, sound, odor, and temperature (Hall 1963). The case studies presented in this chapter demonstrate different ways of engaging with this new perspective.

Paolo Brusasco, based on his extensive research on Old Babylonian domestic architecture and the interaction of house plans and family archives, gives a thought-provoking insight into the relations between household members and visitors, and between different households living in one dwelling. By focusing on specific architectural settings in the houses of Ur and Nippur in southern Iraq — the arrangement of door openings and room suites, access routes, roofed and unroofed spaces, and the use of special materials such as plaster for walls and mudbricks for pavement — he is able to reveal specific soundscapes, and settings of alternating light and temperature as well as smell that are also underpinned in the texts. Brusasco evokes a picture of social inequality and probable different levels of power as well as specific settings for business activities. He makes a strong case for the integration of archaeology and texts also including the phenomenological experience.

Felix Arnold's very critical approach on the usefulness of a functional examination of ancient Egyptian dwellings deals with the topic of waste disposal, the only component found in an abundance in ancient settlements that, from the author's perspective, can solely inform about activities inside houses. Arnold revises developments in the arrangement of domestic space in Egypt from the early Middle Kingdom to the Late Period based on the case study of Elephantine, a settlement at the southern Egyptian border growing out of the original

structure of a fortress. He argues for an increasing sense of clean and unclean spaces that can be traced by the transformation of an open court in the center of the houses used, for example, for processing food, into a central hall with the transfer of household activities to outside space. The process of outsourcing household activities such as cooking or handicrafts from the house is also noted by Spence and Müller (this volume) for other Egyptian settlements. It thus documents the inhabitants' perception of the dwelling in regards to, for example, experiencing smell and the effort to create a more comfortable and hygienic surrounding if they commanded the available space.⁸

How ancient Egyptian houses were perceived by their inhabitants is further explored by Neal Spencer, who tracks the development and changes over time in a crowded neighborhood within the town walls of the New Kingdom Ramesside fortress Amara West in Egyptian-occupied Nubia (Sudan). The renewed excavations of this settlement with a multispecialist team including investigations of the nearby cemeteries and landscape remodeling provide the basis for the reconstruction of an entire spectrum of activities and interactions in the neighborhood ranging from households' individual decisions to lifecycles, and relations with neighbors. Mixed cultural traditions, Egyptian and Nubian, are, however, expressed in the cemeteries and partially in the artifact assemblages in the houses. These ethnic components provide glimpses into a much more heterogeneous and intermingled environment and individual choice that is most often overlooked in studies of urban lived experience.

Pompeii, the extensively quoted site for ideal preconditions in a household analysis, is the focus of Jens-Arne Dickmann's contribution. He addresses the actual difficulties in investigating Pompeian domestic space by contrasting the large and wealthy houses that were most often either visited by their former inhabitants and survivors in search for their property or looted by later intruders and smaller houses that attracted less attention and seem to be more reliable in regards to artifact assemblages. In line with Nevett's assumptions on Classical and Hellenistic Greek domestic space, Dickmann also stresses the shortcomings of the approach focused on architectural units, most often rooms, and activities that can be located therein. He views activities on broader axes of distance and proximity and infers social relations from the association of certain activities in one place. Dickmann demonstrates the organization of one large Pompeian mansion, the Casa del Menandro, into several subunits for dependent households such as slave families, the porter, and the major-domo based on his analysis of the architecture, installations, and finds. With the help of graffiti, Dickmann is furthermore able to clearly distinguish specific zones within the large mansion where slaves fulfilled their daily duty in servicing their master. The application of this integrated approach reveals an elaborate system of specialized areas within the house that was clearly arranged for the purpose of hiding signs of labor, dirt, and smell as well as reducing movement throughout the house by specific groups.

Identity and Ethnicity

The conscious, or more often, unconscious structuring of the individual domestic space by a household reveals insights in the inhabitants' perception of their own identity. In regions

⁸ A sense for hygiene, especially upon entering a dwelling, is also supported by texts (Gräzer Ohara 2009).

with a mix of different cultural spheres, for example, border zones or occupied territories, this is enhanced by a web of entangled traditions and expressions that inform about the complicated construction of ethnicity in all its different forms (e.g., situational ethnicity; Emberling 1997). Spencer's observations on the cultural intermingling in Amara West in Egyptian-occupied Nubia are only discernible to a certain extent and especially at the level of households (see also Smith 2003). It is the private sphere that yields the most interesting models of how identity and ethnicity is lived, constructed, and perceived. Only small insights can be gained, most often revealed by specific artifact assemblages, and installations, for example, related to religious practice, costume, or cuisine, whereas architecture tends to mask these underlying aspects by presenting the norm. Some facets, such as language, will most often remain hidden. The papers subsumed under this section present case studies in how to unfold these characteristics and understand modes of cultural orientation by combining architecture and finds, using new techniques in micro-archaeology, and considering written documents.

Peter Miglus presents new evidence from recent excavations in a large domestic building of the early Middle Bronze Age at Bakr Awa in Kurdistan. Although part of an independent kingdom on the periphery far from the Mesopotamian heartland, the architecture and material culture yields an unusual mix of local and southern, Babylonian characteristics. This is expressed by the use of the Akkadian script and images and symbols of power belonging to the repertoire of the Mesopotamian kingship, while certain typical domestic features are missing and the pottery exposes a distinctive local style. Miglus concludes that the inhabitants of higher social status, maybe officials given the enormous size of the building, tried to maintain close ties with the south and thus communicated a very specific image of their self-perception, however, only on a formal level, while keeping their own traditions in the private sphere.

State-planned settlements as prominently featured in Egyptian urbanism and their highly standardized domestic architecture are the focus of Nicholas Picardo's contribution on the Middle Kingdom temple-town Wah-sut in South Abydos. Compact large mansions featuring several subunits within a network of corridors are the typical elite housing blocks of state-sponsored settlements at that time. Given the purpose of the town and the role of these elite mansions as home and office of officials, Picardo is able to give an insight into those hybrid households' identity by applying the Lévi-Straussian model of the social house. By studying the corpus of sealings from one particular house in this settlement, Picardo also exposes a possible change in function and identity of the household within the institutionalized landscape of Wah-sut.

Aaron Brody sets the stage for a detailed analysis of the identity and ethnicity of the inhabitants of Late Iron Age Tell en-Nasbeh in Israel. He considers diet, ritual, language, dress, and habitation as well as the effect of the Assyrian empire that controlled the region, and notions of boundaries. By combining architecture, arti- and ecofacts, mortuary data, and epigraphic evidence, Brody is able to reveal different facets of the highly local and situational identity and ethnicity of the Tell en-Nasbeh people, but stresses at the same time the difficulty to determine these aspects from the archaeological record.

Complementing Brody's study of Israelite identity and ethnicity, Aren Maeir focuses on specific aspects of the Philistine household that add important evidence to the differentiation of the Levantine cultures in the Iron Age and thus the specific ethnic elements of Philistine society. He presents technical features of metallurgy, hearth construction, and

the use of plaster in Philistine households resulting from the application of on-site micro-archaeological analysis as well as a consultation of the contemporary textual evidence, the biblical narrative. Maeir shows convincingly that the complex nature of the Philistine culture with elements seemingly influenced by different regions in the eastern Mediterranean can be furthered by the thorough application of micro-archaeology and a study of macro- and micro-artifacts in a concerted effort.

Society

Eventually the approaches and applied techniques in household archaeology should lead to a better understanding of wider social processes and changes in ancient societies. The detailed investigation at the micro-level thus ultimately delineates themes that contribute to the big picture. The bottom-up approach can inform about household composition, family structure, and gender and also reveal the different stages of household lifecycles. By combining the evidence from the archaeological record and written documentation, it can be possible to distinguish class, status, and rank of households or individual members. Managing property, tenure, and inheritance strategies is integral to the study of households. But also the relations of a household with outsiders, neighbors, relatives, or dependents can illuminate subsistence strategies and private economy. All these different aspects form our picture of ancient societies and create an idea of how they were built. The papers subsumed under this final theme engage with those different facets of households by using the archaeological and written information for the respective case study.

Brian Muhs traces the available evidence for property title in Egypt from the third to the first millennium B.C. In delineating the rare evidence for property transfers and contracts from the third and second millennia, he concludes that by the first millennium B.C. the increased documentation of private property titles must have gone along with a shift in the perception of the family home, the house. The considerably different domestic architecture from Egypt's Late Period and Greco-Roman era of the first millennium B.C. with multi-storied houses on a reduced groundplan with casemate foundations and sturdy walls exemplify the increasingly limited space in settlements, but also the wish to have a clear separation between inside and outside space, including the prevention of waste accumulation by certain household activities that were then outsourced to the courtyard area (see Arnold, this volume). Muhs sees a further explanation in the investment in private property and thus the desire to own durable houses. Having more control over property by contracts resulted in differing claims by various parties and thus changed the interaction between households and houses.

Miriam Müller gives a detailed insight in the development of a neighborhood of the Egyptian Delta site Avaris/Tell el-Dab'a in the late Middle Kingdom and Second Intermediate Period, when the settlement became the capital of the first foreign dynasty ruling over Egypt. By studying five large estates and their corresponding households over a period of about 120 years, she is able to trace the accumulation of considerable wealth and thus probable upward social mobility that was possibly not connected to an affiliation of the household masters with the government. Müller raises the question of a potential middle class in Egyptian society that was able to live comfortably and own significant property while being integrated in a patrimonial system of dependent households. At the same time, she stresses

the difficulties of determining rank and status in the archaeological record and the problem of drawing false conclusions based on the evidence of absence.

A successful combination of archaeological and written evidence is presented by Heather Baker in her case study of first-millennium B.C. houses and households in Babylonia. A detailed study of house terminology in the cuneiform texts allows her to map functional designations of parts of houses onto groundplans. By detailing different stages of property transfer among households, families, relatives, and neighbors in three specific cases from the Neo-Babylonian, Achaemenid, and Hellenistic periods, Baker is able to associate the archaeological record of the houses with the cuneiform evidence of private archives. She can prove, for example, shared residence by multiple families in one house and the modifications but also constraints in subdividing houses following the household lifecycle of birth, marriage, and death — right of the firstborn, dowry, and inheritance that must have had a considerable influence on different activity areas in a house. She furthermore draws attention to the problems concerning the often-used correlation of house size and status of the inhabitants by demonstrating complicated ownership structures sometimes stretching over more than one house.

Concluding the chronological range of the different case studies, Tasha Vorderstrasse's paper ties in with Muhs' examination of houses and private archives from the Greco-Roman period by presenting the so far rarely investigated interaction between Copts and Arabs in Early Islamic Egypt. Vorderstrasse confirms the same phenomenon for the Islamic period, that houses were increasingly seen as an investment. She furthermore brings together the archaeological evidence from the town of Jēme, Medinet Habu in Western Thebes, with houses arranged in a similar manner as the previous Greco-Roman houses and the written evidence from private family archives. This approach allows her to reconstruct intricate social relations between several families living in one house or in neighboring buildings, intermarried and bound by debts and loans paid by divisions and fractions of houses.

Responses

The three responses that are added to the collection of papers critically review the state of the discipline from a Near Eastern viewpoint focused on all the contributions, in a sole focus on the Egyptian evidence and a New World perspective on the developments in the ancient Near East and Mediterranean. Elizabeth Stone criticizes the slow adoption of available, foremost scientific techniques in the historical disciplines compared to prehistoric archaeology in the region which goes hand in hand with the uncritical attitude toward artifact assemblages and their probable perturbation by formation processes that was exhibited in some papers. Nadine Moeller discusses the issue that most case studies display “multifunctionality” when it comes to attributing functions to different spaces/rooms in houses. Nevertheless, Egyptian house layouts in particular show a remarkable uniformity over a long period of time and a wide area that hints at underlying ideas of how domestic space was conceptualized. Spence's paper stresses this aspect by carving out a system of structured encounters in dwellings based on social relations that governed the specific form of the built environment. Both Stone and Moeller, furthermore, mention the potential of administrative records in private dwellings in the form of sealings that can address and contribute to an understanding of economic processes, subsistence strategies, and exchange within the community as well as on a cross-regional level, but also give evidence of status and family structures such

as inheritance patterns relating to the inhabitants of a dwelling. Cynthia Robin contributes in her response from a New World perspective the case study of the Maya farmers' village Chan in Belize and stresses the wide-ranging conclusions drawn from such a small-scale community by applying a combined historical, archaeological, and scientific approach. In welcoming the broad range of promising case studies and thus the successful adoption of household archaeology in the Near East and Mediterranean, Robin concludes "as archaeologists are challenging themselves to ask and answer questions about ancient people and their lives previously considered beyond the realm of archaeological knowledge, they are creatively bringing together humanistic and scientific approaches, that allows archaeology to be on the forefront of research that is bridging the intellectual divide between humanistic and scientific knowledge."

Conclusion

The combination of (micro) archaeology and texts emerged to be a particularly worthwhile approach for the study of ancient households as exemplified by the broad range of case studies presented in this volume. The dual approach with a strong focus on the study of artifact assemblages including micro-particles within the surrounding architecture and texts opened up new venues for the investigation of households in ancient societies. Themes such as the perception of domestic space, elevation and the third dimension in studying houses and households emerged as important perspectives for future studies in this field. The presentation of a wide array of case studies from different regions and periods in the Near East and Mediterranean including the perspective from New World household archaeology turned out to be exceptionally successful given the frequent cross-referencing in the different papers and specific aspects, difficulties, and prospects of the study of households came up as inherent across the different regions, periods, and cultures. Texts, as useful as they are, always bear a certain bias and are foremost products of elite society. They are for this reason specifically excluded in a number of publications (see, e.g., Yasur-Landau, Ebeling, and Mazow 2011). Not using the available information is, however, unsatisfactory. The archaeological record needs to be approached from an unbiased perspective with focus on the material remains and the results then be tested against the ancient written evidence for consistencies and inconsistencies (Allison 2001). This was exemplified by a number of articles revealing the intricate dimension of time in the archaeological record by tracing household lifecycles and exposing multi-generational processes.

Rooms in ancient homes were most of the time multifunctional areas subjected to limitations of space and also seasonal use. By combining architecture, installations, artifacts, and, for example, chemical signatures of floors, an idea behind the use of a certain area or a room could be gained as shown in a number of contributions. In the same way, this close examination can display how specific functions might have changed over time. Here, size comes into play and observations on the separation of different functions in a house need to be put in perspective for houses of different proportions from a specific region or period. The evident problem of using artifact assemblages in determining activity areas is for the various formation processes in the archaeological record a matter of fact. As highlighted in a number of articles in this volume, this can be overcome to a certain extent by examining patterns in a representative sample, in a diachronic and area-wide perspective (see also Tringham 2012).

The use of micro-archaeology as major criterion for the selection of case studies from the different regions turned out to be less applicable than originally intended. As innovative and important this new set of techniques is,⁹ as difficult and essentially unsuitable it emerged to be for certain regions and sites. Especially in Egypt excavators face the problem of not being able to export samples or properly test material on site, or at least within the country. Turning to the southern neighbor and former Egyptian occupied region of Nubia, yet still in its beginnings of large-scale archaeological excavations and thus much easier in its contact with the local authorities, problems nonetheless arise with the characteristics of each single site and a state of preservation that makes sampling simply impossible and fruitless. Limitations of this approach from political to environmental circumstances to plainly time, exposure, and costs have so far been responsible for a very divergent application of this array of new techniques in the different regions. It is, however, wished that micro-archaeologists would be part of a project from the beginning, better included in decision processes, and actively present on site. This collaborative effort has been presented in three articles in this volume.

The importance of ethnographic data is evident in many of the contributions to this volume. In addition, an important point was made by also including the reconstruction of the landscape and its effect on households as a significant factor in determining household behavior. Certain aspects concerning observations on societal structures were only hinted at and are rewarding for future studies. Domestic cults as prominently featured in other publications (e.g., Bodel and Olyan 2008; Yasur-Landau, Ebeling, and Mazow 2011; Albertz and Schmitt 2012) were mentioned only briefly in several contributions. They are a promising field for retrieving concepts of identity and ethnicity from the archaeological record, in particular related to ancestor veneration and kinship continuity, genealogies, and social memory (Routledge 2013, p. 217; see also R. Matthews 2012). Gender perspectives were included in a number of articles based on texts, built-in installations, and finds (see also Hendon 1996, 2006). In this context, the connection of houses and tombs with burials under house floors, in courtyards, or right outside the settlement opens up a new venue in bringing the bioarchaeological and archaeological information together. A separation of different genders in the house is most often impossible according to the finds and installations¹⁰ which might also be affected by the lack of evidence for upper stories with possible women's or more private quarters. The aspect of private economy and household production, focus of most of the contributions in New World household archaeology (e.g., Hirth 2009; Douglass and Gonlin 2012), is only rarely commented upon in this publication.¹¹ The investigation of slaves and dependent households as touched upon in a number of articles is in this respect worthwhile to pursue.

In conclusion, the advocated approach in the seminar and this resulting publication has shown the necessity to include as many lines of evidence as possible and the broad spectrum of results that becomes accessible. A study that is only based on the architecture or the artifacts can evidently not lead to an adequate picture of household organization and behavior.

⁹ See, however, the paper by Hodder and Cessford (2004) on the problem of the so-called "background noise" describing the observations at a densely occupied site such as Çatalhöyük, where micro-artifacts buried in the floors often lack intentionality and thus do not have any value for the detection of activity areas.

¹⁰ See Nevett 1999 and in this volume for a critical evaluation of the text sources concerning gender separation compared to the archaeological evidence.

¹¹ Kristin De Lucia's paper focusing on multicrafting households in Pre-Aztec Central Mexico at the conference has already been published in the *Journal of Anthropological Archaeology* (De Lucia 2013).

The remains of ancient households that scholars have to deal with today are already incredibly limited. An integration of archaeology, micro-archaeology, and texts is in that respect essential in coming to a better understanding of households in ancient societies.

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Investigating Traces of Everyday Life in Ancient Households: Some Methodological Considerations

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Introduction

In 2012, I happily accepted Miriam Müller's invitation to join other household archaeologists at the Oriental Institute to discuss new advances in the state of the field. As one of the early-adopters of "micro-debris analysis," I looked forward to learning about other techniques that are providing better insight into our understanding of the archaeological signatures from everyday domestic activities. These expectations were met, but the two days' worth of discussions also changed the content of this paper. Before the conference, I was content to report on my own silo of research — the study of micro-artifacts recovered from activity areas and floor surfaces; after hearing each of the thought-provoking papers, I realized that it would be useful to situate this technique within the broader array of possible approaches to studying domestic life in the past. Today, few archaeologists have to be convinced of the necessity of studying households to understand ancient societies, but many are uncertain how to select the most useful set of techniques from the diverse array (and expense) of current options. So after the conference, I decided to provide this prosaic, but hopefully useful, guide to selecting among cutting-edge technologies and the importance of integrating specialists into the overall research design of a project.

In this paper I pose a basic question: What does a household look like in the archaeological record? and critique the growing toolkit of techniques that are being used to answer this query. These tools range from the study of chemical residues found in ceramic vessels to XRF (x-ray fluorescence used to analyze the elements within metals, glass, ceramics, and other materials) and from tests of phosphorus levels (which sometimes correlate with human activities) to microscopic analysis of small artifacts. These techniques can retrieve information about long gone remains (such as wine) or features (such as dung cake storage areas), but researchers should apply them as part of a comprehensive interpretive plan, instead of cherry-picking a handful of approaches and uncritically incorporating the results into the broader interpretation of ancient activity areas.

Household Archaeology

While the discipline of "archaeology" as we would recognize it today developed over a hundred years ago, much of the initial focus was on monumental structures and cemeteries (such as the work of Mesopotamian scholar Austen Henry Layard or the Egyptian archaeologist

Auguste Mariette). An interest in households — and more specifically domestic affairs, economies, and activities — did not emerge until the 1980s, with ground-breaking studies such as Wilk and Rathje's 1982 article that laid the foundations for the field of household studies (including terms, scope, and models). Over the next decade Richard Wilk (then an assistant professor at New Mexico State University) was at the forefront of techniques for studying households; he modeled what these results could tell us about social organization in numerous books and articles (Wilk 1983; Wilk, Netting, and Arnould 1984; Wilk and Ashmore 1988). Over the next two decades, archaeologists integrated ethnographic observations, architectural analyses, household artifact analysis, and soil tests into household archaeology. More recently, archaeologists have explored the utility of Lévi-Strauss' "house societies" (*sociétés à maisons*) (Lévi-Strauss 1982, pp. 176–87, and more recent interpretations such as Carsten and Hugh-Jones 1995; Chesson 2003; Joyce and Gillespie 2000). Originally developed as a theory to avoid the rigidity of lineage-based studies, it personifies the "house" as a "moral person" who manages material and immaterial property and serves to organize groups of people (who may or may not have direct kinship affiliations) (Lévi-Strauss 1979, p. 47). Although not focused on the walls of the "house" per se, this approach is appealing to archaeologists because it accesses the ideology of the house through the materiality of its estate, such as its architecture, ancestors (i.e., burials), and heirlooms (Beck 2007, pp. 6–10).

In addition to turning our attention to households and applying new techniques, this field of study has produced insights into topics rarely explored before. For example, archaeologists have used household studies as a springboard for investigating "childhood" and its cultural determinants (Baxter 2005), the houses of social outcasts such as Chinese households in the American West (Fosha and Leatherman 2008), non-traditional "houses" (fraternity houses or houses of prostitution), or the sociologically abstract activities that may have left an artifactual trace within a house, such as "mothering" (Wilkie 2003). All of these studies push the boundaries of "household archaeology" and allow us to ask more inclusive and sophisticated questions about everyday life in ancient societies.

Within the last few years, there has been an increase in the number of book-length volumes that focus on household archaeology around the globe (this volume is one of the latest examples; see also Egan 2010; Yasur-Landau, Ebeling, and Mazow 2011; Parker and Foster 2012; Briz et al. 2013). These volumes usually focus on either cross-cultural examples from around the globe or drill deeply into one culture's households with inter-disciplinary techniques. These approaches suggest that we have a lot to learn about households from other cultural traditions and that a diversity of methods provides better insight into everyday life. All household archaeologists agree, to some extent, that domestic units are the basic socioeconomic unit within society and are thus worthy of study. Accordingly, the field of household archaeology can be all-inclusive (as recognized by a Wenner-Gren-sponsored conference held in 1981; see Arnould and Netting 1982). First, the majority of structures at most sites are domestic, that is, houses. The ubiquity of houses makes it more curious that the field of household archaeology did not gain traction until the last quarter of the twentieth century. Second, most anthropological questions revolve in or around households. For example, craft specialization is often at the household level, many pre-industrial economies are household-based, family organization and gendered roles are evidenced throughout household organization, most political networks have some basis in kinship affiliations and, therefore, the household. And, finally, one's domestic life comes to an end with death and the related mortuary artifacts and memorials. Thus, most anthropological questions can be

addressed through domestic evidence, whether it is the distribution of elite ceramic vessels or the type of clothing used in male and female burials. And more and more archaeologists are recognizing the integral nature of domestic spheres of interaction within broader cultural and political trends (Carballo 2011). From this wide array of “house-centric” approaches I focus on archaeological (or artifactual) approaches to the study of households, surveying archaeological techniques that focus on the recovery and interpretation of domestic material culture.

Domestic Terminology

It is easy to talk about “households” and neglect to define your terms. Unlike other fields of study, the average school child can offer definitions for the commonly used adjectives and nouns in the field of household archaeology: *house*, *household*, *family*, and even the less commonly used term, *domestic*. But it is important to define terms, even when they appear straightforward.

Domestic

Proceeding from most to least abstract, how do archaeologists define the term *domestic*? Most dictionaries define it in relationship to humans and their families (<http://dictionary.reference.com>). In other words, while a dog can be domesticated by living near human habitations we do not usually call wolf homes “domestic” dens. Other sources define *domestic* as “related to the running of a home,” modified from the Latin *domesticus*, which, in turn, is from *domus* “house.” The dictionary definitions are so vague as to include domestic matters from one’s household to one’s country of origin (e.g., domestic politics) (www.merriam-webster.com).

All of these abstract concepts are hard to locate in the archaeological record. Instead, archaeologists tend to borrow terms from cultural anthropologists who have access to a fuller range of domestic practices. These definitions focus on oppositions, such as Irene Cieraad’s implicit definition in her book *At Home* (Cieraad 1999, pp. 3–4), which contrasts the domestic to the “public” and associates domesticity with women, not men. Or we can cite a definition from Sylvia Yanagisako’s classic review of “Family and Household” (1979, p. 165), where she admits that while somewhat difficult to interpret, domestic activities are usually related to “food production and consumption or to sexual reproduction and childrearing.”

Throughout this paper, I suggest that archaeologists need to begin with material-based definitions in order to select the most productive excavation methodologies. For example, if we used the ethnographic definition of domestic we would simply need to place our exploratory trenches in areas away from “public spaces.” This may or may not lead to a successful search. Archaeological definitions of “things domestic” tend to focus on the outcome of domestic actions, in other words, the patterning of debris from household activities.

Returning to the dictionary definition of *domestic*, “relating to the home,” there are more questions to answer. Is domestic limited to the archaeologically discovered “home” or “house”? If so, would a communal bread oven (visited by neighbors each morning) constitute a “domestic activity area” or is the domestic space only the locale where family members consume the bread? On the other hand, would a local market where shoppers collect ingredients for baking the daily bread (or other meals) be considered part of a domestic activity area?

House

Dictionaries provide the simplest explanation of the term *house*: “a building for human habitation, especially one that is lived in by a family or small group of people” (www.google.com definition). For cultural anthropologists, the members of the house are often referred to as the *household* and sometimes the two terms are conflated. Thus, these two somewhat synonymous terms are contrasted with the more specific term *family* (defined by the kinship ties of various individuals and not necessarily related to a shared physical space).¹ In other words, families are united metaphorically by kinship ties, while households are related by geographical propinquity within houses (Yanagiasko 1979, p. 162). Other ethnographic definitions focus on the shared domestic activities of a *household* as opposed to the kinship ties of a *family* (Bender 1967, p. 493).

For archaeologists, houses are an important spatial delineator for studying associated activity areas and inferring the identity of the individuals who left behind that domestic material culture. Individuals who share the same roof may or may not be related and may or may not share social attributes, such as class or ethnicity. These physical structures can simultaneously “reveal and display” while “hid[ing] and protect[ing] ones behavior and identity” (Carsten and Hugh-Jones 1995, p. 2). While analytically rich in household models, archaeologists begin with a more prosaic challenge: where does one house end and another begin? In many cultures, separate structures share walls and subsequent remodeling (removing/adding windows, doors, and thresholds) can make it difficult to distinguish the edges of any single house. Sometimes archaeologists use open courtyards as a means of counting households, assuming that each family had access to at least one open-air courtyard (Steadman 2004, pp. 527, 531–37). But issues of socioeconomic status, household composition (e.g., the presence of servants), and multiple floors makes this calculation complicated.

Floor

Most ethnographers would not spend time defining the term *floor* in their work, but this becomes a critical analytical unit within an archaeological trench. Even the dictionary definition hints at the logistical challenges: “the surface of a room on which one stands” (www.thefreedictionary.com) or “the lower surface of a room, on which one may walk” (oxford-dictionaries.com). Since archaeologists rely on reconstructions of past architecture and have no access to human subjects, it can be very complicated assigning attributes such as *bottom*, *top*, or even *surface*. In the case of mudbrick houses, the distinction between collapsed roofs, melted walls, and living floors can be very subtle and is occasionally missed all together under an unrelenting sun that tends to wash out the subtle differences in color that might otherwise guide an excavator.

When I was learning to excavate I had skilled role models who patiently taught me to be attentive to subtle changes in sediment texture, color, and composition. Moreover, they took the time to distinguish among the surface of the floor (the “living surface”), debris that had accumulated on top of the floor, the materials that constituted the floor surface itself, and

¹ This division between *family* and *household* originated with Malinowski’s models of kinship (discussed in Yanagisako 1979, p. 162).

the post-depositional changes that sometimes erased the distinctions among these features (see further, La Motta and Schiffer 1999). I proceeded to dig at six sites in Turkey that shared similar morphologies (tell sites, the prevailing use of mudbrick as a building material, and similar cultural affiliations). I realized that trench supervisors were not uniformly trained in how to identify floor surfaces, in part because it was assumed that there would be in situ artifacts or features that would guide an excavator as s/he “followed the floor.” In my experience, sherds can lie horizontal on a number of surfaces (due to gravity and water sorting), not just “living floors” and the base of features can vary by several centimeters across a floor. This may seem like a trivial issue, until you start to calculate the assumptions that are made for dozens, if not hundreds, of artifacts that lie roughly within the same horizontal plane within any given “house.” If you have conflated two or more floors you may be comparing artifacts that were, in actuality, used by two different generations or by a growing family after they have had five children.

New Techniques for Studying Domestic Life

The increasing archaeological interest in households has corresponded with an increase in new methods and techniques. Technological advances have improved the accuracy of archaeological excavations in a myriad of ways. This brief overview reviews some of the techniques that are most useful for studying domestic architecture, artifacts, and activity areas.

First, the study of domestic architecture has been improved by the use of total stations (laser-based equipment that can produce very accurate two-dimensional and three-dimensional maps), drawing software (like Google’s freely available SketchUp, or more professional draftsmen’s programs such as AutoCAD), and mathematical models to illustrate access patterns within the house (the classic example is Hillier and Hanson 1984, updated by scholars such as Regev 2009).

Second, the artifacts within these houses are being tested with an increasing array of techniques. For purposes of this brief overview, I divide domestic materials into cultural artifacts and natural objects.

Cultural Artifacts

Traditional domestic artifacts such as pottery and lithic tools can be studied using new techniques like infra-red spectroscopy (IR) or scanning electron microscopy (SEM-EDX), as well as more traditional approaches such as petrography. IR has been used by lithic specialists to study the residue found on domestic tools from Paleolithic sites in Greece



Figure 1.1. A men’s teahouse in a Kurdish village (all photos by the author unless otherwise indicated)

(Galanidou 2006; she also highlights the ethical problems with destructive analyses such as IR). And SEM-EDX has been used to study a multitude of artifacts, including human cremains and the impact of high temperatures on accurate measurements of microstructures in rib bones (Absolonová et al. 2012) or the impact of trauma on the bones recovered from the members of the doomed Donner party (Dixon et al. 2010, p. 641).

The section above makes a common assumption, that we can agree on what artifacts are domestic: items such as cooking pots, lithic tools for preparing food, and cut caprid bones found in a midden. But what about more complicated scenarios? For example, are the sherds recovered from a men's teahouse part of a domestic assemblage? And would we be able to recognize the gender restrictions within this space (fig. 1.1)?

To pose the question another way, do people have to sleep in a structure for it to be domestic? And, if so, are inns, caravanserais, hotels, and so forth considered domestic residences? Or does sleeping have to co-occur with other domestic activities such as eating, child rearing, and bathing? With the co-occurrence of these two activities, a cemetery could be defined as domestic because it provides eternal rest.

And finally, why does it matter whether an artifact or feature was used in a domestic or a public context? On one hand, societies do not pigeonhole cultural traditions into boxes like "economic," "domestic," or "political." But many of our anthropological models assume that these realms are distinct and thus a lot of fieldwork on "complex" societies focuses on one of these cultural arenas at a time. The days of a single ethnographer feeling competent enough to write on "society" writ large is long gone (e.g., Malinowski's *Argonauts of the Western Pacific*). But sometimes these ambitious and comprehensive studies have been replaced with a remarkably narrow slice of a culture's traditions, beliefs, and everyday life.

Natural Objects

While artifact analysis is continually evolving, most of the new techniques have focused on non-cultural objects, such as plant remains, DNA, and soil analysis. So while bioanthropologists have fine-tuned the extraction and study of DNA to question more figurative definitions of the "family" (Rose 2010), chemists have discovered that the soil surrounding a human burial can indicate mercury poisoning (Anonymous 2013).

Sediments have also been studied using coupled plasma-atomic emission spectroscopy (ICP/AES). For example, William Middleton and his colleagues have used this technique to study floors in Mesoamerican houses (Middleton et al. 2010). And chemical residues on floors have been studied with new techniques such as bulk density, loss on ignition, electrical conductivity, and salinity tests to reveal multiple, synchronic activities on floors (Varela and Dore 2010; De Lucia 2013). Geo-archaeologists take thin-samples and cores from floors to study the microscopic remains from everyday life (a process called micro-morphology; Matthews 2005). And other scientists have applied stable isotope analysis to study the chemical signatures of molecules in bones and teeth in order to interpret past diet and health (Price, Manzanilla, and Middleton 2000).

Perhaps the two fastest-growing techniques are phytolith and phosphorous studies. Phytolith (literally, "plant stones") studies are becoming increasingly more prevalent on archaeological projects. Some plants absorb silica from the surrounding groundwater and soil into their cells. After the water evaporates, the silica is re-deposited into the soil as the plant decays. Because they are inorganic, these siliceous plant remains tend to preserve

well. They are found archaeologically in former garden areas, on cooking containers and tools, in storage vessels, and sometimes in grave offerings and teeth (Pearsall 2000). They can provide insight into food consumption, climate change, and gardening patterns, but only a few plants leave distinctive phytolith signatures (maize is one commonly studied example). Carl Wendt (2005, pp. 174–76) used phytolith data collected from an Olmec site in Mexico to identify surfaces that were used to prepare maize and beans. Counterintuitively, Georgia Tsartsidou and colleagues discovered that animal enclosures and threshing floors were sometimes devoid of phytoliths (usually we would expect the opposite because of the presence of hay or fodder; Tsartsidou, Lev-Yadin, and Stothert 2008).

Archaeologists analyze the quantities of phosphate in soils to indicate areas of past human activity when there is otherwise no artifactual signature. Phosphates are released into the soil as organic matter decomposes. Because decaying plants do not necessarily indicate human presence, this technique is built on years of ethnoarchaeological work to identify more specific phosphate patterns (Middleton 2004, Middleton and Price 1996). For example, Martha Zierdan and Elizabeth Reitz identified levels with “cloying dark soil, high in phosphate” that indicated the transitory presence of animals at a colonial American market in Charleston, South Carolina (2009, p. 348). Douglas Ubelaker and his team (Ubelaker and Stothert 2006) studied a calcium-to-phosphorous ratio to determine whether individuals in Andean Latin America chewed coca (this study also employed a scanning electronic microscope). In each case, there were no artifacts left behind to indicate the past activity.

Our interpretation of the data produced from these techniques is improved by sampling from modern or off-site locations. For example, a collection of contemporary phytoliths helps archaeologists identify disturbed layers where modern-day silica has mixed with ancient ones. This is one of the many reasons why the study of houses at a site must be fully integrated into the overall sampling strategy and research questions.

It is tempting, after summarizing these diverse approaches, to order up “one of everything” at every site. Despite their investigatory promise, many of these techniques are dependent on site conditions (such as the preservation of floral or faunal material), the local geology, or limited by access to time and money. (If you can only take twelve phytolith samples from a 100-acre site, is it worthwhile?) And, most importantly, whichever combination of approaches you choose, the “specialists” must be integrated into the overarching research design. Cherry-picking new techniques, taking samples in the field, and then sending them off to laboratory specialists without engaging the technician or scientist in the collection methodology leads to limited or misleading results (see Maeir, this volume).

Digging Up “Houses”: Some Suggestions

This is not meant to be a “how to dig” primer, but rather an attempt to problematize the overarching strategy for locating and collecting material culture from “houses” in a meaningful way. And, in full disclosure, my job on most projects has been that of a specialist, not an excavator. Thus I have had the luxury of taking samples from dozens and dozens of trenches without the responsibility of managing the day-to-day excavations. In the following review I do not want to minimize the difficulties in coordinating a dozen or more workers toiling in 110-degree heat trying to unravel complicated stratigraphy. Instead, I pose the following observations to challenge the occasional facile interpretations in final reports that sometimes minimize the material complexities that were found in the trenches.

Boundaries

The first difficulty is defining the boundaries of a single “house.” Most of my work has been conducted at Mesopotamian sites located in modern-day Turkey and Syria. The majority of these operations have used trenches (ranging from 2 × 2-meter units to 10 × 10s), retaining baulks in between so that each trench has four visible profiles. Other authors have reviewed the pros and cons of this approach (e.g., Higginbotham 1985). Here I want to point out a few considerations for house archaeologists. The most obvious is that an ancient “house” will almost always span multiple trenches. This introduces excavation variability (side-by-side trenches may have differential recovery rates for subtle features based on the experience of the excavator), collection biases (workers, usually taking the lead from the trench supervisor, will vary in the type and quantity of artifacts that they hand pick and/or screen), and partial sampling (imagine trying to interpret contemporary American domestic “areas” and subsequent cultural practices if you did not excavate the bathroom).

Ethnoarchaeological studies in the Middle East have provided helpful clues for locating house boundaries, but have not resolved this issue. For example, using the benefit of ethnographic data, some authors have studied the composition of households, working backward to determine what artifacts or rooms would be included in a discrete house. In her work in a Muslim Arab village of about 1,500 people, Kathryn Kamp (2000, p. 85) determined that the best indication of conjugal units was the number of dowry items (specifically the quantity of pots and pans and the number of china cabinets). The more commonly used indicators in excavations, the number of water jars and/or the size of the house, were not statistically significant within this living community.

Contemporaneous Living Surfaces

The second complication in excavating a house is locating contemporaneous layers. All household excavators have found a lovely floor, only to follow it at an angle until it appears to “dive” under the initial floor level. Contemporary observations of mudbrick buildings and courtyards reveal one of the reasons for this phenomenon: uneven surface areas and slanted roofs to aid in channeling rainfall away from living areas. In addition, we have to consider the contemporaneous layers that range from the subterranean (e.g., burials, cisterns, and latrines) to the floor level itself, to the surrounding walls, ceilings, rooftops, and sometimes multiple stories. In Kamp’s observations, she found that the ceilings in kitchens, stables, and hay storage rooms were lower than those in sitting rooms and storage areas (2000, p. 86). This range in height makes it complicated to differentiate the individual structural features when they are collapsed together. And in Mayan houses, Gair Tourtellot (1988) discussed the impact of domestic cycles on the distribution of artifacts and features.

Even if you were fortunate to pick off loose layers down to a firm floor, you would still be faced with determining which of the higher levels contained debris from the surrounding walls after they collapsed? Figure 1.2 suggests such a “before” and “after” scenario. Imagine that the ceiling and walls of the structure in the photograph have collapsed onto the floor, thereby combining the rooftop living spaces with the ground floor, the interior wall hangings and window treatments (or dried vegetables), and the whitewashed walls and covered entrance foyer into a layer of “collapse” one to three feet high. Perhaps animals grazed in the ruins of the collapsed building or children played here, curating various items such as



Figure 1.2. A contemporary house in a Kurdish village

rocks, seeds, and “toys” to the abandoned house. The top of the collapsed layer becomes a new living surface that may be separated by one or more generations from the original household. Excavation alone may not be able to untangle the rooftop activity area from the original floor, but some of the techniques discussed in this article can help (like testing for the presence of dung spherulites to differentiate outdoor areas from indoor spaces).

Sampling Strategies

The issue of sampling is just as relevant in household archaeology as it is in settlement studies or survey projects. While time and money will always limit one’s ability to take a wide or diverse sample, we can be explicit about the biases in our sampling techniques. Otherwise we risk using one well-excavated house as an interpretative template for an entire community. To highlight some of the dangers of this approach, we can imagine the interpretive bias if we studied the house of the chief’s daughter-in-law versus the residence of a queen’s maid, or a flintknapper’s home versus a butcher’s. The occupation, class, and ethnicity of the residents will influence the quantitative and qualitative results of material culture excavated within a house. Anne Killebrew provided a helpful template for reporting one’s sampling decisions. She excavated “House B” at a Byzantine site in ancient Palestine, noting that only 10 percent of the village was excavated at Qasrin and that this one house, nicknamed “House of Rabbi Abun” (after an inscribed gravemarker found nearby), is both similar to and distinct from the “average” village house (Killebrew, Grantham, and Fine 2003, pp. 60–61). Her and her colleagues work is also notable for applying experimental feature and house construction

techniques in order to better understand the ancient technologies that were used (e.g., constructing a replica oven and using mud to plaster house walls; *ibid.*, p. 62).

Micro-artifacts

My own work has focused on small, domestic artifacts that were unintentionally dropped or left behind. For over a decade, I led a research team to study everyday life in domestic contexts on the high and low mounds at several Turkish sites (focusing on households that dated to the Early Bronze Age and Iron Age). In particular, I focused on the recovery and study of micro-artifacts, defined as objects under one centimeter in size, in order to better interpret activity areas. The study of “activity areas” has a long history in archaeology (beginning in the early twentieth century with the study of paleolithic cave floors and continuing into the present with ethnoarchaeological and experimental studies), but the size and depth of many urban sites has prevented most urban archaeologists from attempting a similarly fine-tuned investigation of discrete artifactual assemblages within densely inhabited settlements (Kent 1984; Ciolek-Torrello 1984; Manzanilla and Barba 1990; Rothschild 1991; Hodder and Cessford 2004).

In addition to the difficulty of systematically collecting and studying assemblages at large sites, locating *in situ* finds is very difficult. The analysis of these larger artifacts, features, and structures are limited by removal of artifacts upon site abandonment, poor preservation of features, and difficult-to-observe architectural modifications. Micro-artifacts,



Figure 1.3. Suphi Kaya Bey floating heavy fractions at Ziyaret Tepe
(photo by Jerzy Wierzbicki, courtesy of the Ziyaret Tepe Archaeological Project)

however, provide a unique window on activity areas because small items are more likely than larger ones to remain where they were dropped, lost, or produced (Rainville 2005a).

Accordingly, I collected over 2,500 heavy fractions in order to study the distribution and type of macro- and micro-artifacts found in domestic, religious, and public activity areas within ancient Mesopotamian cities (Rainville 2002, 2003, 2005b, 2012). I should emphasize that the most informative samples include “macro” remains as well as unfloated sediments (the matrix that contains “micro” artifacts). In other words, when excavators take the heavy fraction sample they should not pick out the artifacts that are visible by sight. By taking a “whole earth” sample, the densities of “macro” and “micro” artifacts can later be compared and the complete assemblage analyzed.

For my micro-debris method, I sampled 1- to 25-liter heavy fractions from middens, hearths, floors (the trampled floor surface and the fill, for comparative purposes), street surfaces, storage pits, and burials. Samples were taken from features in order to provide a comparison with micro-artifact densities from specific activity areas. For comparison, control samples were collected from non-cultural levels and from construction debris.

After collection in the field, the heavy fractions were floated (fig. 1.3). The “light fractions” (containing botanical matter) were set aside for analysis by other specialists. The materials left over from flotation contained rocks and artifacts; I sifted them through a series of four screens of variable mesh in order to separate archaeological remains from naturally occurring rocks. With the aid of $\times 3.5$ magnifying binoculars, delicate tweezers, and large sorting trays, I picked out pieces of pottery, bone (animal and human), chipped and ground stone, baked mudbrick and plaster, shell (both aquatic and terrestrial), bitumen, charcoal,



Figure 1.4. Micro-bones recovered from the heavy fraction



Figure 1.5. Tablet fragment, recovered from a micro-debris sample at Ziyaret Tepe in 2012 (collected and photographed by Britt Hartenberger)

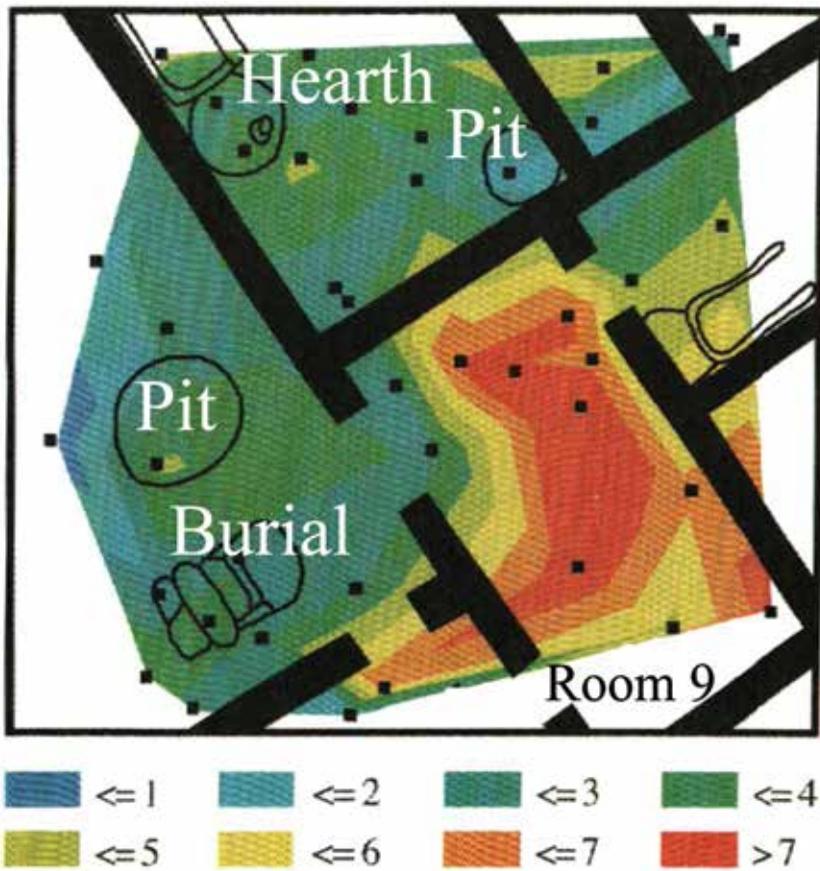


Figure 1.6. Contour density map illustrating the distribution of chipped stone debris within an Early Bronze Age house at the site of Tishrit Höyük (drawn by the author)



Figure 1.7. Sorting micro-artifacts into qualitative categories: (A) ceramics, (B) lithics, (C) bones, (D) broken beads, and (E) bitumen

metal fragments, and the occasional bead or bit of sealing clay (fig. 1.4). On three occasions a small piece of inscribed mudbrick was found in the heavy fractions (fig. 1.5). I used the weight and count density for each type of debris to produce contour density maps, and analyzed this data with a variety of non-parametric tests of association (fig. 1.6).

In addition to studying the density of artifacts at each locus, the materials were sorted into finer categories including ceramic wares (fine, sandy, coarse, and cooking), biological taxa (including fish, medium and large mammals, and rats and mice), chipped stone colors that corresponded to tool types (tan, dark brown, gray, and the less common pink or red), and shell (aquatic and terrestrial) (fig. 1.7).

Results from Micro-debris Analysis

Recovering Hard-to-excavate Materials

One benefit of micro-archaeological investigations has been the recovery of artifact types that are rarely recovered through traditional excavations. For example, it is very hard to spot and collect rodent and fish bones while excavating packed sediments. More surprisingly, the floated heavy fractions contained the chipped rims from fineware vessels (when otherwise, neither the macro-sherds nor the vessels remained at the loci of activity) and small metal hinges that may have held wooden or ivory “writing boards” together. Another micro-material type not regularly recovered with traditional excavation techniques is small beads. Many of the published bead typologies are based on burial contexts where extra effort

Figure 1.8. Beads collected from a heavy fraction at Ziyaret Tepe



Figure 1.9. Contemporary Turkish head scarf embroidered with beads



Figure 1.10. Beads used in a wall hanging in a Turkish business

(and sieving) is made to recover beads. These beads are often made of precious materials like lapis lazuli or gold. In contrast, the more ordinary beads that I recovered from domestic contexts are made from gypsum, limestone, shell, and frit (fig. 1.8). While only 4 percent of the heavy fractions that I collected contained beads ($n=95$ beads total, ranging from 1 to 8 beads per sample), these were domestic contexts (like floors) rather than mortuary ones. Accordingly, these samples provide a more accurate window into the everyday use of beads.

Contextualizing the Results with Ethnoarchaeological Studies

I used a multi-disciplinary approach to interpret the bead assemblages that I recovered in the heavy fractions. In addition to recording their excavated context, I conducted ethnoarchaeological research in a Kurdish village and a Turkish city to determine what uses beads may have served beyond simple decoration. First, I learned that today, bead production in this region of southeastern Turkey is primarily handled by children and women.² Women use intricate beadwork to personalize commercially purchased headscarves (fig. 1.9). The occasion for these “sewing circles” enables women to socialize, share stories, and visit with women outside of their families. In other instances, modern-day beads were used in tourist bracelets,

² In contrast, Jonathan Kenoyer (1991, p. 55) found that much of the bead production in Khambhat, India, was handled by men, with only the stringing

delegated to women. The mining of materials was conducted by men, women, and children.

religious wall hangings, and protective amulets (such as the prevalent *nazar boncuğu* or “evil-eye amulet”; fig. 1.10). This range of uses challenges the more traditionally held view that beads were predominantly decorative (either as jewelry or clothing ornamentation). The diversity of contexts raises additional questions to pursue in future research: Did beads primarily symbolize personal taste, social status, or religious beliefs? Did both men and women use the beads to decorate their clothing? What percentage of the beads were used in domestic decorations or amulets rather than on clothing? Understanding these artifacts more fully outside of their burial contexts will improve our understanding of an important avenue of craft production and the symbolic function of domestic furnishings.

Micro-artifacts as a Case Study in Analyzing Assemblages

The third result is how micro-artifact patterning challenges traditional notions of artifact assemblages. Here I am using Michael Shott’s (2010) definition of *assemblage* to reflect the theoretical and methodological complexities implicit in this term. As Shott explains, while the *assemblage concept* is a fundamental concept for organizing the material culture that we excavate, fewer archaeologists consider the tautological nature of essentializing sets of artifact types to define activity areas (e.g., toolkits that symbolize “camps” in forager settlements). Or, in simpler terms “once we decide what we are looking for, typically we find it in assemblage data” (ibid., p. 887). By comparing and contrasting “macro” and “micro” artifact densities and distributions, we can test some of our conventional interpretations of artifactual assemblages within urban areas.

First, I tested to see whether macro- and micro-artifacts were differentially distributed; they were (Rainville 2000, p. 284; Rainville 2005a, pp. 32–35). If they hadn’t been, the micro-artifacts that I collected would have been the crushed, smaller pieces of the regularly occurring macro-artifacts, which would not have had much interpretive value.

Second, I created models for what micro-artifactual assemblages looked like in the archaeological record. Several of these models provide cautionary tales for interpreting features as “in situ” or “intact.” For example, in a domestic surface that excavators interpreted as a “floor” I found sherds that spanned from the Early Bronze Age through Classical periods. While the retention of heirloom vessels is to be considered, this is not a realistic chronological range for a discrete activity area. In other cases, I found that micro-artifacts were the only remaining trace of many daily activities such as stone tool retouching, animal butchering, and food storage (the vessels were removed upon abandonment but often chipped or broken through everyday use, leaving behind small fragments to indicate their presence). And as I have discussed elsewhere, daily cleaning practices can impact the distribution and recovery of micro-artifacts (Rainville 2000, Rainville 2005a).

When excavators uncovered especially well-preserved floors, I sampled the entire room by laying out 10 × 10-centimeter units and following the outline of the floor that they identify (fig. 1.11). Depending on the size of the room and the depth of the floor, this netted one to three dozen samples and enabled me to map the distribution of activity areas within houses. This micro-archaeological sampling technique is informative for a number of reasons: it illustrates the multiple uses that most rooms had in the past (unlike our modern conception of “kitchens” versus “bedrooms,” for example), it provides a window into artifacts that are rarely preserved at the macro level (such as lithic debitage), and it enables us to talk about artifact assemblages within a room.



Figure 1.11. Taking micro-debris samples from an entire floor in the Lower Town at Ziyaret Tepe

While it would not be realistic to float the excavated remains from an entire urban site, a combination of random and judgmental sampling from primary contexts provides multiple advantages, ranging from the recovery of rare artifact types to a better quantification of the density distribution of large and small items (calculated from the known weight and volume of each heavy fraction).³ A careful study of the remains within a heavy fraction can also indicate the impact of post-depositional disturbances (like rodent holes that change the vertical position of sherds) and of the potential for synchronic assemblage uses (e.g., the use of heirloom vessels alongside contemporaneous ones).

After a decade of sampling different trenches, I have realized the importance of engaging trench supervisors and artifact specialists in an ongoing dialogue. On many projects, the standard procedure is to hire trench supervisors to supervise excavations within a unit of a certain size and, more often than not, trust them and their workers to decide how to sample artifacts. For example, the supervisor may decide not to save undiagnostic sherds from a plow zone, or they may screen primary deposits but not secondary or tertiary ones. Sometime later (days, months, or even years), the artifacts are studied by the respective specialists. Usually these are specialized positions, so you hire a faunal analyst, a ceramicist, a lithic expert, and if you're lucky, specialists in other fields like paleobotany or malacology. By the time their reports are produced, they are usually working without access to the complete context. In

³ Very few urban excavations in the Near East regularly calculate the quantity of sediment excavated. In other words, if you report a dozen palace-ware

sherds from a temple and two from a residential structure this has little interpretive value unless you know the relative density from each context.

other words, the pottery person is not comparing the type and quantity of ancient vessels to evidence of meat consumption from charred bones. In talking with several trench supervisors about their reactions to specialist reports from their trenches, we agreed that too often the lack of ongoing dialogue results in uni-dimensional interpretations that focus on only one artifact category at a time.

Third, the qualitative range of micro-lithics often exceeded that of the recovered “macro” tools and blades. The variable preference for chipped stone types (defined here by color choice) may correlate with economic resources (if, for example, some of the types are not local) or household preferences. Whether there are qualitative differences among the raw material types remains to be seen. But even without clear structural differences, the use of certain material types may have had a symbolic meaning for ancient residents (akin to using an authentic Swiss Army knife versus an imitation).

And, finally, I tested one of Shott’s other suggestions, that the “assemblages” we see in the archaeological record are often the end product of multiple visits to a site by various individuals over a long period of time (e.g., not just the debitage from Hunter A who preferred to sit in the northwest corner of the firepit to work by the light). I conducted a short ethnoarchaeological study of our outdoor work areas at Ziyaret Tepe, Turkey, recording who conducted what activities where at different points of the day, and then later I excavated one-foot square samples from the surfaces where each person worked. I immediately realized that even a very thin layer (under 1 cm in thickness) included a longer period of time than I expected. For example, there was decades-old trash in plain sight on the dirt surfaces



Figure 1.12. In-situ artifacts beneath a work table at the Ziyaret Tepe archaeological camp, Turkey. Notice the bottle top, nut shell, and small fragments of debris



Figure 1.13. Reconstruction of a room within an Assyrian house if you assume that every excavated artifact within the layers of the trench were used at the same time (cartoon by Mary Shepperson)

which was occasionally re-used (e.g., a ca. 1970s pull-tab from a can of soda was subsequently curated and used to pry open a twenty-first-century container of nuts; fig. 1.12).

Figure 1.13 represents a scene from the daily life of an Assyrian family if you assumed that every sherd, animal bone, tool fragment, and bead found within several centimeters or so of sediment was used contemporaneously within one given room. And while most excavators recognize the regular disturbances within their trenches (from rodent and post holes to intrusive storage pits and post-depositional forces), it is hard to synchronize those observations with artifact specialists who are analyzing bag after bag of pre-sorted objects far from their original context. Note the edges of the excavation unit, an archaeologically imposed bias on the perimeters of ancient rooms.

To Collect Micro-debris or Not to Collect Micro-debris?

Micro-debris analysis is one of dozens of new techniques for studying ancient households. As discussed in the first half of this paper, there are so many techniques that you will have to prioritize your choices. This prioritization should be based in part on the amount of time that you can spend in the field, as well as on the nature of your site's geological and preservation conditions. Geoarchaeologists pointed out decades ago that site-formation processes impact the construction and survival of architecture (Rosen 1986). The best way to fully understand the impact of these natural forces on the preservation of domestic architecture is



Figure 1.14. An abandoned house in Tepe, Turkey



Figure 1.15. A Kurdish family standing outside of their home, Tepe, Turkey



Figure 1.16. An ant carrying away a piece of chicken

to work closely with a geologist who is able to visit the site, not just consult from a distance. In sum, it helps to have a baseline for preservation at each site so that you can interpret the subsequent patterning of fragile items, like bone. One innovative measure of preservation is discussed by Stephen Weiner (2010, p. 160), who used the quantity and quality of carbonate minerals in the shells of snails to gauge the relative preservation of other faunal remains based on the pH levels of the surrounding sediments.

Buried Houses: What Is Missing?

One depressing ethnographic account estimated that over 92 percent of the household artifacts were either curated at abandonment, not preserved, or reused/stolen within a generation (Robbins 1973). And this does not take into account Ian Hodder's definition of "entangled things" that are integral to the operation of households (like births or bathing) which may not have occurred within the indoor boundaries of a house or have left any permanent physical traces (Hodder 2012). A photograph of an abandoned house in a modern village illustrates the impact of abandonment after only a decade: grasses growing on the roof, sagging walls, eroding whitewash, and its transformation into a trash disposal area (fig. 1.14). Or, to think about it from the opposite perspective, figure 1.15 shows a typical moment in the life of a Kurdish family. Even this static photograph gives insight into dozens of daily activities and artifacts that would not be preserved in the archaeological record, such as the relationship between the man and woman or their perishable clothing.

Since few archaeological sites experience a sudden ending to residential life, such as the often cited example of Pompeii (Dickmann, this volume), most ancient people take their portable valuables with them when they abandon a site. This supports the cliché that archaeologists dig up people's trash. In addition to curating artifacts, domestic activity areas may



Figure 1.17. An ancient artifact repurposed in the present, Diyarbakir, Turkey

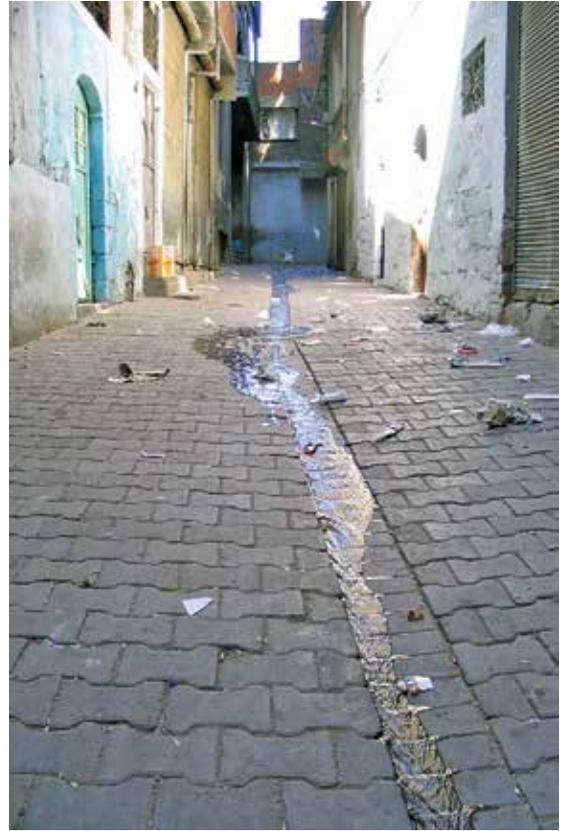


Figure 1.18. Drain in a modern-day Turkish city

be located far from domestic architecture and are thus hard to locate. A large percentage of the faunal remains from consumed animals may also be missing from the archaeological record. Carol Kramer (1982, p. 49) noticed that a contemporary Iranian village contained very few bones because of consumption patterns, off-site kill locations, and the scavenging activities of dogs.⁴ So what do the commonly excavated sheep/goat/cattle bones represent on Mesopotamian sites? In addition to consumed flesh, some of these remains might be remains of pasture animals roaming abandoned village sites. This would make more sense than the implicit scenario where ancient urbanites lived on floors strewn with bones from large quadrupeds. Even in the case of chicken bones recovered from domestic floors, why would we expect to find pieces of a chicken skeleton anywhere near a living floor? And if it was disposed of in a midden (say, in an open lot adjacent to a house), we might predict that dogs or even ants would consume and remove pieces of the skeleton. After laying out a serving of chicken from a circa 2007 meal and watching ants cart it away, piece by piece, I no longer discount ants as a post-depositional disturbance (fig. 1.16).

⁴ Evidence for their presence might be found instead through dung and wool products, another argument

for applying a palette of techniques to locate these subtle signatures.

Even when we recover domestic material culture it may be located far from its original use spot. These culturally influenced discard practices can include dropping, tossing, placing, reusing, and dumping (Binford 1978, pp. 298–99). For example, figure 1.17 shows a two-thousand-year-old inscribed stone being repurposed as a stool along a busy street in modern-day Diyarbakir, Turkey. Once deposited into the archaeological record, secondary formation processes can move (or modify) the materials even further through cleaning, sweeping, raking, and, unintentionally, trampling (Tani 1995, p. 235). And more subtle forces, such as decay from bacterial or fungal forces, can erode or destroy artifacts. Finally, post-depositional processes often impact floor layers, through bioturbation, flooding, or scavengers (either animal or human). The drain in a modern street (fig. 1.18) moves artifacts down a slope, far from their original discard locations.

After considering all of the possible disturbances in the archaeological record it is tempting to go back to excavating easy-to-spot, immovable monumental architecture. But the point of this paper is not to dissuade household archaeologists from studying everyday life, but rather to increase discussion among excavators from different parts of the world who have grappled and sometimes solved these thorny preservation issues. I conclude this section with an example of a clever work-around for missing data. Anne Killebrew and her team used ethnographic data to learn about the preparation and consumption of animal feet (preserved in the archaeological record as metapodials) within contemporary Druz society (Killebrew, Grantham, and Fine 2003, pp. 64–66). Next, she integrated this data into an index of food-preparation areas, using the density of bone fragments per square unit of excavated area to differentiate between consumption and preparation areas (*ibid.*, p. 66). She used this model to explain the patterning of the archaeological remains. Her sophisticated model combined results from ethnoarchaeology, experimental archaeology, and artifact and activity-area analysis in order to understand what might be missing from the archaeological record. This interdisciplinary approach is one of the best ways to develop multiple interpretations and explanations for the patterning of domestic material culture in the archaeological record.

Does Household Archaeology Help Us Understand Everyday Life in Ancient Settlements?

In conclusion, I return to the original premise of this article: houses and households form the socioeconomic foundation to any society. For a span of thirty years researchers have explored this concept. As we move forward with new techniques we are able to answer a greater range of questions about previously inaccessible behaviors. By judiciously applying new techniques we can create better anthropological models about domestic life in the past. Adelheid Otto's paper in this volume is an excellent example of using an interdisciplinary and multi-technique approach to studying households. And information from activity areas can enable us to build models for more abstract concepts such as the "gender," "status," and "ethnicity" of household residents.

By combining studies of individual houses, we can begin to build models about the distribution of social and economic groups within neighborhoods. For example, did lower-class laborers live side by side with craft specialists and/or social elites? Were certain occupations, such as flintknapping or metal working, segregated within cities? Planning a well-integrated study may resolve some of these questions.

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Activity-area Analysis: A Comprehensive Theoretical Model

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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 Branisław 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 Stelrecht 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 Ḥabur 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 Ḥabur 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.

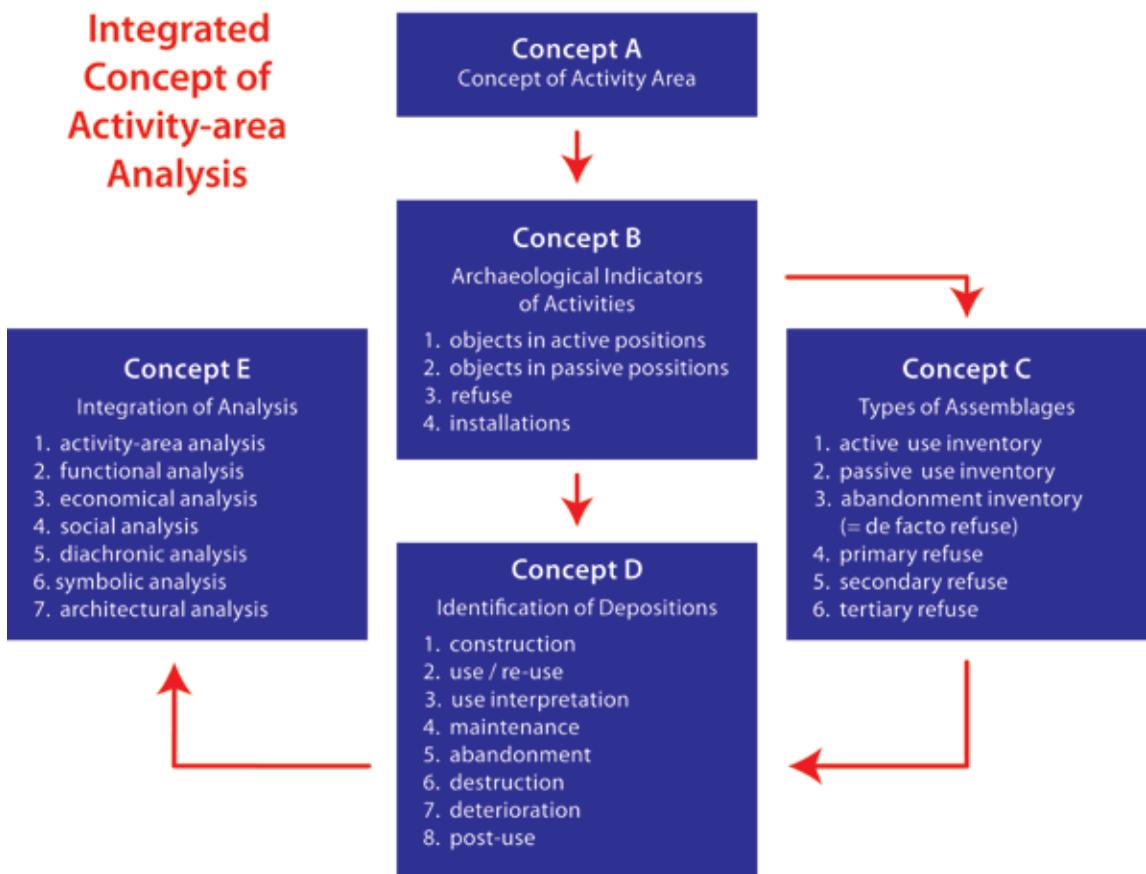


Figure 2.1. The integrated concept of activity-area analysis: a scheme (all images copyright of the author if not otherwise stated)

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

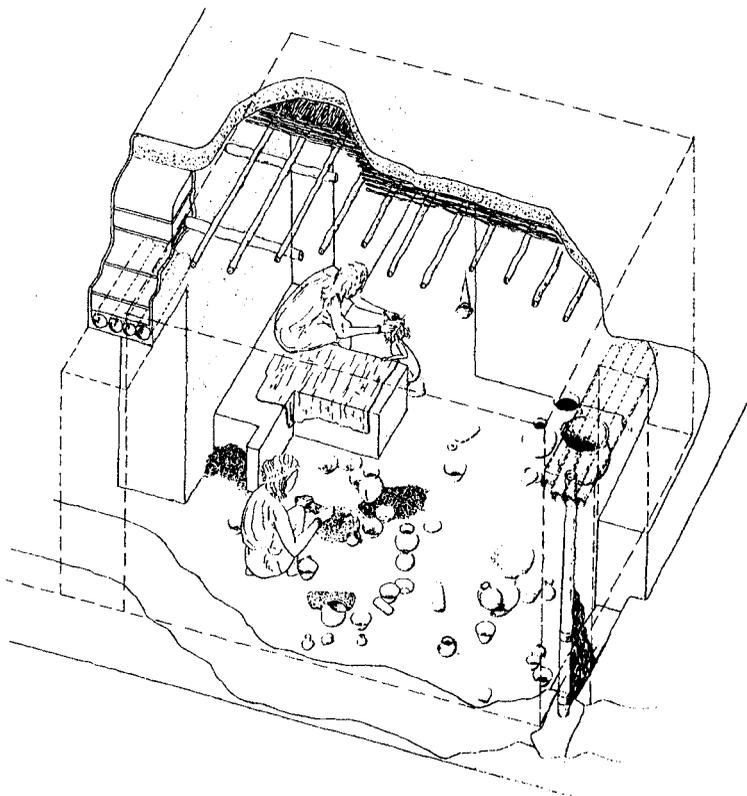


Figure 2.3. Tell Bderi, reconstruction of the activity areas in Room A of the house in Area 2965

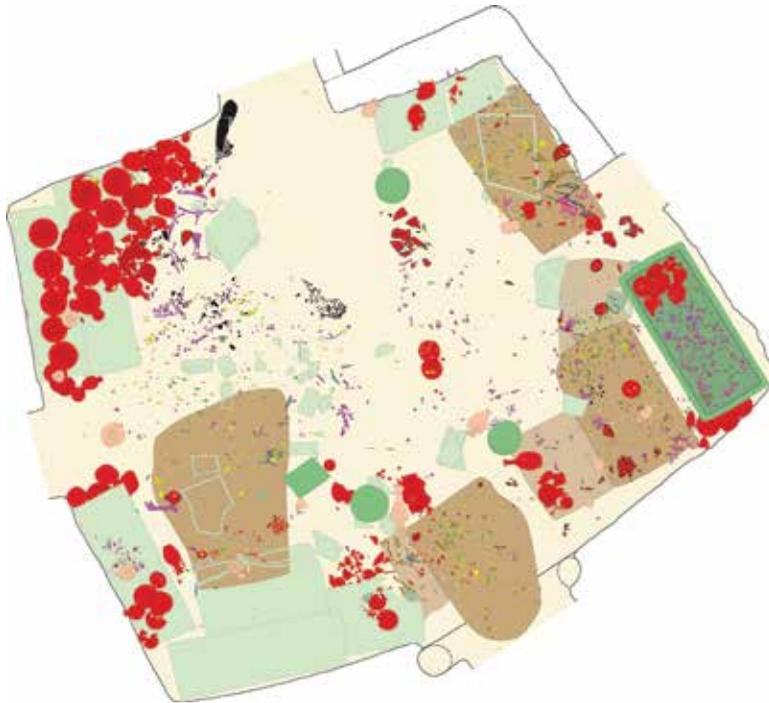


Figure 2.4. Computer-rendered hand drawing of the active use inventory in the main chamber of the Royal Hypogeum at Qatna

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)

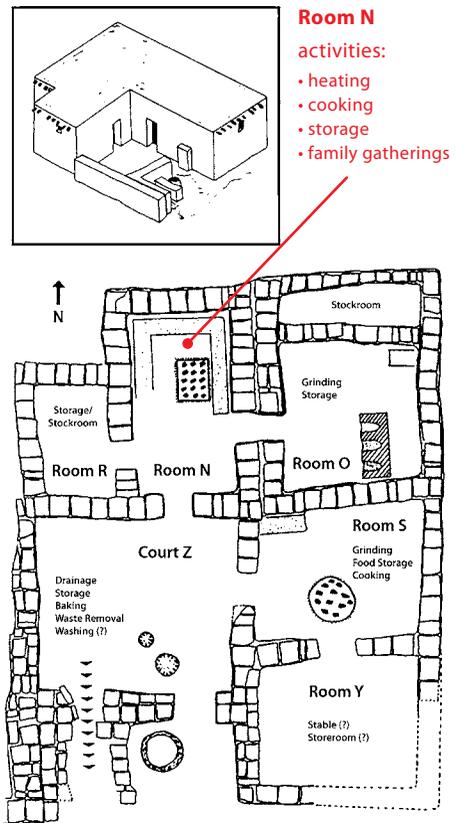


Figure 2.7. Tell Bderi, plotting of the activity areas in House I (level 8)



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

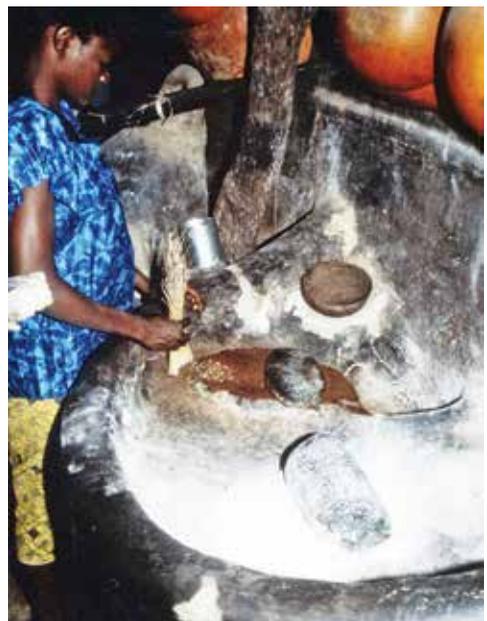


Figure 2.10. Ethno-archaeological comparison: grinding table in use in a house at the village of Tiébele, Burkina Faso, West Africa (author's photo, 1992)

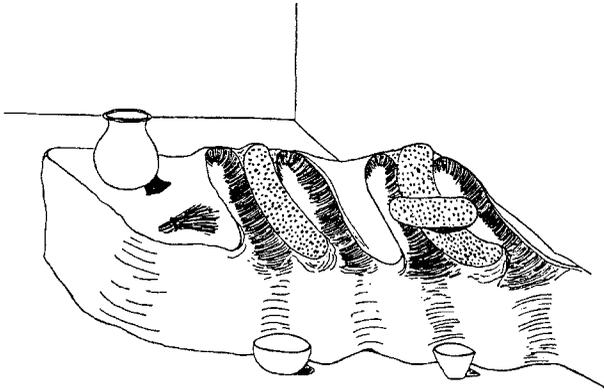


Figure 2.11. Reconstruction of a grinding table in an Early Bronze Age house at Tell Bderi, based on ethno-archaeological analogy



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).

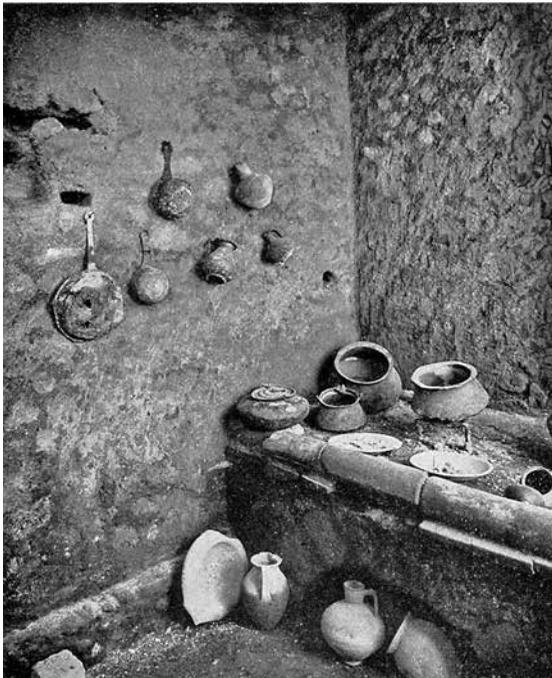


Figure 2.13. Active use inventory of a kitchen discovered at Pompeii, obviously re-arranged by the archaeologists (after Corti 1944, fig. 77)

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

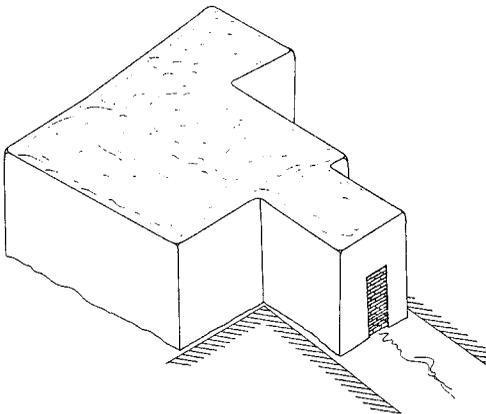


Figure 2.14. Tell Bderi, House XIV (level 14), isometric reconstruction of the house with its door blocked by mudbricks



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, pl. 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.

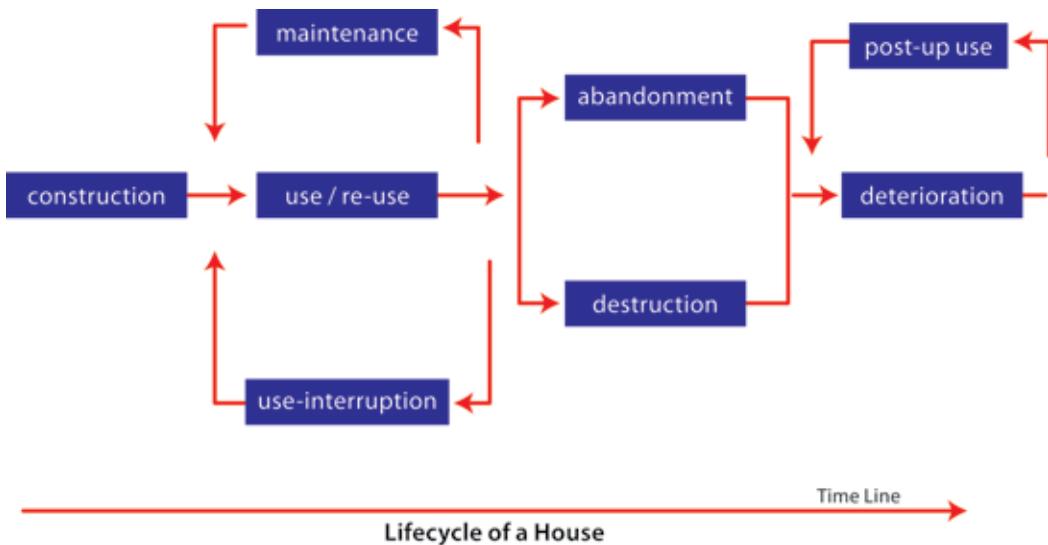


Figure 2.16. Scheme for the lifecycle of a house

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, pl. 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

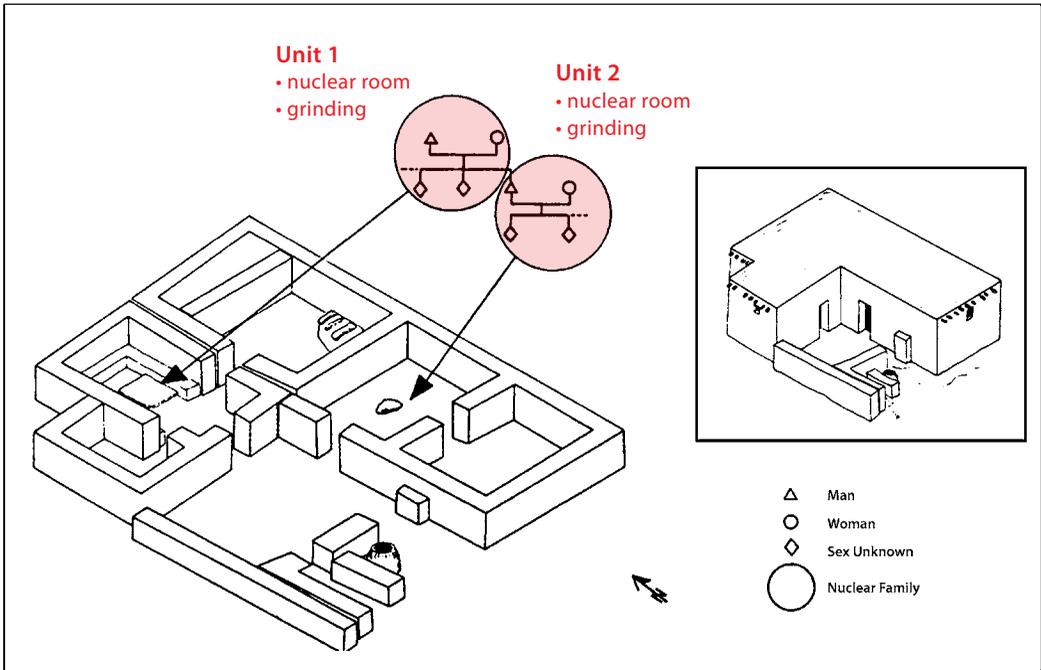


Figure 2.17. Tell Bderi, House I (phase 8), reconstruction of the household composition

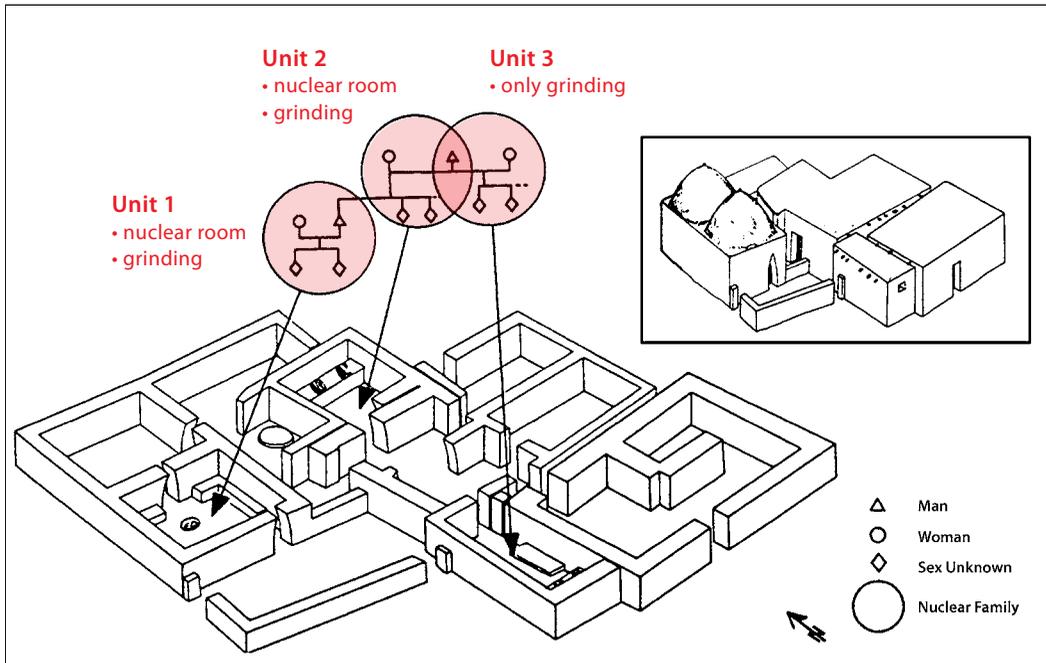


Figure 2.18. Tell Bderi, House III (phase 9c2), reconstruction of the household composition

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.

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How to Reconstruct Daily Life in a Near Eastern Settlement: Possibilities and Constraints of a Combined Archaeological, Historical, and Scientific Approach

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Introduction

Nothing makes an archaeologist happier than a settlement which has been destroyed by fire before the inhabitants were able to save their belongings. This paper discusses the extent to which the interpretation of room and house function is possible even when these apparently ideal conditions are given (the “Pompeii Premise”), because still then the reduction of the systemic inventory by natural processes and by historical events such as plundering is considerable. Such is the case at Tall Bazi in modern-day northern Syria, where the still-existent primary inventory of approximately fifty contemporary buildings allows insights into various activities within the private houses. Written sources and scientific analysis can help in deducing the missing equipment of households. A promising method is, then, to define an ideal typical building with an ideal typical inventory and deduce the ideal typical activities in the areas, and to compare this to the always varying existent forms of the individual units. This allows recognition of deviations from the ideal type immediately, and lets us gain insight into the individual variations in status, occupation, or personal fate. The utility of this method is demonstrated by the example of a small house, which shows that the frequently assumed relation of house size to the economic or social status of the inhabitants is not always right.

1. The Method

The so-called Pompeii Premise, defined by Lewis Binford, Michael Schiffer, and others, is that archaeological assemblages at any site can be treated as if they were Pompeii-like systemic inventories (Schiffer 1985; Binford 1981). However, as has been shown frequently over the past decades, various formation processes are responsible for the specific composition of the assemblages that are found in excavation: the systemic inventory was altered by numerous processes which can – in analogy to paleontologists’ definitions of taphonomy (Gifford 1981) – be divided into premortem and postmortem transformations. To the former belong

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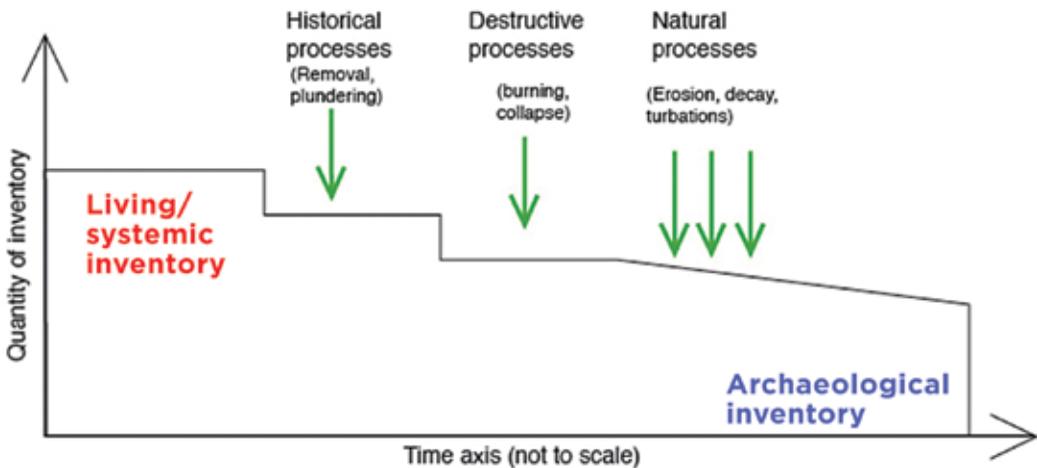


Figure 3.1. From systemic to archaeological inventory at Tall Bazi

historical processes: the removal of objects when the inhabitants left their homes, or the plundering of a settlement before or after its destruction. To the latter belong natural processes and disturbances, erosion, or various turbations.¹ The resulting archaeological inventory is but part of the systemic inventory (fig. 3.1).

The archaeologist's task is to develop methods to reconstruct the former living system. These methods vary according to the investigated culture and its natural environment: while non-carbonized organic materials have not been preserved at Near Eastern sites due to climatic conditions – in contrast, for example, to the admirable preservation of these materials in Egypt – written records furnish a precious source for reconstructing the missing parts of the household equipment. Furthermore, ethnological analogies, scientific methods, and experimental archaeology have proven to be invaluable tools to reconstruct former daily life.

2. The Case Study of Tall Bazi, a Fourteenth-century Settlement in Northern Mesopotamia

The above-mentioned methods to reconstruct the systemic system from the archaeological inventory is demonstrated here by the case study of the site of Tall Bazi, a Bronze Age settlement in northern Mesopotamia – modern northern Syria – in the Tishreen Dam area of the Euphrates valley (fig. 3.2).²

For the purpose of this volume, only the Late Bronze age settlement is of interest. It consisted of the prominent citadel, a 60-meter-high natural fortified hill, and the northern and the western lower town. This western town, the so-called Weststadt, had been constructed

¹ Faunal- and floral-turbations, cultural and non-cultural disturbance processes are described in Schiffer 1987, pp. 206–09.

² Salvage excavations of the Weststadt have been conducted under the direction of Berthold Einwag and myself from 1993 until 1998 on behalf of the Damascus branch of the German Archaeological In-

stitute, to whom I am also indebted for sponsoring my traveling costs to Chicago. We are grateful to the Deutsche Forschungsgemeinschaft (DFG), who supported the investigations on the citadel from 2000 onward. Heartfelt thanks are due to the Syrian Antiquities Service, which permitted and fully supported our investigations.

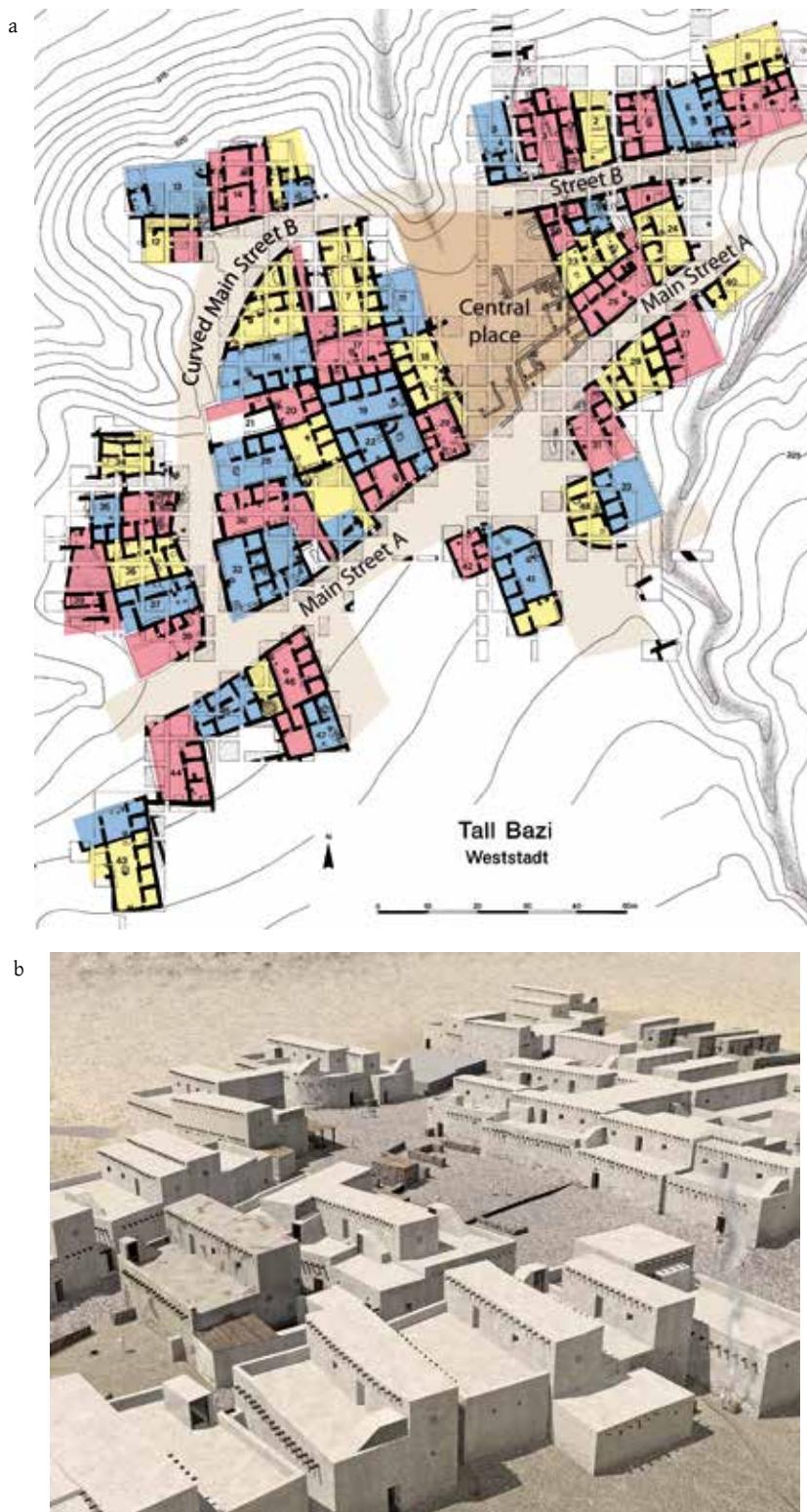


Figure 3.2. The Weststadt and the main structures of Tall Bazi (northern Syria), ca. 1450–1350 B.C.,
(a) plan and (b) reconstruction

on virgin soil on a shallow river terrace as a suburban extension of the already existing settlement. The houses were arranged along two main roads and around a central open space which probably served as the marketplace (Otto 2006, pp. 266–68). The regularity and layout of the domestic quarters as well as the division of the plots show that the Weststadt was a planned settlement enlargement.³

The great interest of the Weststadt lies in its tragic fate: it was violently destroyed and heavily burnt after having existed for only about two generations, probably from about 1450 until 1350 B.C.⁴ There is a single level of occupation with at most two phases. Apparently the abrupt end of the whole city came so suddenly that the inhabitants had to leave a large part of their belongings, even weapons, seals, and jewelry. It is therefore a rare example of a settlement consisting of a considerable number of neighboring houses that were in use at precisely the same time, and that still preserve in the burnt debris a certain amount of their inventory (for a more precise definition, see section 3.1.1, below). The Weststadt was never settled again, and the Late Bronze Age remains lay immediately below the surface when we arrived in 1993.



Figure 3.3. A typical house in the Weststadt of Tall Bazi, consisting on the ground floor level of a main room and a row of flanking secondary rooms, with the remaining archaeological inventory (House 32)

³ On first sight, the layout of the Weststadt seems to be irregular. In fact, the curve of the northern road follows closely the natural form of the terrace. One of the best proofs for the planned character of the Weststadt are the walls that border the streets on both sides. They were built first, and afterwards the plots along these walls were built one after the other.

⁴ The date of the destruction has been a matter of debate, since the radiocarbon dates, which were derived at different laboratories, were not consistent. Taking into consideration the latest results, a destruction date around the middle of the fourteenth century B.C. is most probable.

No more than seventy-five houses existed in the Weststadt, of which fifty have been excavated.⁵ Most show a highly standardized ground plan: a large rectangular main room flanked on one side by a row of three to six small square rooms (fig. 3.3). A staircase led to the roof above the main room, which was the only open space in most of the houses and served as the courtyard. From there the upper story above the row of small rooms was accessible. This is evident in several of the better-preserved houses, where the debris from the roof, including the inventory from the second story, was found collapsed into the secondary rooms of the ground level.

3. Reconstructing Ancient Everyday Life by a Combined Archaeological, Historical, and Scientific Approach

3.1. *The Archaeological Approach*

3.1.1. Classifying the Archaeological Inventory of the Weststadt Houses

As already mentioned, the remains that are found in excavations are only a part of what had existed long ago. Following the definition of Schiffer (1972), we speak here of archaeological inventory as opposed to systemic inventory. The classification of this archaeological inventory during excavation is crucial for the interpretation of the structures, and necessarily is the first step in the interpretation process. The following definition of the inventories is adapted from Schiffer 1972, Clarke 1973, and Pfälzner 2001 (see Otto 2006, p. 26, and Pfälzner, this volume).

Inventory I, or primary inventory, has been defined as functioning objects that were in use at the time of destruction and that were found at the place where they had been used or stored. In order to determine whether the inventory of the Weststadt houses was still intact at the moment of their destruction, it was mandatory to restore the vessels, even though this meant a considerable effort, because refuse sherds were frequently found reused as building material inside the walls and roofs. Sherds of broken pottery were imbedded in the mudbricks (apparently the mud for the bricks had been extracted from the surrounding mounds), some had been put in the mortar between the bricks, and others had been placed under the roof beams in order to even them out.⁶ If these walls and roofs collapsed and became mixed with the inventory, intrusive sherds were the result.

Fortunately, most houses in the Weststadt disposed of Inventory I, and in some of the better-preserved houses even some primary inventory of the upper floor level had been preserved (fig. 3.4).

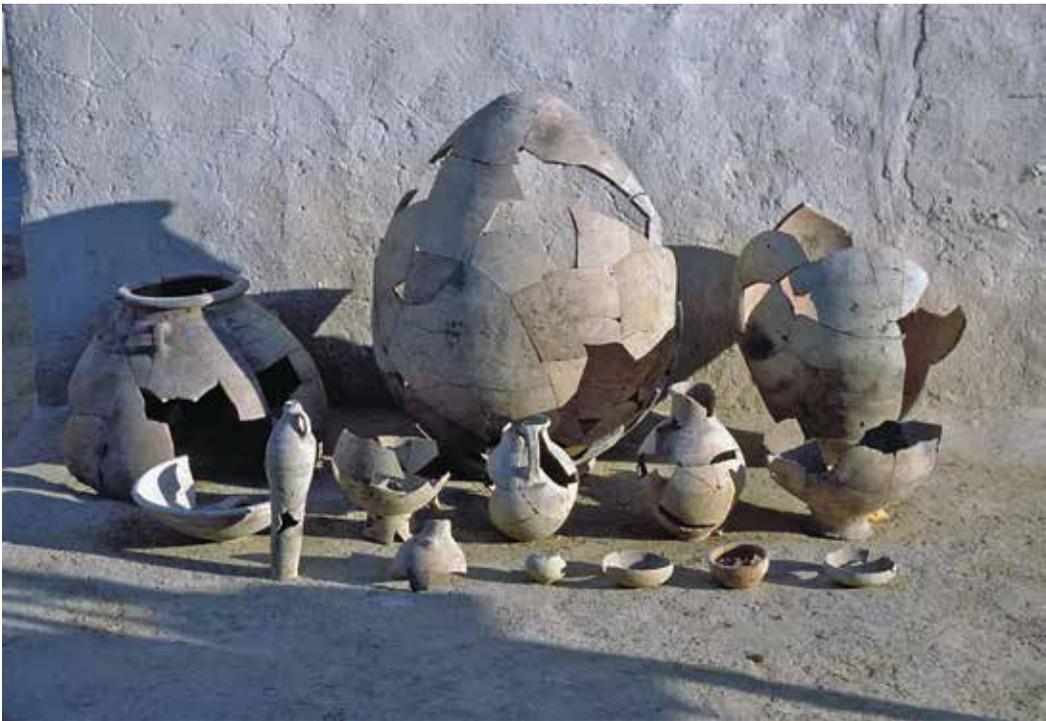
Inventory II is made up of functioning objects that were still complete and functioning, but temporarily out of use and therefore stored for a limited time span in certain areas. As a consequence, no functional relationship between the objects and their findspots may be deduced. Additionally, a considerable part of the personal belongings such as documents and useful tools had certainly not been left behind. A fine example for this is House 28, where a

⁵ The existence of fifteen to twenty more houses can be deduced from the magnetic survey, see J. W. E. Faßbinder and H. Becker in Einwag and Otto 2001–03, pp. 87–88, pl. 5:d.

⁶ These same practices have been observed in the constructions of the local people who live today in the villages of this region.



a



b

Figure 3.4. Inventory I (primary inventory) collapsed with the upper floor in House 47, secondary Room d, (a) as found and (b) restored

considerable part of the mobile objects (pottery vessels, bronze and stone tools, jewelry, raw material, etc.) had been stored in one of the secondary rooms, Room b (fig. 3.5). As for the pottery, sets of plates, bowls, and other vessels had apparently also been stored in the room. In distinct contrast to Room b, the main room and the other secondary rooms were found virtually empty. One reason for this sort of storage may have been the temporary absence of the inhabitants, but other reasons are conceivable.

Inventory III, or “de facto-refuse” (Schiffer 1972; Pfälzner 2001, p. 46), designates no longer or only partially functioning objects that were out of use — items that were left behind at the abandonment of a built structure. In the Weststadt houses, these were most often large and heavy objects such as the basalt saddle mills and extremely large, immobile pottery vessels such as beer vats, which have a capacity of up to 200 liters and were partially set into the ground. Less frequently, smaller and still intact objects such as figurines, jewelry or small jars were left behind, either by mistake or perhaps intentionally during abandonment rituals.⁷ House 20 is a fine example (fig. 3.6): While the northern part of the house was intensely used at the moment of the settlement’s collapse, only a few broken pots, the heavy saddle mill, and the large, immobile beer vat were found in the southern part of the same house. The carbonized beams on the floor indicate that, though abandoned, the southern part was covered by a roof that was more or less intact.

Refuse is defined as no-longer-functioning objects that were out of use and had been deliberately thrown away.⁸ In Tall Bazi, refuse was found mostly outside the houses, thrown on the streets, in the central place, or down the slope beyond the housing quarters. If it was found inside a house, it had been created shortly before (e.g., animal bones close to the area, where a meat dish had been consumed), or it had been dumped in shallow pits at certain locations, especially in areas of food preparation.⁹

Following this classification of the archaeological inventory, it is relatively easy to distinguish between the four categories. Only when the interpreted remains are clearly part of a primary inventory can they be used to infer “past behavior” in the broadest sense — one of the primary principles of behavioral archaeology which is frequently used in the framework of activity analyses (Schiffer 1985, p. 19). But even then the question arises: how meaningful is a single house with its primary inventory?

3.1.2. The Series

Imagine a single room with primary inventory has been excavated. A beaker is found in the northern part of the room, a figurine in the central part, and a working tool in the southern part (fig. 3.7a). Is the position of the objects necessarily significant? Everyday life shows that there may be countless reasons why an object may be located at an unusual spot, if only for the moment: it might have been moved from its usual location for repair, or recently

⁷ Two fragments of a large terra-cotta bull figurine were the only objects recovered from House 37. Found not far from the entrance, they possibly point to ritual practices at the moment of abandonment (Otto 2006, p. 131, fig. 68,11. 244. 258).

⁸ The differentiation between primary and secondary refuse is not an important issue for this inves-

tigation. For a general definition, see Schiffer 1985; Pfälzner 2001, pp. 38–56; concerning the Weststadt of Bazi, see Otto 2006, pp. 26–28.

⁹ An example for this was found in House 4, where animal bones, mixed with ashes, were found in the main room inside an oval pit in the area of food preparation (see Otto 2006, p. 156, fig. 79).

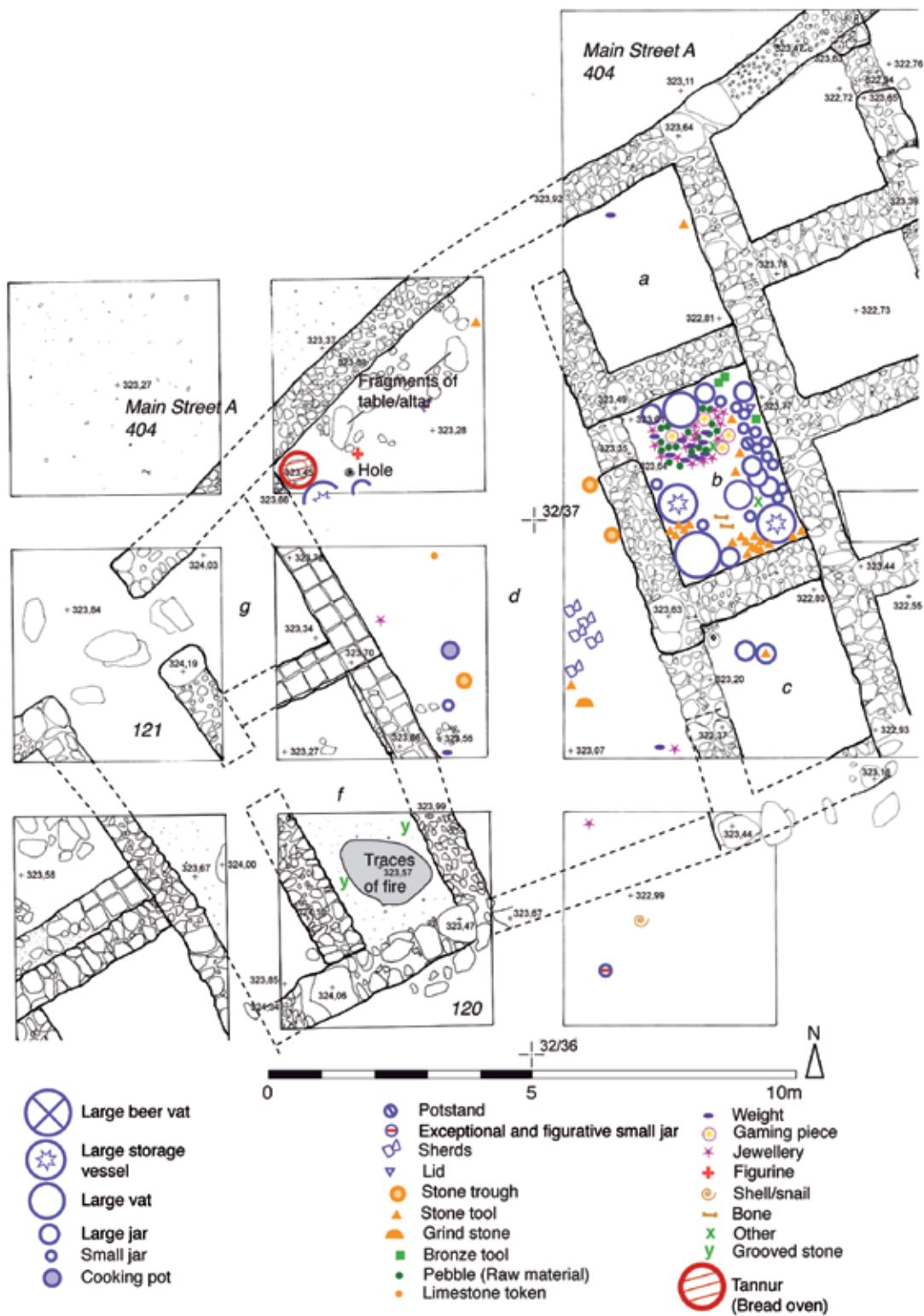


Figure 3.5a. Inventory II in House 28: Most mobile objects had been temporarily stored in secondary Room b. Map of the house with inventory



Figure 3.5b. Inventory II in House 28: Most mobile objects had been temporarily stored in secondary room b. Kite photo of Room b



Figure 3.5c. Inventory II in House 28: Most mobile objects had been temporarily stored in secondary Room b. Sets of pottery vessels from Room b (partly restored)

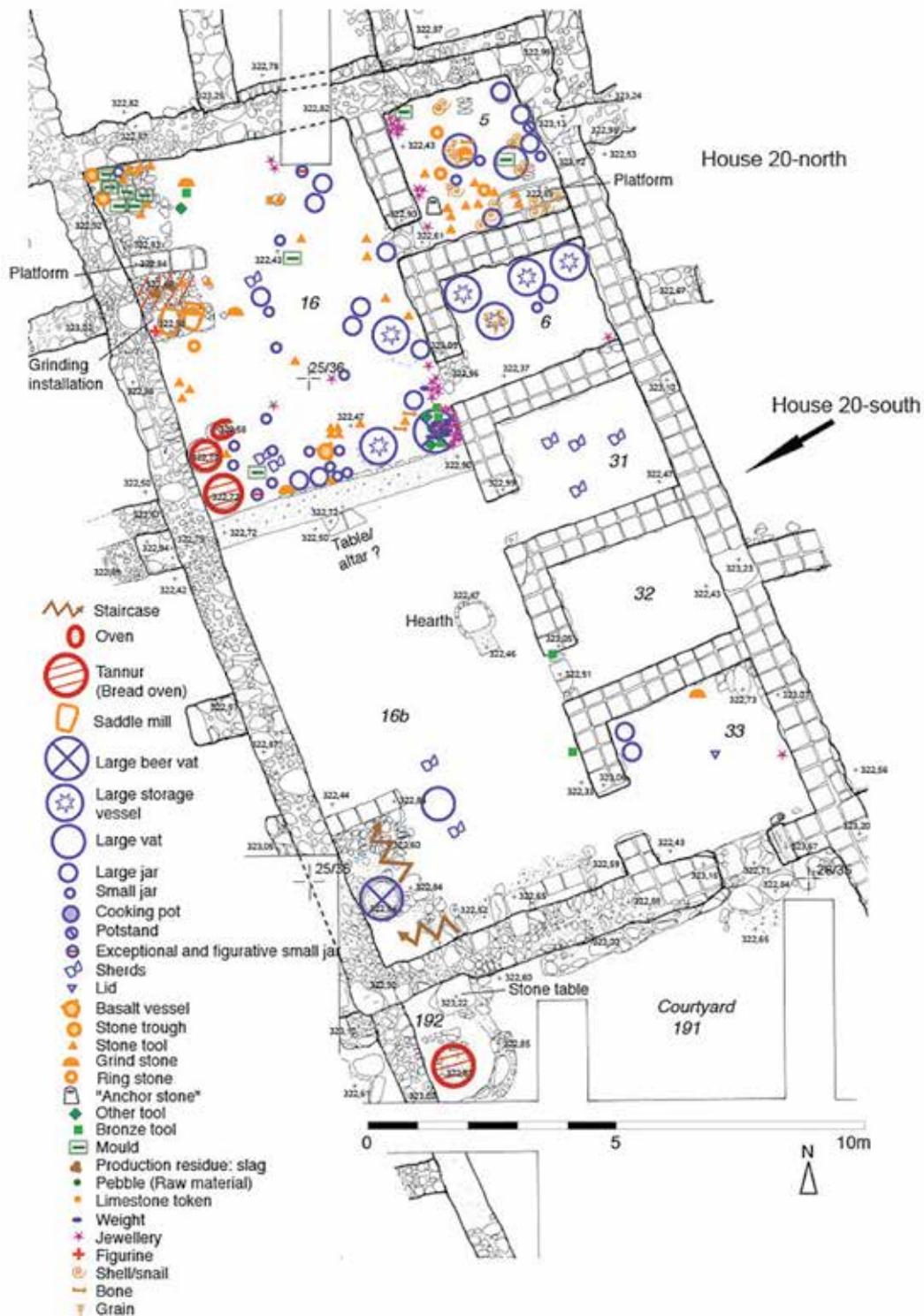


Figure 3.6a. Inventory III in the southern part of House 20: Map of the house, which had been divided at an earlier stage into two separate units, of which the northern one was used as a house with a smith's workshop, and the southern one was abandoned



Figure 3.6b. Inventory III in the southern part of House 20. The house was found virtually empty except for some sherds and a heavy mill stone, which had fallen from the upper story when the roof collapsed. Carbonized beams and other burnt material on the floor is evidence that the roof was intact

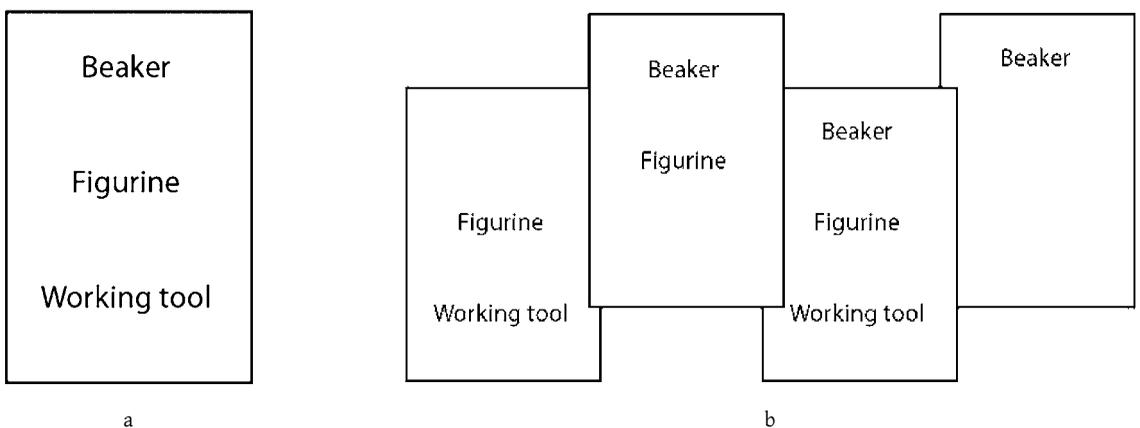


Figure 3.7. (a) The distribution of finds in a single unit, evidently being of limited significance; (b) the distribution of finds in a single unit, evidently being of limited significance versus the value of the series

purchased and not yet put away, or perhaps the house had been cleaned or cleared, or children had messed up the room, and so on. It seems at least as probable that an object can be found at a location where it was commonly used as where it would have never been used. Therefore one has to be extremely cautious when inferring the general function of a location from the position of a single object in a single house. Even less reliable is a transfer of this supposed function onto other houses with a similar ground plan, as is frequently done when the function of a room is inferred from its form or type.

In fact, only the series is revealing: when the same distributional pattern of objects occurs in several houses, conclusions about the function of an area and subsequently about the activities that took place there are tolerable. This is possible even if the complete pattern hasn't always been observed, but only a part of it (fig. 3.7b).

3.1.3. Interpreting the Function of a Room with the Help of Its Equipment

There have been numerous successful attempts to interpret the function of a room with the help of its mobile and immobile inventory (e.g., Kent 1987; Daviau 1993; von Pilgrim 1996; Verhoeven 1999). Starting from the premise that a room's function may be derived not from its form alone, but mainly from its equipment, the first step in the interpretation process is to investigate in every single house and room the nature and the location of the immobile installations on the one hand, and of the mobile objects, belonging to Inventory I, on the other hand. The second step is, to arrive from the multitude of individual observations at a distributional pattern, the so-called ideal type (see section 3.4).

The most frequent installations within the Bazi Weststadt houses were an oven, a *tannour* and a hearth, a bench, a tablelike structure, a stone trough, and a large beer vat. A cylindrical bread oven (Arabic: *tannour*) and an oval oven, often closely associated with the shallow platform of the hearth on which the cooking must have taken place with the help of three firebricks,¹⁰ were present in 82 percent of the houses, nearly always in the main room. A shallow bench, built quite carelessly from bricks, stones, and mortar, stretched for several meters along one long side of the main room in 78 percent of the houses. In 60 percent of the houses, the remains of a tablelike structure were found at the most prominent place of the main room, opposite the entrance.¹¹ A massive stone trough, partially set into the ground, was found only in 42.9 percent of the houses, and therefore seems not to have been an indispensable equipment of every household. But a large cylindrical vat, the largest ceramic vessel in every house, was firmly set into the ground in 89.3 percent of the houses. These jars, which for various reasons can be interpreted as beer brewing vats (see section 3.2), indicate that brewing took place in nearly every house.

The mobile objects that were most often found were various stone, bronze, or clay tools and pottery vessels of different shapes and sizes, from fine tableware to medium-size forms, large storage jars, and coarse cooking pots. Furthermore, a considerable amount of jewelry,

¹⁰ Very much in the same way as the elder women at the village of Banat-Bazi do the cooking today.

¹¹ The tablelike structures consisted in some instances of solid stone slabs, two of which had been set vertically and a third one placed horizontally on top

of them. In other instances, shallow protrusions or a pillar of mud indicate that a similar construction had existed, but from organic material. Therefore the estimate of 60 percent may be too low.

some weights, a few figurines and seals, and lots of raw material for various handicrafts were found.

The distributional patterns of some items were easy to derive; for example, fine tableware beakers, bowls, bottles, and plates had either been stored in the secondary rooms or they were found in the main room in front of the bench, which enables us to recognize this as an area of consuming. In the secondary rooms were also found most of the large storage jars (some of them still containing carbonized grain), stone and metal tools, weapons, and jewelry. Clearly these rooms were mainly intended for storing equipment while it was not used, rather than for activities. Only when rooms were well provided with light and air did activities take place in them. A good example is House 17, where brewing beer, grinding grain, and preparing food took place in the area opposite the entrance of the house, where ample light and air was supplied from a shallow lane, whereas the pitch-dark rooms in the southeastern corners served for storage only.¹²

Certain handicraft activities that took place in the houses were easy to detect. For example, numerous molds, stone anvils or tools, and production remains tell us that a blacksmith had been manufacturing bronze tools, weapons, and fine jewelry in House 20-North. Iron oxide stones and multicolored pebbles in a raw or partly worked state in several other houses testify that weights and beads were produced there. But what about the handicrafts and daily activities in which mainly organic materials were used and therefore left little trace? What about the textiles, wooden objects, leather, and fur that must have existed? It is evident that only a small part of the systemic inventory will be found through traditional excavation, and that scientific methods and written sources are indispensable to regain these missing but vital information on former daily life.

3.2. *The Potential of the Scientific Approach*

Various scientific methods, the quality and quantity of which are steadily increasing, are today at the disposal of archaeologists (see, for example, the contribution of Aren Maeir in this volume). In the following section, only two examples for the potential of scientific methods are given (for another example, the reconstruction of furs with the help of tiny toe bones, see section 3.3).

Palaeobotany and palaeozoology help us better to understand the ancient diet. Analysis of the Weststadt samples proves that the meat of goat/sheep was consumed predominantly — easily understandable in this area at the border of the steppe, which was ideal for herding small animals (Einwag 2010). However, the dietary evidence from the houses shows remarkable differences: in House 18, a medium-size household, a goat or sheep had been consumed shortly before the final catastrophe. Part of it was found near the hearth, another part had been placed near the “table,” presumably as an offering for the “gods and ancestors,”¹³ and yet another part was kept in a cooking pot in a storage room. But apparently not every

¹² The supply of light and air can be reconstructed for those houses that are directly attached to another one, which excludes the possibility of windows or even tiny openings (Otto 2006, pp. 232–33, fig. 157).

¹³ The veneration of “the gods” (*ilānū/ilū*) and “the dead” (*mētu/eṭemmu*) — according to the documents

from Emar and Ekaltē — belonged to the duties of the family’s head. Whether “the gods” and “the dead/the ancestors” designates two different instances or the same, has been disputed (see van der Toorn 1996; cf. Pitard 1996).

household could afford to slaughter and consume a whole animal. The diet of smaller households appears to have been extremely mixed. A few bones of donkey, goat or sheep, cattle, pig, and even dog were found scattered around the hearth in House 22-South. Clearly they had been part of the diet. The small amount and the quality of the meat indicate that the inhabitants were dependent on exchange or gifts in order to obtain their meat. This small household of only 82 square meters (the average is 132 sq. m) consisted of just the southern part of a house that had been divided, probably as a result of an inheritance division (see papers by Baker and Muhs in this volume). If the small house size and the diet in meat is taken as a clue for the low economic status of the inhabitants, it may be concluded that this was the share of the widow, who had a lifelong right to live in her late husband's house, the major part of which was inherited by the eldest son, as many inheritance division documents from Emar testify.¹⁴

The second example concerns the contents of jars, at least concerning beer and wine. The nature of these residues was derived through residue analyses, a method that has much too seldom been applied at Near Eastern settlements. In general, the pottery inventory of the Bazi houses was fairly standardized. The largest vessel in nearly every house was a wide-mouth vat of about 200-liter capacity. It was always found empty in excavation, in contrast to many large storage vessels with narrower openings, which still contained carbonized grain. The considerable capacity and the wide opening speak against oil and wine as possible content; its use as a container for water is also highly improbable because it was firmly set into ground and therefore could not be easily accessed for cleaning — a vital feature for a water container even today. Residue analysis of the large vat proved positive for oxalate, which led us to initiate an interdisciplinary research group on ancient brewing. Experimental archaeology, new translations and interpretations of ancient texts, and more residue analyses demonstrate the high probability that beer was brewed in nearly every household.¹⁵

3.3. *The Potential of the Historical Approach*

Thousands of cuneiform texts have been known from the two contemporaneous settlements Meskene (ancient Emar) and Tall Munbaqa (ancient Ekalte), situated about 30 and 60 kilometers downstream from Bazi. As regards the individual households, the inheritance documents, bequests, and real estate sales documents turn out to be a precious tool for reconstructing the systemic inventory, because they mention the mobile inventory of one household, including the objects that have completely decayed.

Of course, the inherited objects differ due to the economic situation of the individuals, but as a whole the equipment of most households seems to have been quite similar. On average, this mobile inventory was distributed among the heirs in the following way: one bed

¹⁴ There are other arguments for this interpretation, for example, the fact that the saddle mill for grinding grain was installed in one of the two secondary rooms — a rare exception, since the mill usually was placed on the upper floor. This could be interpreted that either the widow was no longer able to climb upstairs, or that another party was living in the upper floor. For a more detailed description and analysis, see Otto 2006, p. 182.

¹⁵ See Zarnkow et al. 2006; Zarnkow, Otto, and Einwag 2011. We thank Martin Zarnkow from the Technische Universität München, Weihenstephan, who has been conducting analyses and experimental brewing for many years with us. We also thank Walter Sallaberg, who has been studying many relevant written sources and has developed many ideas of ancient brewing with our research group.

and one footstool (usually the share of the wife), one table and one chair (usually for a male heir), one or more bronze kettles, stone mortars, pestles and mills, several garments, blankets or bedspreads.¹⁶ Of these mobile objects, only stone tools have been found in excavations; the wooden furniture and the textiles have decayed, and the bronze kettles must have been taken away or looted.¹⁷ Note that these texts list wooden furniture, large metal and stone objects, and textiles, but never ceramic vessels. Apparently these were not deemed precious goods but simply containers. On the other hand, the texts indicate a very small amount of wooden furniture. If only one chair and one stool is mentioned for a house, it can be excluded that this was the usual way to sit, and it follows that most family members must have been seated elsewhere.

This situation seems to be mirrored in every main room, which was usually equipped with a long bench, about 50 centimeters wide and of the same height. But was it indeed used for sitting, or could it have been used as a working platform or a pedestal for objects? The palaeozoological results help us to answer this question: distinctive animal bones (little toe bones) can only be interpreted as the remains of fur pelts. These toe bones were found on and at the foot of the benches in at least three houses, therefore we can assume that the benches and/or the floors nearby were covered with furs and served as seating accommodations.¹⁸ Indeed the area of the bench seems to have been the ideal place all year long, since in winter it must have been the warmest place (the hearth was usually nearby), and in summer it must have been the best ventilated area (usually it was installed at the side of the house, situated along an open area) (fig. 3.8).

Another example for the indispensable value of the texts concerns the interpretation of the tablelike structure that was situated at the end of the main room in more than 60 percent of the houses. It was built either from stone slabs, mudbricks, or from stone and wood. The area around this structure showed a remarkable concentration of “unusual” objects which were otherwise absent from the houses: libation vessels, jewelry, antique objects, stone weights, bucrania, etc., but also animal bones, sometimes still in cooking pots (Otto 2006, pp. 241–44). In those houses that had been divided into a larger and a smaller part, the table remained in the larger part, or it had been built there anew.¹⁹ Numerous inheritance documents mention that the “gods and ancestors” remained in the “main house,” which was the share of the eldest son. His duty was to venerate and feed gods and ancestors regularly (see n. 13; see Pitard 1996; van der Toorn 1996). This may explain the concentration of most of the objects mentioned above: at least a part of them may have been used for the relevant rituals.

¹⁶ CM 13, Bequest to wife: “Abiyu, son of Zikriya, said as follows: Now (I have given) to Hūdi, daughter of Na’i-Dagan, (as follows): Dagan-zaluli, my maid-servant; 10 ewes and 10 she-goats; 1 bronze kettle, 300 (shekel) in weight, of [(my?)] business venture, 1 bronze *asallu* vat 300 (shekels) in weight, 1 bronze *kabillu* on which my name is written, 1 bronze cup (decorated) with *papparhû*-plants, and 1 cup of ... of the mountains; 1 new garment; 1 large bed (made) of boxwood; 1 new *maqarru*-garment and 1 *i’lu*-blanket/bedspread; 1 bronze *asallu*-vat with a handle, 1 bronze *uttallu*-vessel of *šarbašši*, and 1 bronze brazier; 1 table, 1 chair, 1 footstool...” (Westenholz 2000, no. 14).

¹⁷ Numerous Neo-Assyrian depictions show that large metal kettles are among the most frequently looted objects and the usual tribute (e.g., Budge 1914, pl. 20:b).

¹⁸ The small toe bones easily remain with the fur during the preparation process. I thank A. von den Driesch for the analysis of the animal bones and this useful information. The furs originated from goat and Mesopotamian deer; see Otto 2006, p. 147. 234.

¹⁹ In House 43, 22, 23 the table remained in the larger part; in House 41 a new table was built in the main room of the larger part, attached to the new dividing wall (Otto 2006, p. 70, fig. 28).



Figure 3.8. House 25, where traces of furs were found in the area of the benches, thus corroborating their function as seating accommodation. The benches are the narrow installations along the walls of the main room

However, other objects, such as the small stone weights, indicate that the area around the altar must have played also a role in the economic affairs of the household. Several texts from Emar and Ekalte, which deal with private legal affairs, provide evidence that the so-called brothers assembled in the private houses of individuals for settling these affairs.²⁰ At the end of the juridical act the text mentions that “the *ḥukku*-bread has been broken and the table anointed with oil. The brothers have received 1 shekel of silver.”²¹ This may explain why in several houses small weights, which served to weigh silver (at that time the usual way of payment), were found near the table.

In sum, the combined study of archaeological remains and juridical documents indicates that the table was the place of rituals concerning the veneration of the gods and ancestors of the house, and of social and economic affairs.

²⁰ The society in the Upper Euphrates area was strongly based on collective governance. To the elements of these corporate structures belong the so-called brothers, who were responsible for settling private legal affairs (see extensively Démare-Lafont 2012).

²¹ Emar text RE 20 (Beckman 1996), Sale of House: “... Iphur-Dagan, son of Abda, son of Kapara, has

purchased the house from Bēlu-li’*mī*, son of Abdu-Da, owner of the house, for 1/2 mina of refined silver, the full price. He has received the silver and is satisfied. The *ḥukku*-bread has been broken and the table anointed with oil. The brothers have received 1 (shekel) of silver (each?) as the *kaburu*-payment for the house.”

3.4. The “Ideal Type” as a Method to Understand Common Patterns of Everyday Life and Deviations from It

By using this combined archaeological, historical, and scientific approach, it was possible to arrive at certain general conclusions concerning the activities within the houses at Tall Bazi. But how then to explain the differences, such as variations in house size, or marked differences in the number or quality of the objects in them, to name but a few? Were they the result of economic factors, regional polities, variations in household composition and size, the social status, or ideology (McClellan 1997)? These questions can best be addressed if the “ideal typical” house and its “ideal typical” inventory is defined. Following the concept of *Idealtypus* or ideal type developed by Max Weber (Weber 1951, p. 191; see Otto 2006, pp. 39–40), these are neither average nor exemplary but comprise the common characteristics of the majority of examples. The ideal type was derived through the detailed comparative analysis of the series of finds and find contexts in every house. The ideal typical activity areas were easily deduced from the pattern that emerged from it (fig. 3.9a–b).

The ideal typical house consisted of a long main room that was flanked by a row of two to six side rooms. The main room was accessible through one of the secondary rooms, and these rooms were linked only with the main room. A staircase in the main room, situated near the entrance, led to the open roof that served as a courtyard, and to the rooms of the second story above the small secondary rooms. The main room, which was equipped with a bench, a table or altar, a *tannour*, an oven and hearth, and a brewing vat, served for various domestic-profane active or passive, ritual and economic, and social activities. The secondary rooms, except the entrance room, served for the storage of goods and house equipment (for more details, see figs. 3.9a–b).

The defined ideal type makes deviations stand out immediately. The case of House 29 provides an example. It is frequently assumed that form and size of a house alone allows conclusions about the social and economic status of its inhabitants. But does this relation between size and status hold true when the inventory is taken into consideration? House 29, with ca. 97 square meters on ground level, is one of the smallest houses in the Weststadt (as mentioned above, the average size was 132 sq. m). However, the material remains were in no way “poorer” than those of other houses; on the contrary, it was equipped with all the ideal typical inventory as well as a fair amount of luxury items and imported goods (Otto 2006, pp. 197–200). But House 29 shows one noticeable difference to the ideal typical house: it was directly accessible from the Central Place, and the front door led straight into the main room (see fig. 3.2). All the other households made considerable efforts to protect their privacy: either the houses were accessible through a secondary room or a wall or staircase was installed as a screen in order to impede sight into the main room. Several houses along the main road were not accessible from this road at all, but from a small lane, which in several cases could even be closed by a door and was clearly private.²² Evidently the owner of House 29 tolerated the cramped house because of other advantages. The direct access from the Central Place points to an economic interest of the owner. His function as a merchant or trader may be additionally corroborated by the objects that differ from the ideal typical

²² E.g., all the lanes in the northeastern quarter of the Weststadt could be closed by a door, as door sockets at the entrances testify; Otto 2006, pp. 265–66.



- | | | | | | |
|--|---------------------------------------|--|-----------------------|--|---------------------|
| | Large beer vat | | Stone tool | | Tannur (Bread oven) |
| | Large storage vessel | | Fire dog | | Oven |
| | Large vat | | Bronze tool | | Door |
| | Large jar | | Other tool | | Staircase |
| | Small jar | | Spindle whirl | | |
| | Cooking pot | | Pebble (Raw material) | | |
| | Exceptional and figurative small jars | | Weight | | |
| | Basalt vessel | | Jewellery | | |
| | Stone trough | | Figurine | | |
| | | | Bone | | |
| | | | Bucranium | | |
| | | | Grain | | |

Figure 3.9a. Ideal typical house and inventory

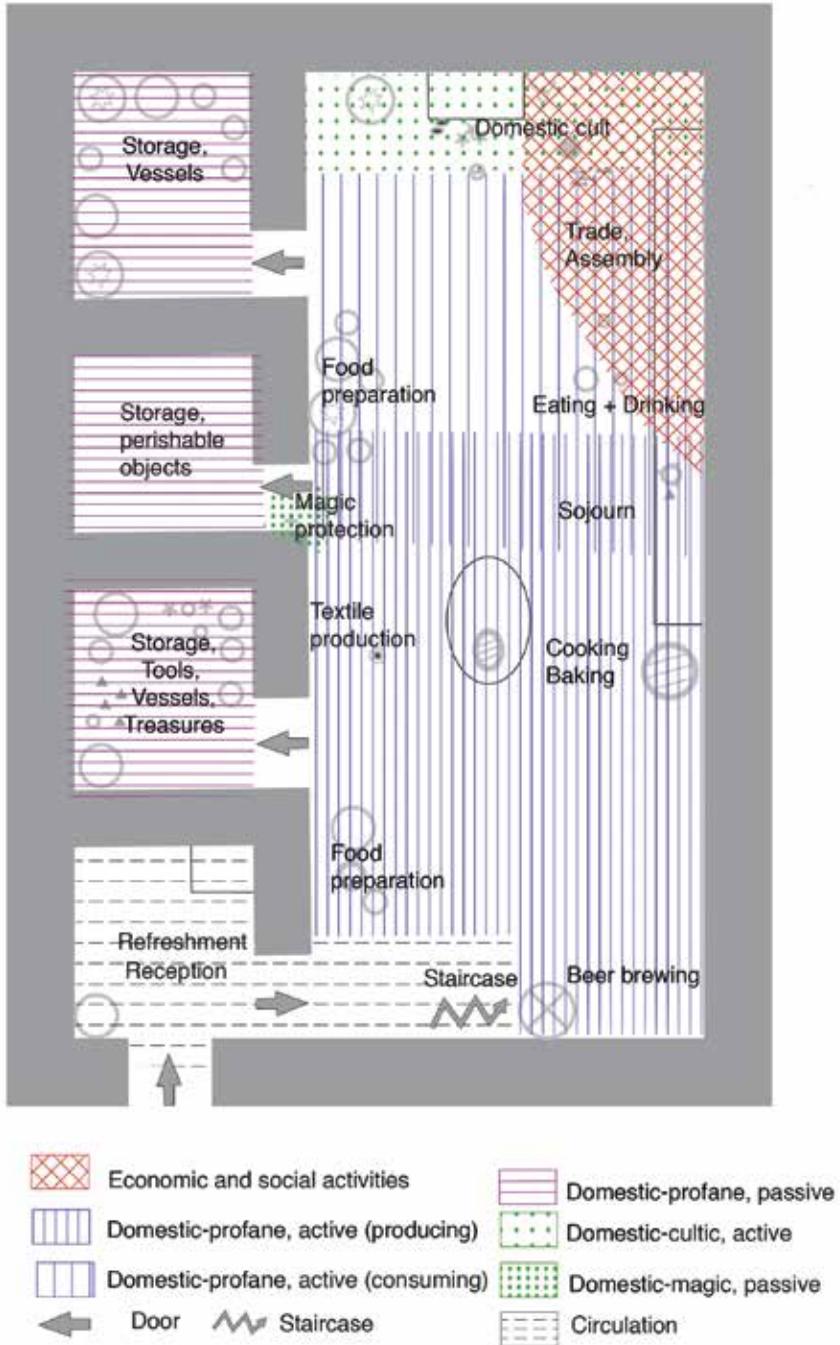


Figure 3.9b. Ideal typical activity zones

ones. This example shows also that accessibility and restricted access respectively must be considered as major clues for the use of domestic units. Furthermore, it clearly reveals that the frequently assumed relation of house size to the economic or social status of the inhabitants may not be true in every case.

4. Summary: The Potential of a Combined Archaeological-Historical-Scientific Approach

Household analyses are reliable only when the inventory has been taken into consideration. But it is a difficult task to reconstruct daily life in a Near Eastern settlement, even when apparently ideal conditions are given through its sudden and violent destruction, since the archaeological inventory forms but a small part of the former systemic inventory. This considerable loss can be compensated at least partially by applying all available methods that furnish complementary insight into past life. The ever increasing number of scientific methods cannot be overestimated in this respect; but unfortunately too often conditions do not allow researchers to realize what is desirable, especially when the laboratories and the samples are situated on different continents.²³ Therefore the historical approach, that is, the careful study of contemporary written sources, must be considered an invaluable tool, although it seems to be little en vogue today. But even when the systemic inventory has been successfully restored with the help of all possible methods, general conclusions on former daily life seem only allowed when a series of contemporary buildings is given. A promising method is then to define an ideal type, that is, an ideal typical building with an ideal typical inventory, and to compare this to the existent, always varying forms of the individual units. This allows the recognition of deviations from the ideal type immediately, and to gain in this way insight in the individual variations in status, occupation, or personal fate. By these means it may be possible to get sometimes quite precise information about the various everyday, social, manufacturing, commercial, and ritual activities in the houses and the composition and status of the inhabitants.

²³ In his paper, Aren Maeir (this volume) describes the advantages of on-site laboratories for micro-archaeological investigations in the field, side by side

and in close collaboration with the archaeologists, which enables select on-the-spot analyses of sediments, finds, and materials.

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Ancient Egyptian Houses and Households: Architecture, Artifacts, Conceptualization, and Interpretation

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Introduction

Over the past few decades, household archaeology has done much to illuminate the nature of social relations, production, and activities within dwellings, focusing both temporally and spatially at the scale of human experience (Allison 1999; Tringham 2001; Parker and Foster 2012). The field emerged, at least in part, as a reaction to macro-scale and comparative studies of domestic architecture and space (Tringham 1995, p. 79). Some studies have sought patterning in the evidence for activities within houses, in order to investigate the ways in which these dwellings were understood by their inhabitants (e.g., Meskell 1998; Nishimura 2012). In this paper, I combine evidence for activities with analysis of house architecture in order to investigate and problematize the relationship between the conceptualization of the house and the use of space. I argue that recognizing the multi-layered way in which an individual inhabiting or visiting a house might understand that dwelling is key to investigating the way in which the house was conceptualized and used.

The Domestic Architecture of Amarna

My discussion is based on houses from the New Kingdom Egyptian site of Amarna (ca. 1347–1335 B.C.; all dates based on Shaw 2000, p. 481). The evidence from Amarna is particularly well suited to an analysis of this type because the site was occupied for less than twenty years and was then largely abandoned. Although there is evidence for the alteration and enlargement of some houses attesting to changes made by the inhabitants, for the most part we get a cross section of contemporary houses built for, or by, the households who inhabited them and presumably tailored to their specific needs. Although there remain voices to the contrary (e.g., Lacovara 1997, p. 60), the majority of researchers familiar with the site agree that the houses were not planned by a central authority (e.g., Kemp 1977, p. 126; Kemp 1989b, p. 294; Arnold 1989, p. 91 n. 9; Spence 2004, p. 123 n. 3, p. 151; Spence 2010, p. 293). Rather, the evidence suggests that the houses are probably broadly representative of Egyptian dwellings at the time, other than being more regular and less dense than was often the case in longer-lived towns because there were fewer spatial constraints. We should therefore expect these houses to be close to the ideal affordable solution of their inhabitants (Shaw 1992).

Amarna was a royal residence town, founded by king Akhenaten (ca. 1352–1336 B.C.) following the major religious changes introduced early in his reign (for an overview of the

site see Kemp 2012). Temples, palaces, and institutional structures are clustered into a core and further palatial, mortuary, and ritual structures are located around the outskirts of the desert bay within which the site is situated. Residential areas are situated adjacent to the cultivation in a ribbon of development on either side of the so-called Central City. There is no evidence for royal involvement in the organization of these “suburbs” beyond the establishment and maintenance of routes between significant royal buildings, and state intervention in the layout of the houses themselves seems very unlikely. Around 1,000 houses of all sizes have been excavated at the site over the years (see primarily Peet and Woolley 1923; Frankfort and Pendlebury 1933; Pendlebury 1951; Borchardt and Ricke 1980; Kemp 1984, 1986, 1987a, 1987b, 1989a, 1995; Kemp and Stevens 2010), providing an extraordinarily rich data set dating to within a single generation.

As with any data set, there are limitations. The majority of the houses were excavated in the first decades of the twentieth century and are relatively well published for the time. However, while ground plans were carefully recorded, often in great detail, artifacts found in the houses were less systematically recorded and precise contexts are rarely given. More recent excavations by Barry Kemp and his team over the last thirty-five years have added more detailed evidence to the record, particularly with regard to the location of artifacts, although for far fewer houses, all but one of them small dwellings (Kemp 1984, 1986, 1987a, 1989a, 1995; Kemp and Stevens 2010).

As a result of laws created to protect Egyptian antiquities, it has for many years been virtually impossible to export archaeological samples from Egypt; as a result, the scientific analyses of soils and artifacts that have revolutionized the archaeology of other parts of the world have had far less impact within Egypt, although, increasingly, researchers are applying such methodologies to Egyptian material from Sudan, which has fewer restrictions on exporting samples (see Spencer, this volume). It should also be pointed out that, despite the richness of the Egyptian archaeological record, domestic settings from the pharaonic period are generally poorly represented because the majority of ancient settlements have disappeared beneath modern towns and cultivation, or have been washed away by movement of the Nile.

Textual Sources for the Household in Pharaonic Egypt

Textual sources relevant to the study of the household are available for pharaonic Egypt. It is not my intention to discuss these sources in any detail here as they have been outlined elsewhere (e.g., Moreno García 2012 with further bibliography), but some important aspects are worth noting before discussing the architecture of the houses, as it is well known that the understanding of what constitutes a household is not uniform but may vary across cultures and can also change over time.

Both the house and household can be designated by the term *pr* in Egypt, showing the close association between the two, although other terms may also be used for each entity (Moreno García 2012, pp. 1–2). Although administrative texts and art seem to focus on the nuclear family, there is clear evidence from other textual sources such as the Heqanakht Papyrus (Allen 2002, pp. 105–20, esp. pp. 107–17; see also Picardo, this volume) that households often comprised extended families along with servants as well as other dependents in some wealthier examples. There is also evidence for the subordination of whole families of relatives, clients, servants or friends within larger “households” through networks of patronage (Moreno García 2012, p. 4). In some instances these vertical networks might be very extensive:

the Herakleopolitan kingdom of the First Intermediate Period is often referred to as the “House/household of Khety” (ibid., p. 1). In his article “Fractal House of Pharaoh,” Mark Lehner (2000) argued that the whole Egyptian state could be seen as one massive household comprising hierarchically organized households, and that the word pharaoh itself derives from *pr-ꜥ* “great house,” a term for a palace.

Defining and Identifying Houses and Households in the Archaeological Record

Texts thus suggest that the Egyptians’ understanding of what a household was could be expanded to cover economically or socially interdependent groups across an exceptionally broad range of scales, from a single dwelling to the state. This is interesting in and of itself, but is exceptionally difficult to work with archaeologically. For this reason, I define household here as a domestic group coresident within a residential establishment. Nor is it straightforward even to define exactly what we mean by a “house” in the context of archaeological studies of Amarna dwellings, because the term is widely used to refer both to the actual building within which people lived, but also to refer to that primary dwelling structure and its grounds, thus including ancillary structures, outside space, and sometimes also additional “houses.” This ambiguity is very common and is also encountered widely in modern usage, but it means that in some cases inappropriate comparisons have been made. This is particularly the case when comparisons are made between small dwellings and large establishments including significant grounds. For the sake of specificity, which is important to the argument here, I define *house* as a dwelling structure, while I refer to the whole ensemble of house plus any subsidiary buildings and outdoor areas within a clearly delimited and controlled space (usually marked by an enclosure wall) as a *residential establishment*. Thus with elite dwellings we find a large house situated within a residential establishment. In the case of the smallest dwellings, house and residential establishment may refer to the same structure. These are obviously far from the only ways to define these terms.

Having established working definitions, it is interesting to note that, although the archaeological evidence for establishing extended networks of households (as are visible, for example, in the textual record) is limited as such social relationships and economic networks may be impossible to spot on the ground, there are some revealing exceptions. Many of the larger residential establishments show evidence for the nesting or embedding of smaller houses and households within their grounds and, in some cases, networks can be inferred in a few cases where groups of small houses are clearly dependent on a larger residential establishment.

In the case of the larger residential establishments at Amarna, it is quite common to find a second house within the enclosure wall (e.g., houses Q46.1 and P47.19; Borhardt and Ricke 1980, plans 2 and 23; see also fig. 4.4). Smaller than the main house from which the whole establishment is controlled, this house most probably housed a deputy of the head of household, perhaps often his eldest son. This house is within the larger residential establishment and the inhabitants are therefore part of that household, but the house could also be said to form a nested residential unit and thus a nested or subsidiary household within it (Spence 2007, p. 323). Sometimes very much smaller houses are found in the corners of the enclosures of large houses and these may similarly have formed subsidiary households, perhaps of service staff. The large, state-built residential establishments in the Middle Kingdom such

as those in the town of Kahun also appear to accommodate a household within which there are subsidiary dwelling units and perhaps therefore also nested households (Quirke 2005, pp. 55–68; Picardo, this volume).

In a few cases at Amarna it is possible to see networks of dependency on the ground. In the case of a few large houses such as those of the sculptor Tuthmose in P47 (Kemp 2012, pp. 163–66), small houses cluster close to the large residential establishment, and there is good reason to suggest that these are small households dependent upon the larger residence, thus showing the types of hierarchical relationships identified in textual and artistic sources extending beyond the boundary of the residential establishment. The enormous storage capacity for grain in large residential establishments at sites such as Amarna and Kahun suggests that these establishments may be supplying a substantial number of smaller dwellings, perhaps indicating networks of economic dependence which are less clearly visible on the ground than in the examples mentioned above.

The Spatial Organization of Amarna Houses

I first discuss briefly the design and spatial organization of houses, drawing on and developing work I have published elsewhere (Spence 2004, 2007, 2010). I will then combine the strong evidence for spatial patterning in the architectural layout with the evidence for activities that took place within particular parts of the residential establishment. Through this I will consider how the residential establishment and house may have been understood and used by its inhabitants, alongside any impact this may have had on how households understood and organized their spatial settings.

The houses at Amarna show huge variation in scale, from less than 10 square meters to

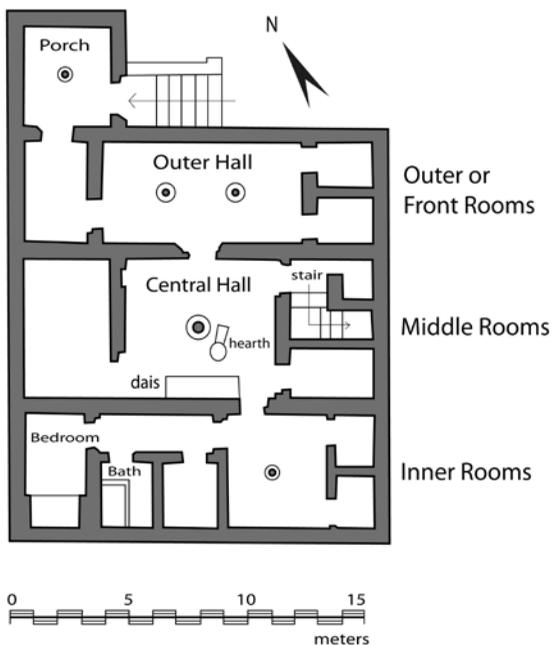


Figure 4.1. Plan of House M47.4, a large Amarna house with tripartite division of space (redrawn from Borhardt and Ricke 1980, plan 17)

over 400 square meters (Crocker 1985; Kemp 1989b, pp. 298–301, fig. 101; Shaw 1992). As has already been outlined, the larger houses are set within enclosures that may feature a range of additional structures including, in some instances, subsidiary houses or residential establishments. One of the most extraordinary features of the Amarna houses is the robustness of the patterning seen in spatial organization from the largest to the smallest examples. This was recognized as far back as the 1930s when Herbert Ricke analyzed the Amarna house plans and pointed to a tripartite division of the space in the houses, using as his model one of the larger houses at the site (Ricke 1932) (fig. 4.1).

Christian Tietze (1985) drew up a typology of the houses in order to investigate a number of social and economic aspects of the settlement across houses of all scales, dividing the houses according to wall thickness and the basic organization of rooms (fig. 4.2).

The same tripartite spatial division is found across the board, with only the very smallest houses (Tietze's types 1a and 1b) lacking the front rooms. Examples of houses with tripartite structure are found from other sites in Egypt from at least as early as the Old Kingdom onward. Staircases feature prominently in the Amarna houses. Structural details including staircase position as well as additional roofing fragments and decorative elements make it likely that the houses often had upper stories, which can be tentatively reconstructed from structural details and Theban representations (Spence 2004).



Figure 4.2. Tietze's typology of Amarna houses organized by wall thickness and spatial complexity. The houses are those chosen by Tietze (1985) to illustrate his typology, but the plans are redrawn from Borchardt and Ricke 1980, plans 27, 28, 46, 9, 70, 110, 44, and 34 (left to right, top to bottom) (adapted from Spence 2004, fig. 2)

Moving toward an understanding of how the houses were experienced is key in terms of establishing how they were conceptualized, but this can be a difficult task when faced with the remains excavated and the loss of the majority of the upper parts of the structures. However, in addition to seeing patterning in the tripartite division of the houses from the outside to the inside, there is also very strong patterning in the spatial sequences within, and in patterns of interconnections between rooms. This can be demonstrated effectively through access analysis diagrams based on Tietze's typology of house plans (Spence 2010, pp. 293–96). In access diagrams (“justified permeability maps”), each space or room is represented by a circle, and the ability to move between rooms is indicated by a line linking two circles (rooms) (Hillier and Hanson 1984). In figure 4.3 (which is based on Tietze's typology of ground plans), the squarish central room of each house is shown by a square. The diagrams are strikingly patterned: as the houses get larger the route toward the square room becomes more drawn out and the complexity of the inner part of the house — access to which is controlled through this same square room — becomes more complex, but the broad shape of the diagram and the patterns of interconnection are fixed.

Access analysis is very reductive in terms of the nature of the connections it depicts, and it is worth examining how this plays out on the ground in terms of focus, control, and spatial movement. The house is focused on key locations that are architecturally marked with specific installations (Spence 2010, pp. 290–91). The most important of these is a dais in the squarish central room that seems to have functioned as an elevated seating place (see fig. 4.1). This central room controls access to all the inner and upper parts of the house, and the dais is found in virtually all Amarna houses (Meskell 2002, pp. 117–20; Koltsida 2007, pp. 49–51). Most of the larger houses also have a single niched room toward the rear of the house. This niche seems to have been a setting for a bed on a dais beneath a wind-hood, which funneled the cool breeze into the interior of the structure (Endruweit 1994, pp. 89–119). Many of the rooms with niches have an adjacent bathroom. All these features seem to mark settings for the head of household; they are visible even when unoccupied and serve to focus the spatial sequences for movement into the dwelling.

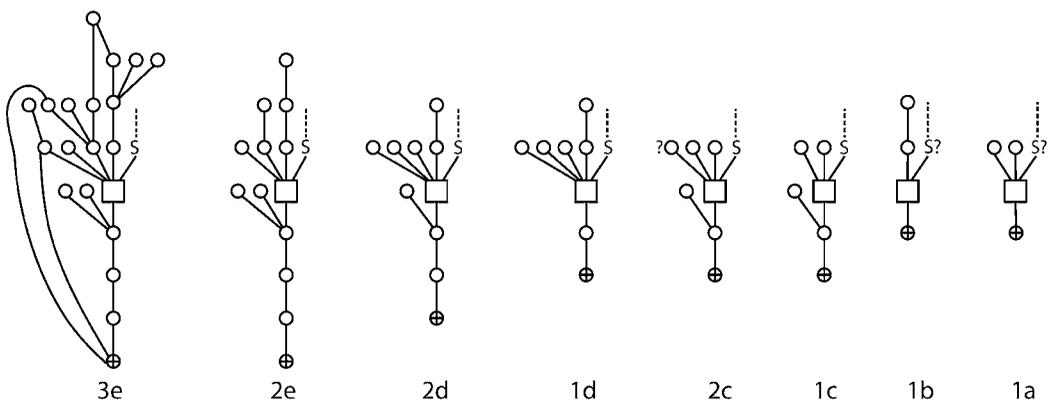


Figure 4.3. Access diagrams of the houses shown in figure 4.2. Rooms within the houses are shown by open circles, and outside space with a cross within a circle. Interconnections between spaces are shown with lines, and the staircase leading to the roof or possible upper story with an S. The square represents the roughly square-shaped room present in all houses, corresponding to the central hall in the larger houses. The patterning in the diagrams is particularly striking

Entrance to the house is designed to screen the interior and disorient the visitor (Spence 2010, pp. 292–93).¹ Where possible, the residential establishment is surrounded by a high wall separating it from the rest of the settlement, and in some cases there are multiple gateways to pass through before the primary house is reached (for examples, see Borchardt and Ricke 1980, plans 2, 23, and 31). The interior of the house is screened and the visitor has to navigate a series of right-angled turns in different directions and with different lighting levels to reach the front room (see figs 4.1 and 4.2 especially 2e and 3e). He or she then has to turn again to approach the dais in the central hall, sometimes meeting shafts of bright sunlight from clerestory windows (which are often on the south side of the room) as the central hall is entered (Spence 2010, p. 293). Comfort is controlled and manipulated in the house in terms of light, but also temperature: the hearth in the central hall is never central but is situated close to the dais to create warmer and cooler locations within the room; the only “air-conditioned” room in the house is set aside as a resting or sleeping place for the head of household, and the bathroom is similarly placed in the inner rooms to which entry seems likely to have been restricted. These differentiations create polarized social settings within which spatial position is important — who gets to sit closest to fire, who has the sun in his or her eyes, who can and cannot use the bathroom. These differentiations are easiest to understand in relation to a visitor but are also likely to have played a role in structuring and negotiating relationships between household members.

Room proportion seems to be key to identifying how these sequences of spaces were negotiated and how the significance of encounters within them understood. There is clear patterning in the use of particular room shapes in specific positions in the sequences (Spence 2010, pp. 296–97). The house thus provides a series of possible points for restriction of entry at doorways inside the house or at gateways in the grounds of the residential establishment, as well as key settings for structured encounters within the house. These settings play an active role in structuring and negotiating relationships within the household and with visitors.

Activity Areas and the Use of Space in Amarna Houses

There have been a number of important analyses of artifact assemblages within domestic contexts from Egypt, including those of Barry Kemp (1984, 1986, 1987a, 1989a, 1995), Ian Shaw (1992), Anna Stevens (2006), Barry Kemp and Anna Stevens (2010) and Aikaterini Koltsida (2007) at Amarna, Lynn Meskell at Deir el-Medina (1998, 2002), Miriam Müller and others at Tell el-Dab‘a (see Müller, this volume) and in the ongoing work of the project at Elephantine (von Pilgrim 1996; Arnold, this volume). All of these studies have produced important results for our understanding of household activities and tasksapes in domestic settings.

The majority of these analyses have been based on the interpretation of assemblages found in relatively small houses of similar scales, and issues have arisen when some researchers have attempted to make broader statements about the nature or conceptualization of the houses or of specific rooms on the basis of these analyses. Examples might include Meskell’s

¹ Contra Kemp 2012, p. 188, figs. 5.28–29. Although I agree that there is archaeological evidence from house N49.10 (Peet and Woolley 1923, pp. 20, 39) for the presence of at least one large window in the outer hall of the house, the position of the window

edge on the collapsed wall suggests that the window was above head height and would thus not have allowed views into or out of the house, instead serving to ventilate or light the room.

reading (1998; 2002, pp. 121–25) of the tripartite division of space at Deir el-Medina as female space in the front room, male space in the central room, and “servile space” in the back of the house. Koltsida (2007, pp. 16–40), on the other hand, views the outer room at Amarna as a “general utility room” following T. Eric Peet and C. Leonard Woolley (1923, p. 60) or “multifunctioned room” (Koltsida 2007, p. 137),² but interprets the rear rooms of the Walled Village houses as either bedrooms or kitchens depending on the artifacts and installations found within. These interpretations initially appear to be at odds with the evidence for the importance of spatial sequence in Amarna houses presented above, and the impression of structured formality in the front room and privileged seclusion at the back of the larger dwellings. It is this tension I wish to explore.

Artifact distributions and assemblages are difficult to analyze across the range of house sizes and locations at Amarna because of limited recording of contexts in all but the recent publications of Kemp and Stevens (see especially Kemp and Stevens 2010), quite apart from potential problems of object displacement and removal, the nature of floor assemblages and taphonomic issues (Schiffer 1987; Pfälzner, this volume). However, earlier publications did record many in situ installations, which will serve here as the basis for arguing that it is exceptionally difficult to map activity patterns across residential establishments of all sizes and find the degree of patterning seen in the organization of the house plans (see also Kemp 1987a, pp. 40–46; Koltsida [2007] carefully collects much of the evidence for objects, set within a functionally organized discussion).

A good example is found in food production and cooking. Evidence for these activities is often found in a rear room at Deir el-Medina or the Walled Village at Amarna, leading to these being labeled by as “kitchens”; from this Meskell (1998; 2002, pp. 122–25) reads the back of the house as “servile space.” However, in the case of all the larger residential establishments at Amarna, including smaller houses with attached courtyards, cooking was clearly taking place outside the house (see, for example, house P47.2; Borchardt and Ricke 1980, plan 23) (fig. 4.4). Evidence for food processing and occasionally cooking are also sometimes found in the outer room in smaller houses, but, again, not in large houses (Kemp 1987a, pp. 40–45; Koltsida 2007, pp. 20–21, 110; Samuel 1999, pp. 134–36) (fig. 4.5).

Barry Kemp and Gillian Vogelsang-Eastwood’s study of weaving at Amarna suggests that archaeological evidence can come from any part of the house. However, stone socket blocks for looms (perhaps the most likely elements to be found in situ are usually found in outer rooms, presumably because there was more light (Kemp and Vogelsang-Eastwood 2001, pp. 373–87, particularly figs. 9.53 and 9.59, and table 9.5) (fig. 4.5). Evidence for animal keeping is found in the outer room of some of the Walled Village houses (Koltsida 2007, pp. 20–21, collects the evidence) (fig. 4.5); in the larger establishments there were separate structures for animals within the enclosures (see, for example, house Q44.1; Kemp 2012, fig. 5.27).

From a cursory analysis of a few very obvious architectural fittings it therefore seems clear that, although some easily identifiable activities were taking place within the smaller houses, space was not primarily structured by or organized around them. Where there was

² Koltsida (2007, pp. 16–40, esp. p. 22, with further references) follows suggestions made by some earlier excavators that this room may sometimes have been an open court rather than a roofed space. While one cannot rule out the possibility that occasionally

the roof of this space was not completed, it seems extremely unlikely to me that this was a common arrangement particularly as there are sometimes stairs in this room leading towards the front of the house (see fig. 4.5).

room to accommodate these activities outside the house (i.e., where the residential establishment had a courtyard or enclosure), evidence for the majority of household tasks suggests that these took place outside the actual house unit (fig. 4.4). Production-related evidence within the house is difficult to establish archaeologically in the larger dwellings. Only when no external space was available did activities such as food processing, cooking, and animal keeping enter the house proper.

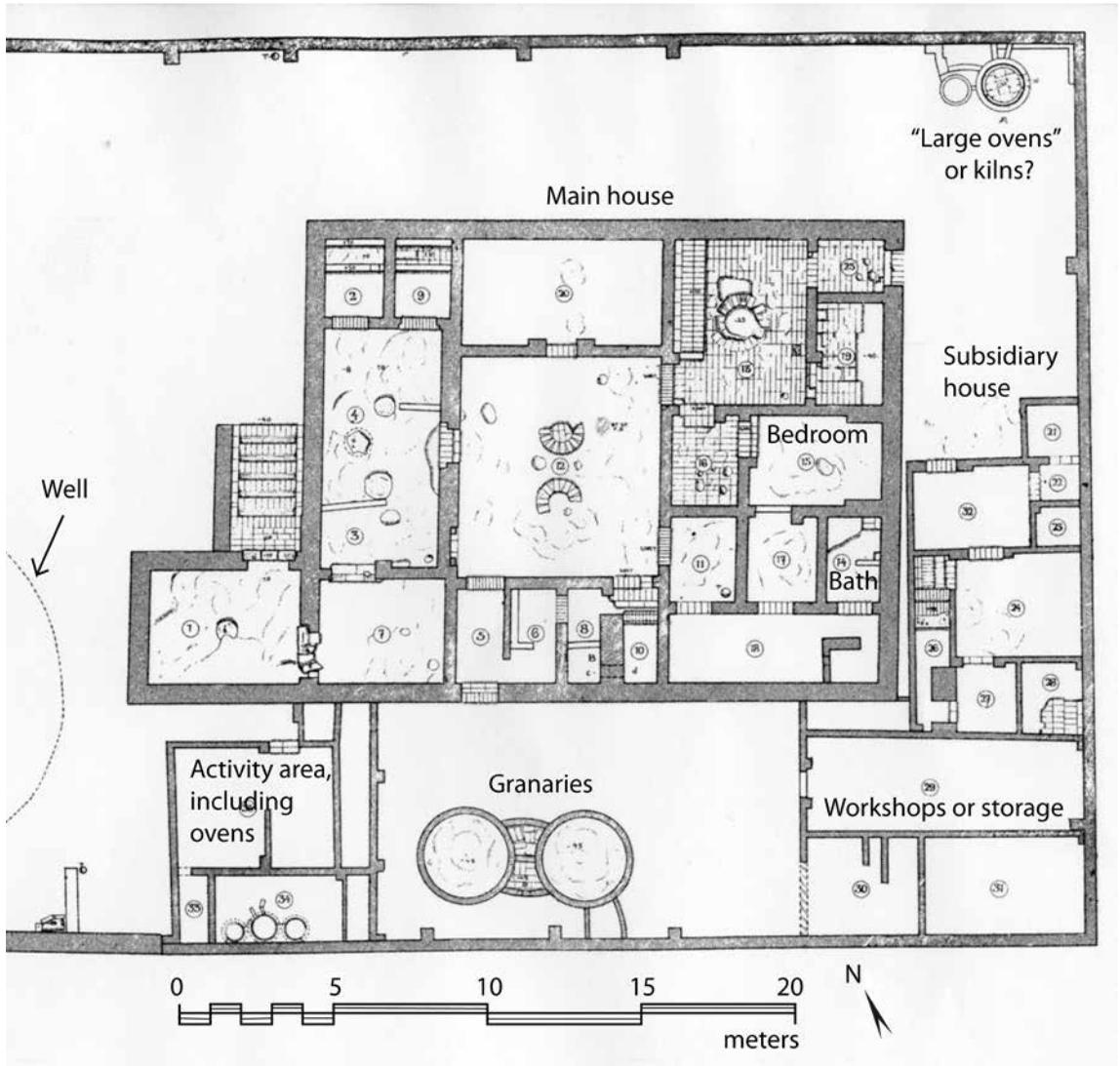


Figure 4.4. The eastern part of the large residential establishment P47.28 at Amarna. The house nestles at the eastern end of a larger enclosure; behind it is a smaller subsidiary house which is likely to have provided a dwelling place for a dependent nested household. The main house shows traces of the key settings for the head of household including the niched bedroom and a bathroom. The central hall (Room 12) is not well preserved and no traces of a dais are recorded, but there is a dais shown against the west wall of the smaller inner hall (Room 18). All evidence for production-related activity is found outside the main house and includes two sets of ovens (one set may be kilns), granaries, and workshop or storage areas (Borchardt and Ricke 1980, plan 34, reproduced with the kind permission of the German Archaeological Institute, Cairo, with annotation by the author based on information found in Borchardt and Ricke 1980, pp. 139–42)



Figure 4.5. North central section of the Walled Village at Amarna, showing state-constructed houses modified by their inhabitants. The houses retain the tripartite structure found in larger houses at the site, with the majority of the central rooms showing evidence for a hearth and dais, while some inner rooms have been used as bedrooms. Evidence for food production and other activities is found within the houses, producing patterns of compromise. Food production is sometimes found in the outer room and sometimes in an inner room; the outer room tends to show the greatest range of activities and the central room the smallest. Key: A, evidence for animal keeping, usually in the form of troughs, tethering stones, or dung; G, grinding installation; M, mortar for pounding grain; O, oven; S, stair; T, trough; W, evidence for weaving in the form of loom supports. Where the interpretation is tentative a question mark is used (base plan reproduced from Peet and Woolley 1923, plate 16, with the kind permission of the Egypt Exploration Society. Annotations by the author based on information extracted from Peet and Woolley 1923, pp. 73–91)

Given that this argument was based on architectural fittings, which we know must have been found in situ, the potential limitations implied for the analysis of artifacts is even greater. At sites such as the Amarna Walled Village or Deir el-Medina, where we have numerous houses of similar scale and absence of exterior space, apparent patterning in activity areas may thus have far more to do with the limitations of the space available than the primary conceptual structure of the house.

I am not in any way suggesting that the study of activity areas is not important. I am arguing only that evidence for the presence of activities should not necessarily be interpreted as an indication of a primary conceptual structure of the house as functionally ordered.

Discussion

In dealing with houses, archaeologists have been influenced by anthropological analyses of relatively simple dwelling structures such as Pierre Bourdieu's (1972, pp. 45–69; 1977, pp. 90–91) investigation of the Kabalye house, or Suzanne Blier's (1987) analysis of Battamaliba dwellings (for a useful summary of a range of examples, see Parker Pearson and Richards 1994a; 1994b). In the small dwellings described in these studies, the structure as a whole has rich symbolic associations, usually tied to its constituent parts; the disposition of objects within that setting and activity patterns associated with them are understood to be intricately linked and interwoven with the conceptualization of the structure. The links between the conceptualizations of structure, objects, and activities are far less apparent in the complex domestic architecture of New Kingdom Egypt. However, by examining the understanding of domestic settings we can begin to tease apart different layers of meaning.

As discussed above, we see far stronger patterning in house architecture than we do in the distribution of installations associated with specific tasks when we look across the range of domestic structures at Amarna. Virtually every house at the site can be fitted into the patterning of spatial interconnections and arrangement of rooms identified by researchers (Ricke 1932; Tietze 1985; Spence 2004, 2010). From this, it can be argued that architectural patterning is dominant and that this is not understood as functionally ordered but is seen in terms of the presentation of the head of household as representative space. Its primary role is to order social relations between the head and the members of the household, and between the household and visitors, mediated through the person of the head of household. In building or commissioning a house conforming to this pattern of room arrangement, each household reaffirmed or negotiated a position within the existing social order and set out an expectation of structured social relations. From the strength of the patterning it is clear that this social ordering would have been immediately apparent to all who were embedded within that same social system, although it is likely that this understanding was implicit and experience-based rather than explicitly articulated. I would argue strongly that this was the dominant way in which the ancient Egyptians understood and created their domestic settings, at least across the Middle and New Kingdom time periods.

This focus on the head of household seated on a dais is shown clearly in a painting of a three-story Egyptian house from the tomb of Djehutynefer at Thebes (TT 104; for reproductions of this image, see Shedid 1988, pls. 5a and 27; line drawing in Spence 2004, fig. 10). In this image the head of household is shown twice, on the main (first) floor, and also on the second floor. On each floor he sits on a chair on a dais while members of the household, including servants, attend to him.

I have argued that houses were not seen as functionally ordered, beyond the extent to which the presentation and activities of the head of household (sitting, washing, sleeping) can be viewed as a function. As I have shown, the archaeological evidence for tasks associated with domestic life, such as cooking, production, and animal keeping is found in different places depending on the scale and setting of the residential establishment. The ideal is seen in the largest residential establishments with substantial grounds where domestic production, cooking, and other activities took place outside the house within subsidiary structures or courtyard space. In smaller residential establishments consisting only of a house with no external space, evidence for these activities is found within the house. The resulting evidence might thus be interpreted as patterns of compromise, in that in each small house choices were made about where particular activities should be carried out so that they would interfere least with the conceptual structure of the house, and the same choices were often made in houses of similar size and configuration.

It is these patterns of compromise that Meskell (1998; 2002, pp. 121–25) and Koltsida (2007) pick up on in their interpretations of domestic settings, but because they focused their investigations on small houses, the extent to which these solutions reflect a secondary level of ordering has not been recognized. I would like to discuss these patterns of compromise further, looking at three interrelated issues: what they reveal about the primary structuring of the house, the extent to which activity areas are understood as such, and the extent to which these patterns of compromise were understood by the Egyptians as a possible secondary level of ordering.

There are many examples of patterns of compromise that can be identified in smaller houses, for example in the houses of the Walled Village (see also Kemp 1987a, pp. 40–46; fig. 4.5). These might include the insertion of staircases either in the front room or one of the two inner chambers (fig. 4.5; Spence 2004, pp. 138–39) in order to create a second story and/or use roof space. Sometimes an inner room seems to have been used as a bedroom (e.g., Walled Village, Gate Street 8; Kemp 2012, fig. 5.25) as might be expected in a larger house, but often these rooms show evidence for activities such as food preparation (Koltsida 2007, pp. 110–15). Outer rooms often show evidence for storage, animal keeping, food production, or weaving (*ibid.*, pp. 16–43). I would suggest that the frequency and variety of task-related compromises associated with a space appear to be inversely correlated with the importance of that space within the architectural understanding of the house as representative space. Thus the squarish central room is widely accepted to be the most important room in the house for presenting the head of household; it is also the room most resistant to task-related compromises. The room that shows the most frequent and varied compromises is the front room; this is also the room most likely to be omitted entirely from the smallest houses in the main city (types 1a and 1b in Tietze's typology). I would therefore argue that the outer room or rooms are the least significant to the spatial sequence of the house.

The house representation from Thebes discussed above may provide evidence for compromise in larger houses in a long-lived settlement likely to have been denser than Amarna (Spence 2004, pp. 148–50). Household production is shown in the house representation from the tomb of Djehutynefer, in the form of the preparation of food, weaving, and associated activities. This is shown as taking place below the main rooms on a ground floor or in a basement; only one house at Amarna appears to have its main rooms at first floor level in a possibly analogous arrangement (Spence 2004, pp. 146–48). Representations of houses from Karnak also show food production but in small subsidiary rooms toward the exterior of the house (Traunecker 1988). Neither source shows any exterior space other than the roof.

It is important to recognise that the rooms in the house seem not to have been understood in terms of activity-related function. Thus most houses have a recognizable place for cooking, but the location allocated to this task varies depending on the scale of the residential establishment, and even in placement within houses of the same scale. It is thus clear that providing a suitable location for a “kitchen” was not considered to be a fundamental part of the creation of a house. Once the house had been constructed following other principles, the most suitable spot for cooking was then established. I would therefore argue that function related to domestic activities is not considered in the construction or conceptualization of the house. Similarly, I would argue that rooms in Egyptian houses were not considered to be “multifunctional” just because a variety of activities took place within them (contra Koltsida 2007, p. 140), because ordering was simply not considered to be functional.

The varied interrelationships between architecture and activities can be pursued further. For example, looking across the locations of ovens, one can establish that cooking was ideally hidden: in larger establishments it is situated outside and, if possible, well away from the house; in smaller houses cooking takes place at the back of the house or perhaps on the roof (see also Koltsida 2007, p. 140). However in the larger houses there is usually no side entrance from the grounds through which food might be brought and served (House P47.28 shown in figures 4.2 and 4.4 is unusual in this respect). Food must therefore usually have been brought in to the house via the main entry sequence, which stands in significant contrast to the visibility of service arrangements in some other highly complex and stratified societies, but correlates with what we see in the representation from the tomb of Djehutynefer.

Despite the comments above about functionality, the patterning of compromises is significant across structures of a similar scale, and presumably this would have been recognized by those moving between houses who perhaps recognized compromises they themselves made at home. The necessity of cooking at the back of the house or keeping animals or grinding grain in the outer room perhaps created a sense of shared experience. The performance of household tasks by women within the outer room, which may have been lighter than other rooms because of windows and a door onto the street perhaps did mean that this was a space often used by women in the smaller houses, however, I would argue that this should be viewed as a secondary layer of association through practice rather than an example of the primary structuring of the house as suggested by Mesckell (1998; 2002, pp. 121–25), because it is very unlikely that similar associations would have existed in the larger houses.

Finally, it should be noted that having established both a primary architectural structuring of the household setting and norms in the patterns of compromise driving the use of space, there is also scope for interpretation of unusual variations in practice as examples of individual decisions made in the adaptation of the houses to fit the particular needs of each household (Kemp 1987a, pp. 40–46); examples might include the additional entrances to the house in P47.28 (fig. 4.4), or the unusual divisions of the front or outer room in Long Wall Street 8 and 9 in the Walled Village (fig. 4.5).

Conclusions

Few working in household archaeology today would argue against the idea that all available sources of information should be combined to create the fullest possible interpretation of the household setting. Here I have suggested that the different sources of evidence must be weighed very carefully against each other in attempts to establish how the communities we

study understood and prioritized the ordering principles behind their creation of domestic settings. In the case of the New Kingdom Egyptian site at Amarna, I have argued that houses were ordered around social practices almost exclusively focused on the presentation of the head of household in structured settings. Patterns in room arrangement can be seen from the largest to the smallest houses at the site highlighting the primacy of this approach to the creation and understanding of domestic architecture and the emphasis placed in the construction of a house on situating the head of household, and, by extension, the rest of the household, within the broader social spectrum of Egyptian society.

I have argued that, beyond the presentation of the head of household through activities such as sleeping, washing, sitting, and eating, the rooms in Egyptian houses were not understood primarily as functional or “multifunctional.” Most domestic tasks were situated within courtyards or outbuildings in large residential establishments, although patterns of compromise can be seen in smaller dwellings where there was no outside or subsidiary space for these activities to take place. I have argued that such compromises, when they are common to households in similar circumstances, may themselves lead to secondary levels of meaning. Set against patterning seen in architecture and artifact distribution, individual variation should allow us to start interpreting the degree to which individual households felt able to depart from established norms in their creation of a household setting.

As household archaeology moves increasingly toward micro-level analysis of activity patterns and chemical signatures, which are opening so many exciting new avenues for analysis, I hope to have shown that analysis of domestic architecture remains an indispensable tool for studying social relationships within and between households and for contextualizing their activities. Above all, we should never assume that the people we study necessarily shared our functionally oriented attitude toward domestic settings.

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Artifact Assemblages in Classical Greek Domestic Contexts: Toward a New Approach

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Introduction

In this paper I propose the application of aspects of Tim Ingold’s “taskscape” model to the Greek domestic context, first, as a means of highlighting an object-centered perspective on our data, and second, as a framework for creating a methodology sensitive to the potential temporal changes and rhythms of a Classical Greek household. In the past, study of domestic artifact assemblages in Classical Greek contexts has taken second place to the analysis of architecture. This is understandable, given the history of the discipline and the nature of the available archaeological data-sets, but I argue that without a shift in the conceptual framework within which artifacts are analyzed, it is hard to make further progress with their use in understanding patterns of domestic activity in Greek houses. At the same time, I suggest, the application of the “taskscape” model will also require the collection of new data, including new types of data, in the field.

The Problem

The remains of Greek houses of Classical date have interested scholars for more than a century. Early studies often used texts, from the Homeric poems to Vitruvius, to reconstruct the layout and appearance of residential structures (e.g., P. Gardner 1882; Myres 1900; E. Gardner 1901). Some of the earliest excavation projects to recover archaeological evidence of Classical housing systematically took place in and around Athens. These include investigations by Émile Burnouf during the 1850s in the area of the deme of Koile, southwest Athens, where he claims to have revealed some 800 rooms of ancient houses. Although scant detail of what Burnouf found is given either in his publications, or indeed in the surviving archival material relating to his life and work, Burnouf reveals a clear fascination with the varying layouts of the different neighborhoods he investigated, and also with the plans of the individual houses (Burnouf 1856, pp. 71–78; Burnouf 1878, pp. 130–33). A more fully documented project is that of Wilhelm Dörpfeld, who revealed a section of street, along with its surrounding buildings, in the neighboring deme of Melite. While his goal was to find a fountain house known as

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the Enneakrounos, which is mentioned in the ancient texts, Dörpfeld's work in fact revealed several private houses with dates ranging from the Classical to Roman periods, as well as small sanctuaries and shrines (see Judeich 1931, pp. 287–99, for a summary and earlier references). Records of the project are not detailed by today's standards, but some information was published on the buildings and the area is still visible, offering what remains one of the clearest pictures of a Classical Athenian residential neighborhood.

Through the earlier twentieth century there was a significant increase in the amount of excavated evidence for Classical and Hellenistic Greek housing across the Greek world. Projects on the Cycladic island of Delos (the data are collected together and the numerous preliminary and final reports listed in Trümper 1998) and at Priene on the Turkish coast (Wiegand and Schrader 1904), revealed large numbers of houses which served as models for generalizing about different architectural forms and layouts. Ultimately a typology was created which was applied to material found in subsequent excavations, such as those from relatively large-scale projects in and around the Agora at Athens (briefly surveyed in Thompson and Wycherley 1972, pp. 170–83), at Limenas on Thasos (e.g., Grandjean 1988), and at Eretria on Euboea (e.g., Ducrey, Metzger, and Reber 1993; Reber 1998). Despite an early interest in Classical texts alluding to the behavior of the inhabitants of houses (e.g., Rider 1916) the focus of these projects was normally on the architecture and appearance of the buildings. Questions about the use of the different spaces were rare, and research did not normally extend to the patterns of social life associated with the excavated structures. Where the role played by any space was considered at all, this was done within the framework provided by ancient texts — including Roman as well as Greek works.¹

A partial exception to this pattern was the work carried out by David Robinson and his team at the site of Olynthos in the Chalkidiki between 1928 and 1938 (Robinson 1929–52). Robinson turned his attention to the evidence for the domestic sphere after he failed to locate major public buildings at the site. His stated aim was to “decide many of the controversial points in regard to the Greek house of the Classical period” (Robinson 1932, p. 122) and he therefore made an effort to document the spatial locations of some of the objects found during excavation. Like many other project directors of this era, he was able to mobilize a large workforce and open up an extensive area. Work at the site proceeded quickly and little attention was paid to stratigraphy at what was considered to be a “single period site” (there were apparently no section drawings of the fills made anywhere on the site). By the end of Robinson's fourth field season almost 100 houses had been exposed, fifty of them in their entirety.

Without exception, then, these earlier studies were concerned above all with recovering evidence for the appearance of Greek houses. Nevertheless, a conceptual revolution took place in the mid 1980s: in an article published in 1983, Susan Walker tried to link the architectural organization of houses excavated at the edge of the Athenian Agora with domestic social life — particularly conventions relating to the behavior of women (Walker 1983). Walker's conclusion, that the organization of space resulted from the physical separation of men and women, was questioned in 1990 by Michael Jameson, but Jameson upheld the principle underlying her discussion, namely that the archaeological evidence of housing could be used

¹ As, for example, with the discussions of double courtyard houses from Eretria and Maroneia, which explore the layout with reference to Vitruvius' description of Greek housing: Vitruvius 7.1; see, for

instance, Rumpf 1935; Reber 1988; Karadedos 1990, pp. 276–80 and 285–87; Fatmann-Rey 1996; contrast, however, Raeder 1988, especially p. 368.

directly for addressing questions about domestic social relationships (Jameson 1990a, 1990b). Coincidentally, in a monumental volume on settlement and house layout first published in 1986, Wolfram Hoepfner and Ernst-Ludwig Schwandner also relied on a similar principle, although their interest was in the extent to which the organization of housing in different cities was influenced by a political ideology of equality (Hoepfner and Schwandner 1994).

With the exception of Robinson's work at Olynthos, all of these studies focus on architecture. Such an emphasis is understandable for a variety of reasons: in many cases the architecture was recorded while little was discovered or reported about the artifacts which may have been found with it. In some cases where artifacts were noted, their interpretation was hampered by the fact that they may have been in secondary contexts or have represented re-occupation of structures (as has been suggested for the House of the Comedians at Delos; Bruneau et al. 1970, p. 426). During the 1990s, a few of us working on Greek houses sought to explore what the distribution of artifacts could reveal about patterns of domestic activity (Nevett 1999; Cahill 2002; Ault 2005; see also Nevett 2008). Although our approaches were somewhat heterogeneous, our aims were similar in that we were trying to suggest basic functions for some of the archaeologically identifiable spaces by analyzing the small numbers of architectural features and the range of finds associated with them.

In my own work, for example, I re-evaluated the material from Olynthos, which remained exceptional because of the extensive area excavated and the detail with which it was recorded. I focused on the question of gendered use of space, a question which was raised by the few textual references to the organization of the domestic sphere surviving from Classical Athens (Nevett 1995; Nevett 1999 *passim*). These had been interpreted by Walker as implying that men and women were separated in different parts of the house — referred to as the *andron* and *gunaikon* — the men's and women's quarters. Architecturally, it was occasionally possible to identify a room which may have been used as an *andron* by the presence of a variety of features including a raised border to the room which may have served as the base for couches, together with decorative features such as colored wall plaster and a cement or mosaic floor. Evidence for female activity, however, which took the form of specific artifact types, was spread throughout the domestic sphere. I therefore argued that expectations derived from the texts could not simply be mapped onto the archaeological data. Instead I suggested a more critical approach revealing an asymmetrical pattern of organization in which male drinking parties (*symposia*) may have taken place in the seclusion of a specially arranged and decorated *andron*, but that at certain times of day women's activities were distributed across the domestic sphere, including in the courtyard which was the major access route around the house. Using artifact distributions as a guide to interpreting the role played by some of the most architecturally distinctive spaces in the house enabled the creation of an interpretative model which could be applied to other sites which lacked detailed evidence for the distribution of finds. I came to view the textual evidence as representing houses specifically from the perspective of male outsiders, for whose visits, I suggested, women are likely to have vacated areas such as the courtyard, in which male visitors might otherwise have encountered them. The term *gunaikon* would therefore have a complex meaning, suggesting areas inaccessible to men from outside the household.

Since this study appeared in full (Nevett 1999; see also Nevett 1995) the model has not been substantially developed or superseded. Bradley Ault's work on five houses from Halieis, in the Argolid (which were excavated in the 1960s and 1970s under the direction of Michael Jameson), supported this interpretation of the organization of domestic activities: while artifacts were recorded in far greater numbers here than they were at Olynthos, they seemed

to indicate a similarly broad distribution of domestic activities across the different spaces of the house, focusing particularly on the courtyard and portico areas (Ault 2005). Nicholas Cahill, who also re-examined the Olynthos material, produced results which were in many ways complementary, highlighting some of the variability between households, particularly in terms of economic strategies (Cahill 2002).

Although collectively these studies address a variety of issues it is clear that our current picture of domestic activities in Greek households represents only one small part of a much larger and more complex web of activities and social interactions. The uses of many rooms remain obscure, and detail is lacking about a range of fundamental aspects of life such as diet and subsistence practices. At the same time only a narrow range of the individuals present in the domestic context have been isolated and their roles explored. There is therefore much more to learn, but at a practical level the analysis of the archaeological material from domestic contexts, and particularly the artifact assemblages, has reached something of an impasse. In a closely adjacent subfield — Roman archaeology — assemblages from domestic and other contexts have sometimes come to be thought of as messy, contaminated by a variety of human activities and natural processes, and frequently uninformative about the activities taking place in a building during its period(s) of occupation (e.g., Berry 1997, Allison 2004). In the remainder of this paper I discuss some of the difficulties facing further discussion of artifact distributions in Greek domestic contexts. Rather than submit to Romanist colleagues' pessimism about the potential offered by this source, however, I offer a positive suggestion about how such analysis might be developed in new and fruitful ways.

Changing the Frames of Reference for Artifact-oriented Studies in Classical Greek Domestic Contexts

Past studies of artifact distributions in Greek domestic contexts have focused to a significant degree on trying to identify a consistently recurring relationship between artifacts and architecture. This is understandable since, if the two classes of evidence can be correlated, then architecture can be used as a proxy for artifacts to discuss the use of space in structures where the artifacts themselves were not recovered or not recorded. Nevertheless, this procedure causes several problems: first, at a practical level, the association between architecture and artifacts is not normally very strong — a variety of artifacts with different functions are commonly represented in a single space (Nevett 1999, p. 63). I have argued elsewhere that this phenomenon does not mean that artifact distributions are uninformative (Nevett 2008). Rather, we have failed to take into account the complex nature of the relationship between artifact distributions and the kinds of human activity we have been aiming to investigate.

A second and even more profound problem with following an architecture-centered approach is that the process of attempting to assign fixed functions to specific architectural spaces almost certainly does not correspond very well with the way in which Greek domestic space was conceptualized and used by its original inhabitants. Surviving textual sources and ethnographic parallels both suggest that households are likely to have been flexible in their patterns of activity (e.g., Nevett 1999, pp. 37–39; Foxhall 2000). The locations in which domestic tasks were performed probably changed depending on a wide variety of factors such as the season, weather and time of day; the numbers, ages, and identities of the other people present in the house; and a host of other variables. In practice, then, the occupants of these houses must have carried out a given activity in a number of locations and, conversely,

must have used a single space for a range of different purposes. As a consequence, there is a tension between our desire to assign a specific function to an individual space and the original pattern of spatial usage. This tension must, by definition, restrict the outcome of our investigation.

In the hope of addressing these problems I would like to suggest a re-orientation of the questions we have been asking of Greek domestic assemblages and a different way of thinking about the domestic environment as a whole. In particular I want to bring in some of the ideas of social anthropologist Tim Ingold, which I think can help to change the trajectory of our thinking in a positive way. Ingold's general perspective is in keeping with recent scholarship on Greek housing in assuming that social interaction and the creation of the material environment are inextricably intertwined, making the house an appropriate lens for studying social relations. He emphasizes that the construction of a house is a social as well as a physical act and that dwelling is an ongoing social process. On this basis Ingold defines a "taskscape" whose boundaries are constituted not by physical features but by the limits of particular human activities. He also emphasizes the way in which the temporal context, as well as the social and spatial ones, is integral to the definition of those activities (Ingold 1993; Ingold 2000, pp. 189–208). Ingold's model was created to arrive at a better understanding of human relationships with the landscape, but I think it also offers a useful framework for thinking about patterns of activity in the Classical Greek, domestic, built environment. It foregrounds various aspects of Greek houses and households which have already been touched on in studies of both textual and archaeological evidence, but which have not so far been given due emphasis in the concepts and methods used to analyze the physical remains of Greek houses and households.

Ingold's "taskscape," then, provides a framework for thinking about the texture of life within the Greek domestic environment, emphasizing the temporal dimension and inviting exploration of some of the processes which may have given rise to the material record as we see it archaeologically. By underlining the potential for fluidity in spatial behavior, it should prevent us from overlooking or underestimating the possible importance of multi-functional spaces. At the same time it should also enhance our chance of detecting changes in use through time, which we normally identify only at a gross scale based on modifications made to the architectural form of a building. In doing so, this perspective encourages us to move beyond the questions posed by the texts, to consider issues arising directly from the data themselves. But how can such a framework be applied in a practical sense to excavated evidence? Here, I would like to explore the benefits of this approach using evidence from a single house. I begin by assessing how far a traditional, architecture-led methodology can get us in interpreting the building, and then contrast the results with the potential offered by a taskscape-oriented approach.

The house I would like to discuss was excavated at Olynthos in 1938 and is known as house BVI 7, or the House of Asklepios after a marble sculpture of the god Asklepios which was found inside (Robinson 1946, pp. 125–42). I select this particular example because the supervisor of the area, John Alexander, seems to have taken particular care to note the spatial location of the artifacts recovered, and although in the publication only the room number was quoted, the unpublished notebook contains many more precise references to squares on a grid slightly larger than 1 meter. Such information is available only for a minority of the houses at the site, so that this example offers one of the fuller data sets to experiment with. At the same time the layout of the house raises a number of interpretative questions.

A traditional, architecture-centered approach would begin with the plan (fig. 5.1). The street entrance was toward the center of the north wall of the house and led via a paved corridor into a similarly paved courtyard. Inside, the different rooms seem to have formed discrete clusters or suites (although the relatively poor level of preservation of the east side of the house has obscured some of the doorways, so that the circulation pattern cannot be reconstructed in its entirety). Among the most striking architectural features identified during excavation is a small roofed space, f, which has a cement floor with raised borders and red plastered walls. This was taken by the excavators for a diminutive *andron* (it measures only 3.00 × 2.65 m). Furthermore, running across the southern side of the house there is a curiously long narrow space, k. This is only about 1 meter wide, but appears to have been separate from the drainage alley which ran between the two rows of houses in the block.

This house differs in a number of ways from the more typical layout of houses at the site (fig. 5.2). Where the entrance is on the north side it would normally be located at the corner, so as not to interrupt the northern range of rooms. At the same time, while BVI 7 had a paved courtyard, as is common, parts of two other spaces, the entrance corridor and the partially-preserved room in the southeastern corner, were also paved — which is less usual. The role of the courtyard here is also atypical: this would normally be the main circulation space, with rooms being entered individually, rather than in suites as here. The excavators of the site also point out that the *andron* is atypical, not only in size (it is the smallest identified at the site) but also in its location and construction. It is built up against the party wall shared with the neighboring house and does not overlook either the street or rear alley, so that the only source of fresh air was the courtyard. At the same time, access is via an intervening room, d, rather than from the courtyard, *pastas* (covered portico), or a dedicated anteroom. Furthermore, two of the *andron* walls are apparently without the usual stone socles, consisting solely of mudbrick. Finally, there is also a strange doubling of the rear wall of the house at its eastern end.

A number of questions arise from these brief observations: what is the implication of the organization of interior space here into suites? — did they still form a single functional whole, or were they in some sense independent of each other? Why were there several paved surfaces? (Were these in fact all unroofed spaces?) Was the red plastered room actually an *andron*, and was it original to the house? What was the arrangement along the southern wall, and does this represent an amalgamation of more than one occupation phase? To address these questions and clarify the use of space in this house a further step would normally be to add artifacts to the architectural picture. A total of 114 finds were documented from the building (fig. 5.3). The bulk of the recorded assemblage (54%) is represented by the ceramic finds (pottery and terra-cottas). If the aim is to identify networks of items which are linked by their use for a single purpose or group of related purposes, then a relatively coarse-grained ceramic typology can be implemented and the inventory of the house divided into vessels used for storage, for preparation and consumption of food and drink, and for a range of other specialized purposes such as decoration and personal care, along similar lines to those used by Ault in his analysis of Halieis (Ault 2005) (fig. 5.4).² Most of the vessels are tableware, including plates of various sizes and small closed vessels such as the oxybaphon, which may have been used for liquids. A smaller number of cups together with kraters and

² These functions can be assigned based either on the physical properties of vessels or on iconographic evidence, or both; see Nevett 1999, pp. 39–52.

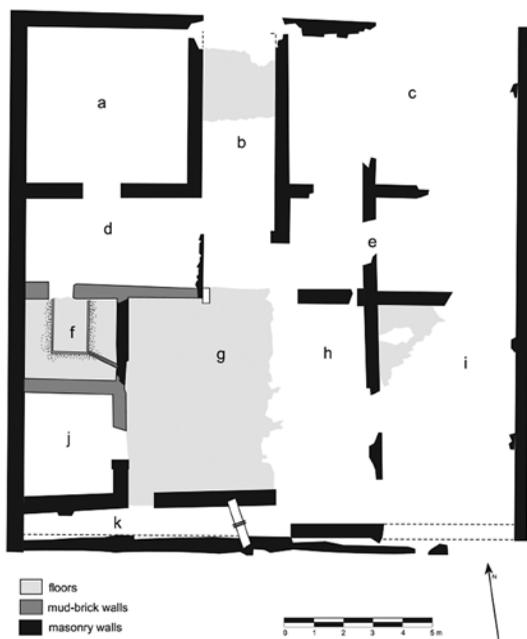


Figure 5.1. Schematic plan of House BVI 7, known as the House of Asklepios (based on information from Robinson 1946, pl. 110)

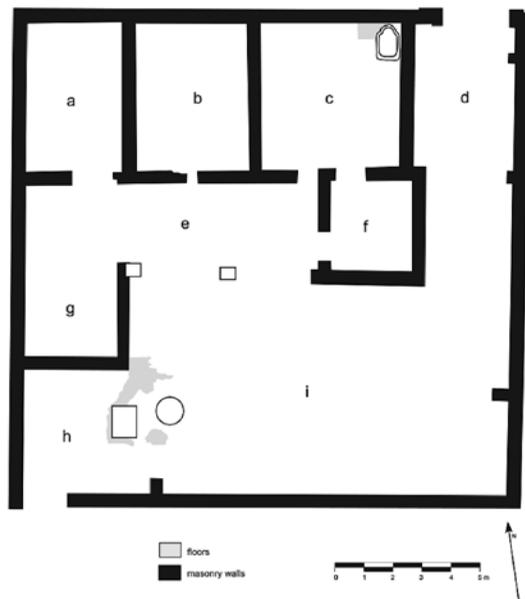


Figure 5.2. Schematic plan of an example of a more typically laid out Olynthian house with entrance on the north side: House AV 5 (based on information from Robinson and Graham 1938, pl. 95)

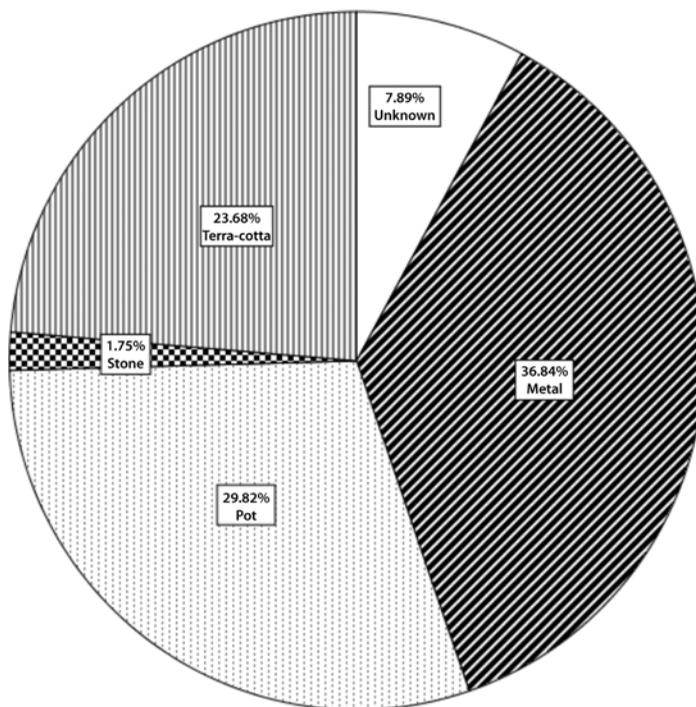


Figure 5.3. Pie chart showing the proportions of the different types of finds associated with House BVI 7 (n=114)

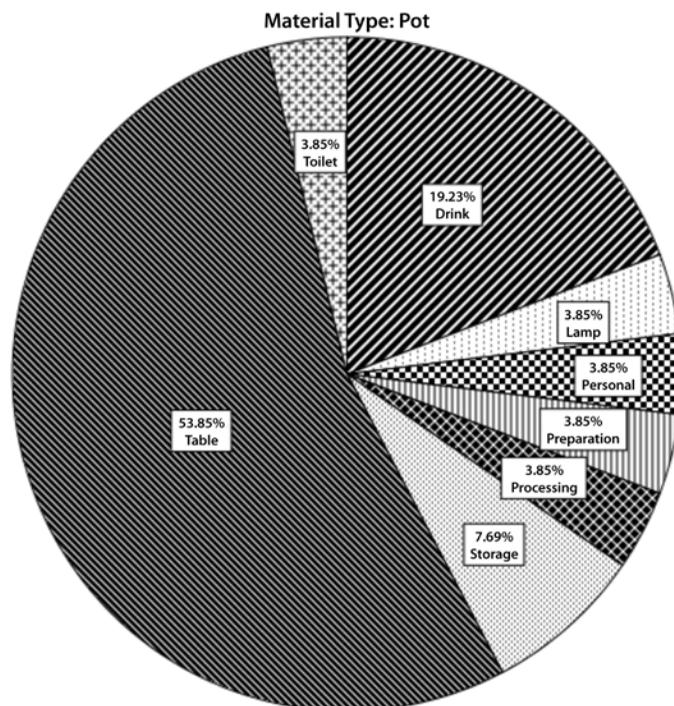


Figure 5.4. Pie chart showing the range of pottery types from different identifiable functional categories, found in House BVI 7 (n=26)

hydriai, may have been used for formal drinking, although some at least may also have been used at the table.

The distribution of the finds provides little firm evidence through which to address the questions raised above (fig. 5.5). For example, comparison between the finds from the different spaces with fully or partially paved surfaces does not highlight specific functions the areas may have had: rather, it reveals a wide range of items, both in terms of the total numbers and the range of activities they may represent. Room b contained only five artifacts, but they span five different functional categories. Space g yielded a surprisingly large number of finds, given that the paved surface would have made it difficult for items to be incorporated into the floor matrix, although at least one of them was recorded as coming from a cistern located in the northwest corner and this may also have been a source for others, which may therefore have been refuse, rather than in use here. Twenty-three items from this space spanned a total of nine different functional categories. Table vessels and decorative elements were the two most numerous groups, accounting respectively for six and five objects. Finally, room i appears to have yielded no finds at all — a fact which might perhaps be attributed to the poor preservation in this area, which David Robinson noted in his published comments had been subject to erosion downslope (Robinson 1946, pp. 125–26). Turning to the roles played by rooms f and k, only three finds come from room f and these do not support its identification as a space used only — or principally — by men: one is a pyxis, a small ceramic box which often carries decorative motifs suggestive of its use by women (Lissarrague 1995). Another is a single loom weight, again perhaps suggestive of female activity, although a single weight can scarcely be evidence for a whole loom. The third item is a

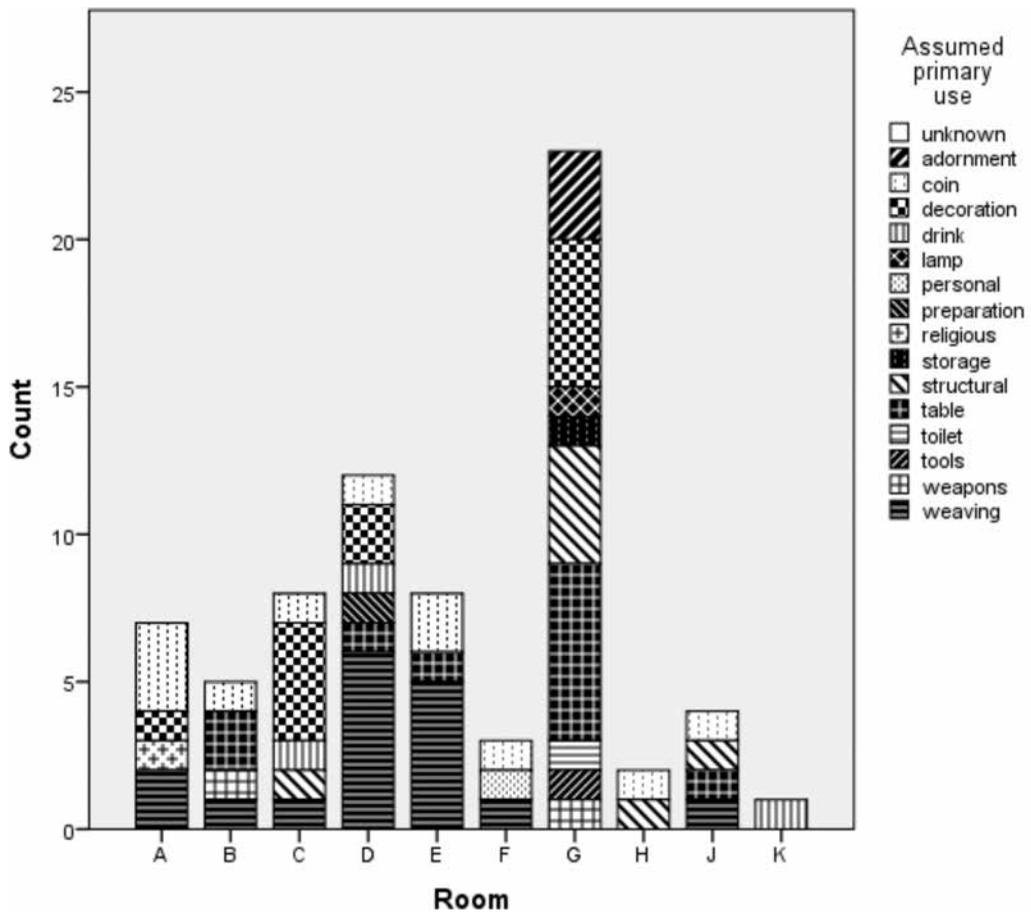


Figure 5.5. Bar chart showing the range of different types of finds from the various spaces in House BVI 7

coin. In space k only a single item, a black-glazed cup, is recorded, again making it difficult to attribute any particular role to this space.

A traditional approach to the architecture and artifacts of the house of Asklepios thus offers little basis for attributing specific roles to individual, architecturally-defined spaces. To what extent, and in what ways, might a taskscape-oriented framework help to further our understanding? Viewing the whole house as a continuous arena across which a range of different activities may have been performed demands a closer focus on the spatial relationships between the different objects. When their distribution is plotted by square meters rather than by room, it is clear that the finds are scattered thinly across most of the house, particularly on a diagonal axis running northwest to southeast, but they are absent from the southwest and southeast corners (fig. 5.6). Mapping the horizontal distribution of ceramic vessels alone reveals a thin, diagonal scatter across the center of the building from northwest to southeast which mirrors the distribution of the finds as a whole. The sample size is too small to draw any conclusions from the relative distributions of table and drinking vessels. Loom weights, too, are widely scattered across the center of the house from east to west, with none of the kinds of discernible clusters one might expect if any had been found in situ after the abandonment of a loom. A significant number of bronze coins were scattered around the periphery of the building but were absent from the center.

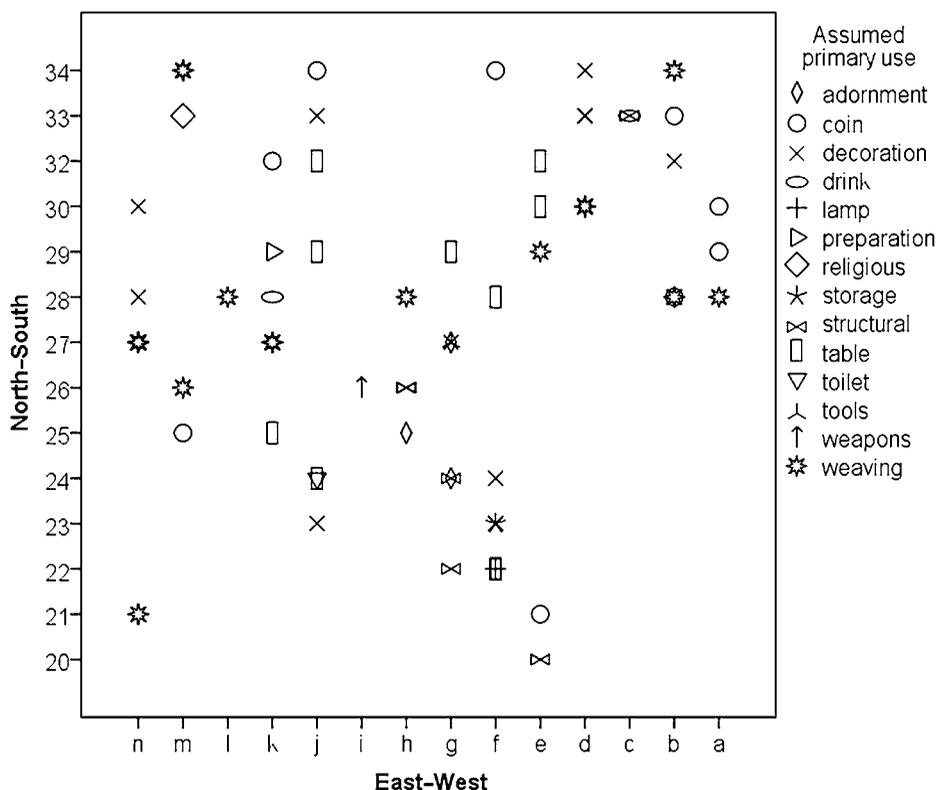


Figure 5.6. Distribution of finds of different types across the area of House BVI 7

Plotting the distributions of the different classes of artifacts in isolation from the architecture emphasizes the fact that there are no discrete, functionally specialized clusters which can be used to pinpoint areas devoted to a narrow range of tasks. On the contrary, items relating to a single activity are widely distributed across the taskscape of the house. But what do these scatters represent? Hitherto we have tended to assume that objects were left behind in the places in which they had been used or stored, by the departing occupants of the house. But the idea of the taskscape highlights the potential contribution of additional or alternative scenarios. In particular it encourages us to think about the temporal dimension of the assemblage: to what extent might the collections we are looking at represent accumulations of items built up through time? A number of potential rhythms can be envisaged on different time-scales. These might include daily cycles involving movement of domestic tasks between the courtyard and interior rooms depending on who may have been present in the house, or on changes in weather or temperature. Longer-term cycles may have been seasonal, again influencing the location of tasks such as food preparation – which may have been more comfortable indoors in the winter, warmed by fires in hearths or braziers – but may have been better undertaken outside in warm weather, hence avoiding unwanted heat and stuffiness in the house. On a longer term still, the number and profile of the residents as a group must have altered through time with the lifecycle of the domestic group, demanding changes in function. Other, non-cyclical, shifts may also have been made through time to the organization of the house for a range of reasons, as the norms and values espoused by

the occupants responded to developments in the cultural, political, and economic spheres within which the house was located.

Such alterations in the locations used for particular domestic activities might be one explanation for the wide distribution of artifacts linked to the same range of activities seen in the House of Asklepios, but at least some of the artifacts seem to have been relatively complete and are perhaps unlikely to have lain in position for very long. There are therefore also other explanations for their distribution patterns which should be considered. For example, historical sources record the destruction of the city of Olynthos after it was besieged in 348 B.C. One can only imagine the effect such a siege and destruction might have had on the state in which the inhabitants left their homes. Artifacts may have been strewn about a house as residents attempted to shelter from the enemy army entering their city, to pack up their belongings or to hide them for recovery at some future date. In fact the artifacts themselves occasionally offer hints of such disturbances: in the House of Asklepios a lead sling bullet was found in the entrance corridor (Robinson 1946, p. 126). In other houses at the site hoards of coins and other items have sometimes been found buried under earthen floors as if their owners intended to return and retrieve them.³ It is also possible that some of the artifacts recovered actually represent items fallen from an upper floor. Although we do not know whether the House of Asklepios had one (it does not seem to have possessed a stone stair-base, which is a key piece of evidence in other houses), there is evidence in some houses for the existence of a staircase leading to a gallery and rooms above the lower story.⁴ Some of the objects in the database for house BVI 7 may therefore represent the contents of such rooms which collapsed when the site was abandoned and destroyed, scattering their contents through the fill above the lower story.⁵

While exploring the artifact distributions using a taskscape-oriented approach helps to broaden the inquiry well beyond the rather narrow attempt to assign specific functions to individual architectural spaces, it also makes clear that severe limitations are imposed on any future analysis by the nature of the available archaeological data. The material from Robinson's excavation at Olynthos has proved a useful starting place for investigating artifact assemblages. Nevertheless, there are a number of reasons why expanding the range of questions in this way takes the discussion into areas where this evidence cannot help us. Absolute numbers of items inventoried per room at the site were relatively small and there is no explicit discussion of the criteria which determined whether or not finds made during the excavation were recorded. By contrast, at Halieis, where archaeologists aimed at more comprehensive recovery, many hundreds of artifacts were sometimes recorded from a single architectural space.⁶ Although such large numbers may result from dumping of refuse after the abandonment of the house, it remains possible or even likely that at least part of the difference in the volume of finds is because many ceramic vessels and other objects found at Olynthos were not recorded. It may therefore be that the sample we do have is biased toward particular classes of object and/or toward specific types of activity. At the same time there

³ For example, in room d of house AVI 8: Robinson and Graham 1938, p. 113; for more general discussion of hoarding at the site, see Cahill 2002, pp. 269–73.

⁴ For instance, BV 1: Robinson and Graham 1938, p. 131; for further discussion of upper stories at the site more generally, see *ibid.*, pp. 214–19.

⁵ A comparable scenario has been noted in the House of the Seals at Delos; see Trümper 2005, esp. pp. 356–60, with further references.

⁶ For example, in house 7, which covered 231 sq. m — a smaller area than most of the Olynthian houses — the ceramic finds alone totaled 6,230; Ault 2005, p. 111.

are some rooms for which no information at all was recorded about any artifacts which may have been found.

The cursory nature of the information about stratigraphy exacerbates this problem. In the notebooks from the House of Asklepios excavations, thirty-four objects are noted as having been found sitting directly upon a floor surface, although the criteria for making this judgement are not made explicit. In other instances a depth below the surface was sometimes noted, although because no diagrammatic representation of the fill was made it is unclear how that depth may have related to a floor level (particularly since the house was built into a sloping hillside). Of the thirty-four items noted as lying on the floor, eight were not located by excavation square, leaving only twenty-six of the original 114 items recorded from the house whose position can be pinpointed both vertically and horizontally. Such a small sample is obviously unreliable as a basis for drawing conclusions about the use of space in the house. Furthermore, this same lack of stratigraphic information also makes it impossible to reconstruct formation processes: for most of the items in the inventory no assessment can be made of whether the findspot is likely to have been the location of use, of storage, or whether in fact that object had already been discarded and lay in a refuse deposit. At the same time it is also impossible to distinguish between occupation deposits and destruction debris. Finally, we cannot know whether objects found on this side of the house might have been washed down slope from the northern part of the house, or even from the street or from a neighboring structure.

In sum, although our data from Olynthos are comparatively full and extensive, they also have definite limitations, particularly if we want to analyze individual houses closely. In my final section I suggest some of the kinds of evidence I think future fieldwork could potentially look for in order to support a more in-depth analysis of artifact distributions from a taskscape perspective, addressing some of the questions raised above.

Data-collection for a Taskscape-oriented Approach

There is clearly a need to collect a new, more detailed data set which would comprise larger numbers of artifacts and would provide greater spatial and stratigraphic control over those objects. At the same time a taskscape-oriented approach would also demand an expansion of the range of sources considered and analytical techniques used. Therefore, in addition to simply collecting larger numbers of artifacts, the roles generally assumed to have been played by different ceramic types based on iconographic and functional considerations would ideally be tested using residue analysis and use-wear analysis. Sampling for ecofacts alongside artifacts would extend the range of identifiable tasks to include subsistence activities such as crop processing. Such information may reveal distinctions between the spatial locations in which different kinds of commodities were processed and stored (e.g., butchering versus grinding of grain to make flour, or pressing of grapes and olives to make wine and oil). Detailed stratigraphic information should facilitate more precise judgements about the type of deposit in which an object was found, and whether it was in use, in storage, in a refuse deposit, or indeed awaiting recycling.⁷

⁷ The latter seems to have been the practice with a number of the artifacts found in Pompeian houses; see Nevett 2010, pp. 101–03.

A new fieldwork project should also be able to move beyond these relatively modest aspirations, to address the important temporal aspect of a Greek house as a taskscape, viewing it as a palimpsest which can give access to shifts in the pattern of domestic activities over shorter and longer time frames (from daily through seasonal to generational time). Ecofacts might help here, offering an indication of seasonal change through the incorporation of different kinds of plant materials, faunal material, and micro-fauna into the beaten earth floors of many of the rooms. But such information is restricted in terms of both the range of activities represented and the time scale to which they bear witness. Artifacts offer the possibility of detecting a wider range of activities, although the range of time scales to which they relate is potentially even more restricted: the relatively small numbers of more or less complete objects from the floors of rooms must surely result from usage or storage patterns at or around the time the house was abandoned, at best (if the locations of the objects can be taken as indicating these, rather than being the result of abandonment or post-abandonment activities). For this reason it is desirable to examine the micro-artifacts such as chips of ceramic vessels, together with the micro-stratigraphy of surrounding beaten earth floor matrices — which make up the majority of the floors in the house. At sites in Anatolia such information has offered insights into the range of items used in a location, and their sequencing can indicate changing patterns of usage through time (e.g., Rainville 2005; Rainville, this volume). The micro stratigraphic matrix itself can also indicate patterns of activity such as the use of water, presence of animals, or presence of organic materials such as matting (for example, Matthews 2005b, 2005a).

Conclusion

I suggest, then, that a taskscape-oriented approach enables us to think about artifact distributions in a new, more creative manner as one of a range of components which can be used to understand the use of space. At the same time it encourages us to look beyond the set of issues raised by the surviving texts, considering houses as dynamic living environments rather than as static entities which fossilize the last moments of their use and/or abandonment. While the limitations of the published data sets currently available for Classical and Hellenistic Greek sites restrict our ability to think in this way, the taskscape model also offers a firm basis for future fieldwork. This would necessarily involve not only collection of more comprehensive artifact assemblages and more detailed stratigraphic information, but also the use of a variety of techniques such as micro-morphology and micro-artifact study, which have already proved successful in other cultural contexts. Together, these new methods and new perspectives have the power to revolutionize our understanding of Greek domestic contexts.

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Interaction Between Texts and Social Space in Mesopotamian Houses: A Movement and Sensory Approach

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Introduction

Language and texts are considered by Mesopotamian scholars as the primary evidence in the reconstruction of past social relations and domestic space. Although the seminal work of Elizabeth Stone on Old Babylonian Nippur has broken new ground in household archaeology, residential patterns are often extrapolated by imposing textual or ethnographic evidence on the archaeological record (Charpin 1986; Van De Mierop 1992, 1997, 1999; Stone 1996; Baker 2010). The extraordinary wealth of information provided by cuneiform archives excavated in urban settlements is not disputed, but problems may arise if an exclusive role is assigned to the written documentation. In the arena of Mesopotamian archaeology, despite a growing awareness that texts may be biased by the ideology and interests of the urban-based literati, and while space and material culture provide insights into the habitual actions of people (Matthews and Postgate 1994; Pfälzner 1996, 2001; Miglus 1996; Wattenmaker 1998; Zettler 2003; Rainville 2012), the importance of the material record is still minimized (Matthews 2003, pp. 155–82).

Approaches that investigate the users' perceptual experiences through the examination of multisensory evidence and movement from ground level are scarce but can complement our comprehension of ancient life. As shown by recent cognitive research, it is well known that the body and the five senses have a central position in evolution, particularly in such evolutionary processes as human imagination and language (Ruthrof 2000, pp. 39–41). This article applies such an approach to the unique evidence from second-millennium B.C. houses, and particularly the residential neighborhoods from Ur and Nippur. At these sites, the analysis can be grounded both on well-preserved house plans and family archives, thus offering an unprecedented opportunity to explore how verbal and nonverbal meanings interact in the archaeological past. Moreover, the veracity of claims made in ancient texts can be checked against the patterns of nonverbal meanings. Results from the analysis of Ur and Nippur can be applied to similar houses from other Mesopotamian sites that lack the combination of architectural and textual evidence.

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Texts and Space: A Dynamic Relationship

It is widely acknowledged that texts and material culture (inclusive of space) have to be studied in conjunction to produce a holistic vision of the past. But has the nature of this interaction ever been really theorized? According to structuralist and poststructuralist approaches to archaeology, language and written texts are divorced from reality and have meanings through an internal network of reference. But denying the presence of pre- or non-linguistic human experience does not take one far. How can one account for habitual and repetitive actions, as well as the many varied sensory experiences of the world? Are they not somehow written in the material evidence available to the archaeologist? The stance taken here is thus to reinstate the body in language or in ancient texts. In order to establish the link, it is suggested that both space and texts must be considered on the common grounds of semiotic systems. They represent, in fact, differently coded sign systems that communicate information to users.

By allowing for the active role of bodily experience it would be possible to counterpoint the formalistic view of language. Different approaches defined as “corporeal semantics” re-evaluate the totality of human engagement with the world and its bearing in the construction of verbal and textual meanings. In line with theorists such as Pierce, Wittgenstein, and Husserl, as well as cognitive science, I stress that language is meaningless by itself unless it is activated by nonverbal signs in the form of mental images and other perceptual elaborations (Ruthrof 2000, p. vii). This approach originates from Giambattista Vico’s strong iconic view of the origins of language, which he contends “must have begun with signs, whether gestures or physical objects” (cited in Ruthrof 2000, p. 36). In Vico’s *New Science*, “The vivid sensation in perceiving the world” has its roots in the body. Like Vico, Heidegger notices that “any mere pre-predicative seeing already understands and interprets” (Heidegger 1962, p. 189).

Family archives are thus understood to be re-elaborations of nonverbal interpretations such as proxemic, visual, aural, and olfactory spacing codes (cognitive maps), namely, implicit, habitual actions carried out by individual agents under community control. But, given the elaborative power of language, epistemic multiplication of meanings are always possible and these are more evident in symbolic discourse. Since nonverbal sign systems are the expression of habitual actions which are only flexibly encoded by documentary evidence, different nonverbal readings and verbal systems may express both corroborative and dissonant relations without “destroying the expectations of a coherent world” (Ruthrof 2000, p. 82). In order to produce more comprehensive histories of the past, the reasons behind corroboration or dissonance between the two different sign systems are illustrated through archaeological examples.

The Archaeological Data

Tell al-Muqayyar, ancient Ur, the capital city of Ur-Nammu (2112–2095 B.C.), has a size of approximately 60 hectares and is situated in the very south of modern Iraq — ancient Mesopotamia — near the provincial capital of Nasiriyah (fig. 6.1). In the Old Babylonian period, the city was served by the Euphrates River and had at least three harbors for overseas and overland commerce. After preliminary excavations in 1853 and 1919, respectively, by British archaeologists John E. Taylor and Henry R. Hall, the site was thoroughly investigated in the years 1922–1934 by the Joint Expedition of the British Museum and the Museum of the

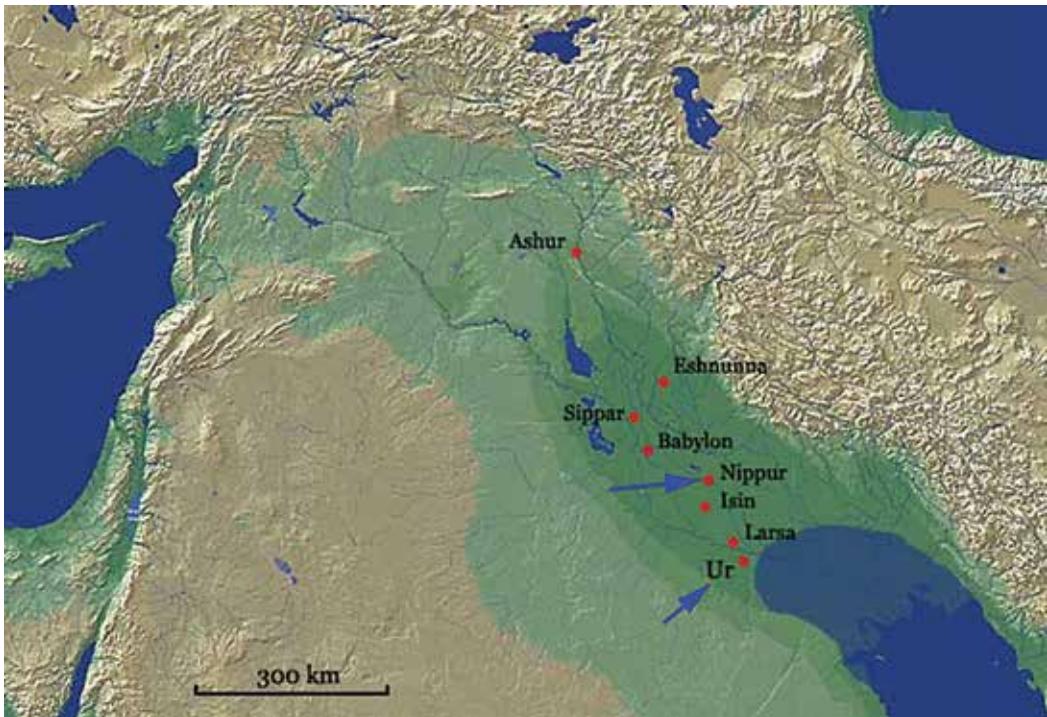


Figure 6.1. Map of ancient Mesopotamia with the main Old Babylonian sites (after Odyssey Adventures in Archaeology)

University of Pennsylvania, directed by Leonard Woolley. Excavation of residential quarters focused on four sites — AH, EM, MS, and EH — though the former two are the major sites; AH and EM measure respectively some 8,000 and 2,900 square meters (figs. 6.2–4). Since the courtyard houses of the main domestic areas were extremely well preserved, nearly complete plans are available. Features and finds were also carefully recorded, but tablet findspots needed to be assessed through examination of Woolley’s original handwritten reports (Brusasco 1999–2000, pp. 155–67).¹ Mudbrick was the main building material, with baked brick used for the foundations, thresholds, arches over door openings, and for some pavements. In some houses, solidly built stairs suggest the presence of upper floor rooms, but they may also lead to the flat roof.²

¹ As stressed by the excavator, “the tablets could not be given catalogue numbers until they had been cleaned, which nearly always meant until they had been baked”; this caused some confusion in the final publication, while field notes are generally more reliable (Woolley and Mallowan 1976, p. xviii; Brusasco 1999–2000, p. 111).

² See Brusasco 1999–2000, pp. 86–87, and Miglus 1999, pp. 204–05, for detailed discussion of upper floor space and roofed versus unroofed house sec-

tors. Houses at Ur and at other sites with solid brick staircases may have had upper-floor rooms as suggested by the excavators (Woolley and Mallowan 1976, pp. 25–28), but the presence of a gallery and a complete group of rooms on the upper floor corresponding to those on the ground floor is unlikely since not all ground-floor areas were covered up by a roof (at least part of the chapel and in some cases the kitchen were unroofed) (Brusasco 1999–2000, p. 87).



Figure 6.2. Map of ancient Ur with EM and AH residential sites (after Google earth)



Figure 6.3. Ur: view of the AH site reconstructed in 1999 by the Iraqi State Board of Antiquities and Heritage (after Curtis et al. 2008)

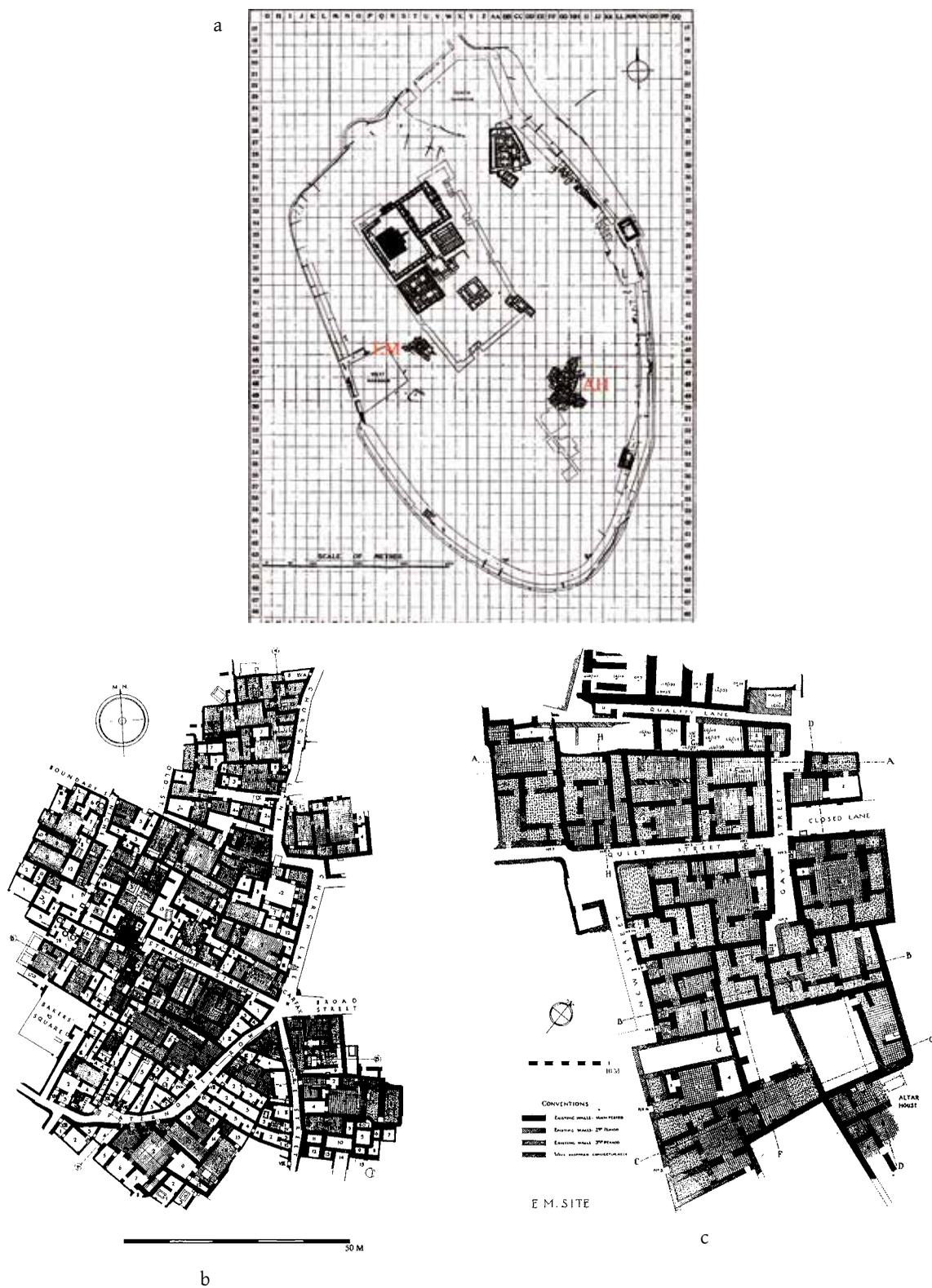


Figure 6.4. (a) Site plan of Ur, with details of (b) AH and (c) EM (after Woolley and Mallowan 1976)

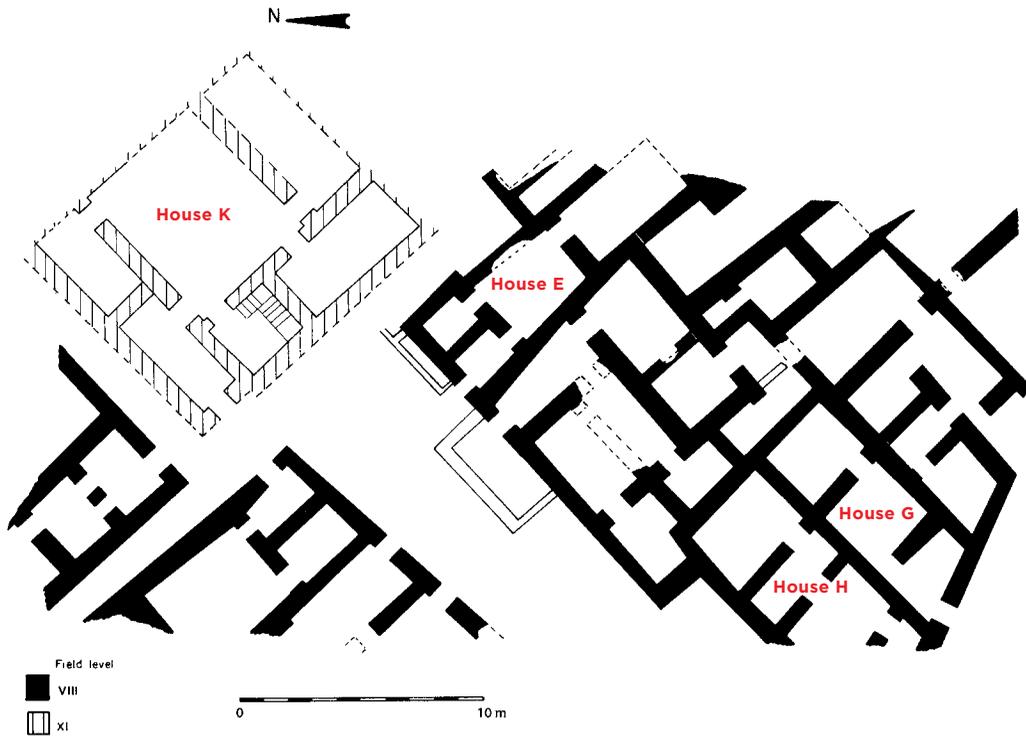


Figure 6.5. TA residential area at Nippur (after Stone 1981, fig. 1)

The same construction materials can be found at Nippur, the chief religious center of ancient Sumer and Babylonia, and the seat of the god Enlil (fig. 6.1). Situated in the southern part of Iraq, approximately 160 kilometers south of Baghdad, the site covers some 73 hectares. In the post-World War II excavations at Nippur, the Joint Expedition of the University Museum of Philadelphia and the Oriental Institute of the University of Chicago uncovered two main domestic areas: TA and TB, whose main levels date to the Isin-Larsa and Old Babylonian period (fig. 6.5). Stone's detailed examination of the stratigraphic sequence shows that the field entries of tablets and other finds are more reliable than the final publication (McCown and Haines 1967; Stone 1981, p. 20; Stone 1987, appendix II).

In Old Babylonian Ur, of the sixty-seven structures excavated, fourteen contained family archives, twelve in the AH site and two in the EM site, respectively, while TA Nippur offers additional evidence for linear houses (H, G, E) and square (courtyard) houses (K), which at Ur lack the archival data. Some examples of movement and sensory experience in some of these houses, as well as relevant text passages, are illustrated through the following methodology.

Method and Theory for the Study of Nonverbal Signs

While simple plans offer a static view of architecture, investigations highlighting movements through space and multisensory experience can better capture the occupants' perception of a building (McMahon 2013, pp. 163–64; Hamilakis 2013). Patterns of movements are the focus of Bill Hillier and Julienne Hanson's access analysis (1984). But accessibility and distancing

mechanisms alone may be too formal to encompass all the vagaries of human behavior. In order to make up for this deficiency, access analysis must be employed within frameworks emphasizing the flow of life: Anthony Giddens's structuration theory and Pierre Bourdieu's idea of habitus emphasize that the sedimentation of past practice unconsciously guides future behavior (Giddens 1979; Bourdieu 1977).

By using cross-cultural and culture-specific data, environmental and social psychology studies offer some useful techniques for the analysis of habitual action in space. Environmental psychology explores the interactive relationships between the built environment and human behavior by stressing the importance of recurrent nonverbal cues as indicators of ancient behavioral responses and interpersonal attitudes (Sanders 1990). Most promising is the combined use of environmental/social psychology models and "space syntax" research for highlighting nonverbal sign systems in domestic space (Brusasco 2004, 2007).

For social psychologists, the degree of proximity between different parties or actors indicates two major social dimensions of interpersonal attitudes and privacy regulation: friendly versus hostile, and dominant versus submissive (Argyle 1994). Intimate and friendly relations are spatialized by closer distances and vice versa (Grøn 1991, p. 103). Conversely, territorial control and high integration, freedom of movement and specific visual vantage points suggest dominance by powerful persons and/or groups (Mehrabian 1972; Sanders 1990, p. 49). Proxemic models are deterministic, but they can be refined with behavioral theories about boundary types (symbolic, psychological, physical, buffer zones, enclaves, etc.), information transfer, and privacy. Although privacy is culture specific, it universally shares the notion of the control of undesired interpersonal interaction and communication (Sanders 1990, p. 49).

These psychological dimensions and privacy mechanisms show up in the archaeological record through the deconstruction of normal house plans into social network charts. Accessibility graphs express the distance of each room from the outside and their relations within the network, thus allowing quantitative analysis of social interaction. The shallower the graphs, the more emphasis on circulation and spatial solidarity across the boundary within an informal system of social relations, while deep tree-like charts spatialize more hierarchical and complex relations both on the internal and external levels (Bernstein 1971; Hillier and Hanson 1984, pp. 18–25, 143–47).

Finally, access analysis is integrated with phenomenological approaches stressing multi-sensory perceptions.³ Although ancient Mesopotamian people certainly possessed a culture-specific hierarchy of senses, modern experimental observations suggest that interpersonal conduct is negotiated within five concentrically nested spaces corresponding to the effectiveness of the human senses. These circles range in decreasing size through vision, hearing, smell, touch (mediated by the use of tools), and direct tactile contact. Vision allows awareness of another person's presence within the co-presence zone of radius 91.4 meters, hearing and smell come into play at 30.17 and at 9.14 meters, respectively, while indirect touch and tactile contact at 2.7 meters and ca. 1 meter, respectively (Ciolek 1982, pp. 223–42).⁴

³ For their application to the Neo-Assyrian capital city of Khorsabad, see McMahon 2013, pp. 163–79. In addition, using Bronze Age Crete as a case study, Hamilakis provides a thorough analysis of "multi-sensorial, experiential modes of engaging with the

world," with an emphasis on affectivity and mnemonic devices (Hamilakis 2013).

⁴ For its application to Early Bronze Age houses from Myrtos (Crete), see Sanders 1990.

Detecting Nonverbal Semiosis in the Past

Activity-area Analysis

In Mesopotamia, the fully flanked courtyard house is an ideal type, for it maximizes privacy and allows for ventilation through the internal open space. But variations of this prototype are very common as the layout of the individual houses was greatly determined by family history and the available space. For instance, some houses have plans with a few rooms in linear alignment, while others are single, double, and triple court structures, not necessarily with a full set of rooms around the open space. Their floor areas range from ca. 40 square meters of the linear type to the 70–200 square meters of the single court residences; double and triple court structures may reach up to 300 square meters in size (Brusasco 1999–2000, pp. 18–19; Miglus 1999, pp. 77–78).

Preliminary activity-area research must be carried out before it is possible to investigate the movements and sensory experiences of residents and visitors within diagrams. Activities occur within systems of settings which are the reflection of user behavior (Rapoport 1990). As shown in previous work, quantitative analysis of nonverbal cues — artifact, features, and find distribution — defines the use of space in different types of houses (Brusasco 1999–2000, pp. 60–93; 2007, pp. 20–28). Findspot analysis, number of residential loci per house, degree of architectural segmentation, and gender-related activity areas are important elements in the definition of family sociology. The distributional pattern of diagnostic features and finds across the house shows the presence of entrance lobbies, kitchens, stairways, lavatories, workroom/utility room, chapels, and archives rooms (table 6.1) (Brusasco 1999–2000, pp. 60–93).

Table 6.1. Ur houses: feature and find distribution by room type (after Brusasco 1999–2000, pp. 66–88)

	Mean Size (sq. m)	Fireplace, Cooking Range, Bread Oven	Drain	Stairs	Bench	Table, Incense Hearth	Cylinder Seals / Sealing Tablets	Tomb	Pottery Implements
Entrance	7.00				x				x
Courtyard	24.12	x	x		x		x	x	x
Main Living Room	11.25	x			x		x		x
Living Room	9.68	x			x				x
Kitchen	8.14	x			x			x	x
Stairway	4.00			x					
Lavatory	3.68		x						
Storeroom	4.45								x
Workroom	11.91				x				x
Chapel	22.31	x			x	x	x	x	x
Archive Room	4 .00						x		

The main feature of the south Mesopotamian courtyard house is a distinction between a dominant family sector located in the chapel suite and secondary residential rooms in which poorer residents lived, namely secondary branches with poorer graves.⁵ Main living rooms and secondary living rooms have been identified through the presence of specific architectural markers and find/feature distribution. Main living rooms are large rectangular loci with a mean size of 11.25 square meters, and with brick pavements, massive mudbrick walls with some baked bricks, door buttresses (and/or increase in wall thickness on both sides of main doorways), and wide entrances like throne rooms;⁶ they are provided with hearths and benches, as well as valuables such as tablets, weapons, and decorated wares (Brusasco 1999–2000, pp. 66–71; 2007, pp. 25–26; see also *Hauptsaal-Empfangsraum* in Miglus 1996, p. 211). Living rooms of a smaller mean size (9.68 sq. m) open on the side of the courtyard but are not included in the chapel suite. As suggested by ethnographic analogy, if each living room is inhabited by one nuclear family,⁷ then the archaeological identification of residential spaces highlights family composition. At Ur, while the pattern of residence was of the nuclear family type (55%), there was a significant presence of extended households (45%). The latter were mainly settled in the AH site (54%) with a smaller figure for the EM site (23%). In general, while linear residences invariably host nuclear units (Stone 1996, p. 233; Brusasco 2007, p. 28), the fully flanked courtyard structures, or variation of it, tend to house both wealthier nuclear families and extended family types. The latter share courtyard, storage, and working facilities, as well as the kitchen, which in some cases may also double as a living room with poorer graves.

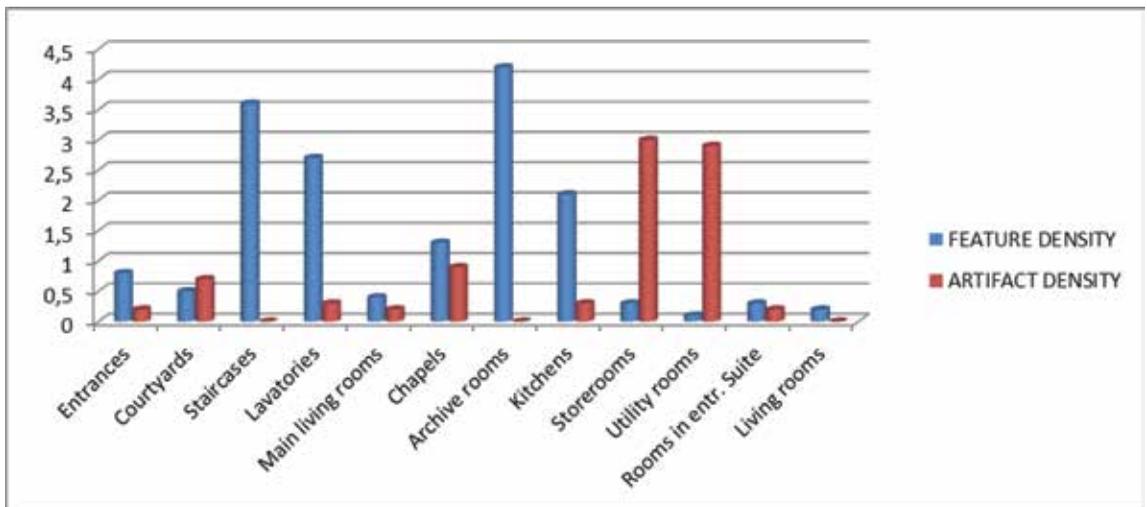


Figure 6.6. Density of features and finds in Ur loci

⁵ By chapel suite is intended the independent group of rooms normally located on the opposite side of the courtyard with respect to the entrance; the suite is composed of the chapel, the archive room, the main living room, and in some cases a bathroom. Since chapels have the highest percentage of family vaults and valuable furnishings, while simple inhumations like larnax and pots are attested in secondary living rooms, kitchens, and utility/workrooms, it follows

that less important family members might have been buried outside the chapel suite (Brusasco 2007, p. 26; for Sippar, see Gasche 1978, p. 89; for Larsa, see Calvet 1996).

⁶ See, for instance, the Palace of the Governors at Eshnunna (Ibal-pi-El I, ca. 1840 B.C.) and the palace of Zimri-Lim (1780–1758 B.C.) at Mari.

⁷ See C. Kramer 1979, p. 144, for some examples of this correspondence in the Near East.

The integrated use of figurative narratives illustrating gender activities, slaves, and diagnostic tools, as well as study of the distribution of the same tools across the house, indicates the lack of gender-specific areas (Brusasco 1999–2000, p. 91; 2007, pp. 27–28). Main living rooms, living rooms, kitchens, and courtyards are equally used by men and women. As for the degree of architectural segmentation, most rooms have a small density of features and finds, and thus are multifunctional spaces (courtyards, main living rooms, living rooms, kitchens, chapels), while only stairs, latrines, and archive rooms represent the most task-specific loci (Brusasco 1999–2000, pp. 71–90, pp. 103–05) (fig. 6.6).

Movements, Sight, Smell, and Colors: Five Social Family Types

Social-network analysis captures the habitual tendency of space use concerning five specific family sociologies with the presence of different degrees of tension among resident subsets and between residents and visitors. Overall, privacy and boundary control tend to progressively increase from Model 1 linear houses (Accessibility Index = 14) to Model 5 double court houses (A.I. = 2286) with a parallel increase in the degree of complex social relations and power mechanisms (figs. 6.7–10). As for nuclear families, the shallow graphs of Model 1 linear houses and Model 2 square houses display a generally interior-exterior orientation with an affiliative/interactive dimension both among residents and between residents and visitors; in Model 2 houses there may live wealthier nuclear families with an expanded service sector (loci 7–8) (fig. 6.7). Analysis of movement can be refined through integration of sensory perception. Both house units are relatively small, and with a circulation path of ca. 13 meters (from entrance to the farthest room) they lie within the co-presence zones of all major senses. Only the 9.14-meter co-presence smell zone may divide space into two different invisible sectors: cooking undertaken in the furthest space with respect to the entrance — in both cases the chapel (see presence of fireplaces) — is out of olfactory range for residents and/or visitors stationed in the entrance lobby or nearby (fig. 6.7:a, d).

Sight lines from outside and within the house are regulated by door placements and walls. Individual experience of moving across the entrance lobby suggests that asymmetrical accesses are designed to influence viewers' perception of space. In order to maximize visitors' visual impression of scale, the door of the entrance lobby VIII (Model 1 house) is offset to the east (fig. 6.7:b). This has two effects: first, external viewers are confronted with privacy mechanisms that hide the main internal activities of the courtyard 2, a place where men and women usually carried out daily tasks; second, once within the house, it allows visitors to achieve more visibility of the courtyard as a whole. This is clear if one compares the two-dimensional isovist of entrance VIII with the isovist from the second entrance X.⁸ Assuming that the courtyard entrants may have been stationed briefly past the entrance, directing their gaze toward the focal point of the chapel door (locus 3), the field of view from VIII is definitely larger than the area visible from entrance X. This may indicate that X is a private passage, whereas VIII is reserved for impressing visitors. Therefore, "asymmetry" and "hiding/revealing space" is used in the positioning of accesses to the courtyard to create perceptions of spaciousness through optical illusion, a feature which is widely employed also

⁸ An isovist is the volume of space visible from a located vantage point. Naturally three-dimensional, isovists may also be studied in two dimensions; see

Turner et al. 2001). Normally, 60 degrees is considered the angle of clear vision at cross-cultural level.



Figure 6.7. Nuclear family houses of Model 1 (linear type: 8–10 Paternoster Row, II phase, AH, Ur) and Model 2 (square type: 5 Quiet Street, III phase, EM, Ur): proxemic, nonverbal sociology showing informal relations among residents and between residents and visitors. Model 1: (a) smell-zone sectors, (b) 60° isovists (red = 60° isovist area of 9 sq. m from Gate VIII; blue = 60° isovist area of 6.5 sq. m from Gate X); Model 2: (c) 60° isovist (area of 9.5 sq. m), (d) smell-zone sectors

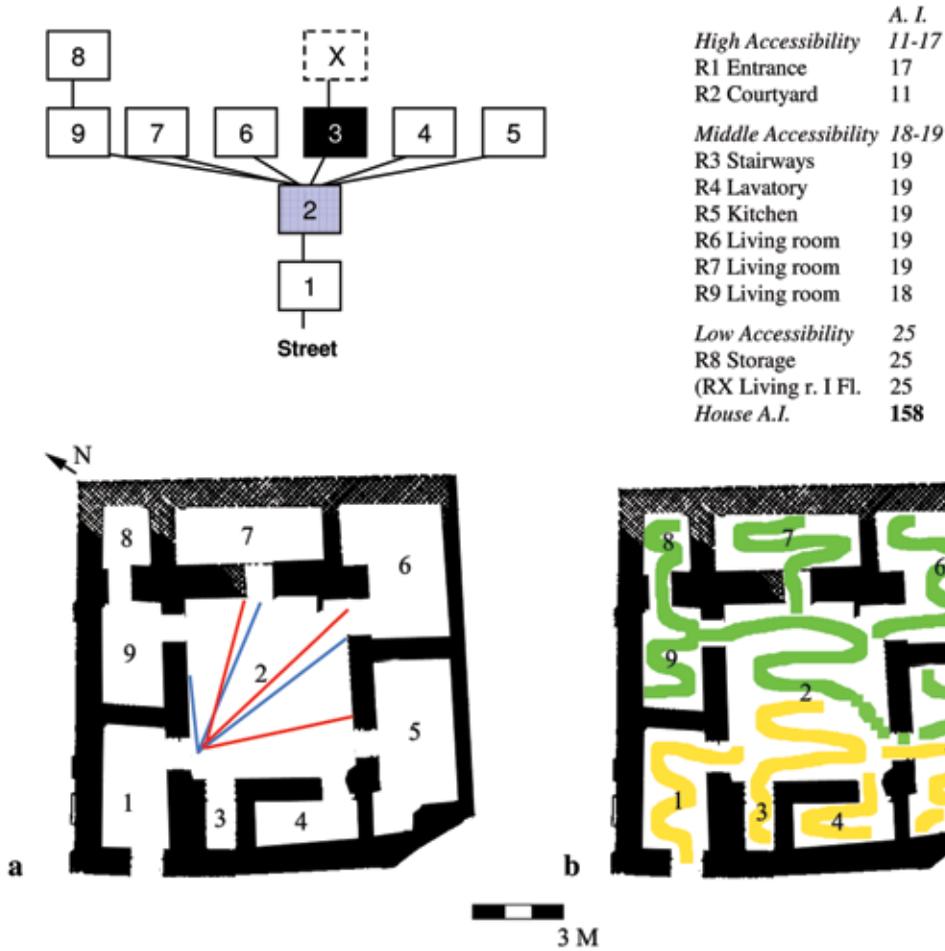


Figure 6.8. Extended family houses of Model 3 (fully flanked houses with one row of rooms on the courtyard: 3 Gay Street, EM, Ur); proxemic, nonverbal code of social equality; (a) 60° isovists (red = 60° isovist area of 15 sq. m; blue = 60° isovist area of 14.8 sq. m), (b) smell-zone sectors

in monumental architecture (McMahon 2013, pp. 169–72).⁹ Asymmetrical fields of view are also emphasized in the house omens:

If the doorways of a house open in its front, a man’s wife will from interior to exterior harass her spouse. If the doorways of a house open on the side (?), the house will be happy. (CT 38, 12: 64–65; Guinan 1996, p. 63)

In Model 2 houses, if the farther door of main living room 4 is the visitor’s initial focus (with a small turn to the left), his perception of space is maximized (fig. 6.7:c); the opposite holds true looking directly toward the chapel 6 door on the north side. Moreover, the main

⁹ McMahon’s analysis focuses on the accesses to the citadel courtyard of Khorsabad, and fields of view from Gate B in particular.

field of view from the family's living room (north door) allows both control of entrance 1 and the service sectors 7–8. In both Model 1 and Model 2 houses (and indeed in all house models), courtyard walls were often whitewashed and special care was devoted to re-plastering to keep the bright color of the surface, thus amplifying the effect of spaciousness in crowded neighborhoods.¹⁰ The omens reinforce this ideology:

If the plaster of a house is painted white, it brings luck. (CT 38, 14: 28; Woolley and Mallowan 1976, p. 28)

If in the interior of a house the walls show the plaster falling off, destruction of that house. (CT 38, 15: 29–32; Woolley and Mallowan 1976, p. 28)¹¹

While an unassuming external facade — a blank wall — with an offset entrance displays the introverted character of the house and the need for privacy, internal values emphasize asymmetry, optical illusion, house upkeep and white plastering versus disrepair and dark painting.¹²

As for extended families, Model 3 (square type), whose living rooms are equally integrated into the network, pinpoints social equality among residents (fig. 6.8). By contrast, in Model 4 (square type), social inequality among resident families is spatialized by the stronger integration of the main living room with respect to the other residential loci (fig. 6.9). In this latter house type, asymmetry and hiding/revealing spatial dynamics are also emphasized in order to reinforce power inequality: the bent entrance 1–2 is offset to the north, and this allows visitors who have entered inside to capture a wider view of the internal courtyard, a view directed toward the main living room 8, and the dominant family, on the farthest side of the open space (fig. 6.9:a). By contrast, the family residing in the living room 4 is completely despatialized from the main field of view, the isovist segment specific to the courtyard entrants. Instead, potential visitors are significantly controlled by the main family, whose field of view covers a large part of the courtyard and the entrance sector.

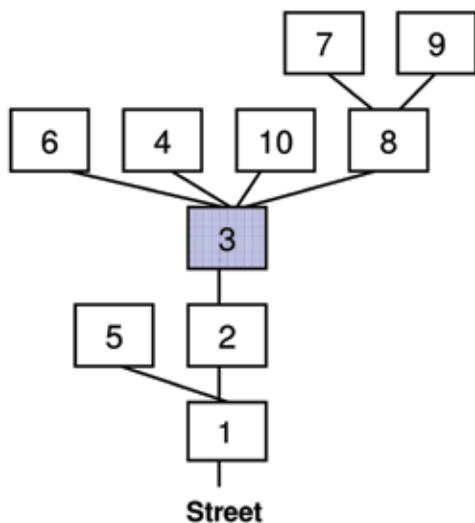
Creating an impression of spaciousness may have been only one of the aims of spatial design. Manipulation of light and shadow in favor of the main family might augment the impression of its power and control within the building. Another interesting perceptual dynamic is at play here: a pattern of light-shadow-light-shadow-light may be detected by following, step by step, the pathway of visitors or users moving from the street to the chapel, the most segregated space at the back of the house (fig. 6.9:b). Entering from the street to the particularly extended passage 1–2 determines a dramatic contrast of light and dark, and, with welcome reduction in temperature, a feeling of coolness enhanced by the presence of a water-jar “so that visitors might wash their feet before entering the house proper” (Woolley

¹⁰ Although practical reasons such as sealing from damp and water are necessarily implied, such continuous re-plastering would not be required for mere wall protection, but aesthetic appeal and symbolic uses of colors may be also invoked (Brusasco 1999–2000, p. 71).

¹¹ A similar omen occurs in Hittite royal archives dealing with the inauguration of a royal palace: “[When] you finish [constructing the building and] you [plaster the building inside, plaster] with long years; [plaster with goodness. When you plaster] out-

side, [then] plaster with frightfulness; plaster [with lordliness]” (Beckman 2010, p. 72).

¹² A similar patterning of accessibility and sensory perception may apply to linear houses from third- to second-millennium sites: House H, G, and E, TA, Nippur, House 11, Harâdum, Early Akkadian Houses X and XI, Tell Asmar, VA, House from Isin, etc.; and to Model 2 houses: House I, TB, Nippur, House from Old Babylonian/Kassite Babylon, Akkadian House XXXVIII, Tell Asmar, IVA (Brusasco 2007, pp. 29–30).



	<i>A. I.</i>
<i>High Accessibility</i>	17-22
R2 Passage	20
R3 Courtyard	17
R8 Main living r.	22
<i>Middle Accessibility</i>	25-26
R1 Entrance	25
R4 Living room	26
R6 Living room	26
R10 Stairway	26
<i>Low Accessibility</i>	31-37
R5 Entrance suite	34
R7 Lavatory	31
R9 Chapel	31
<i>House A.I.</i>	258

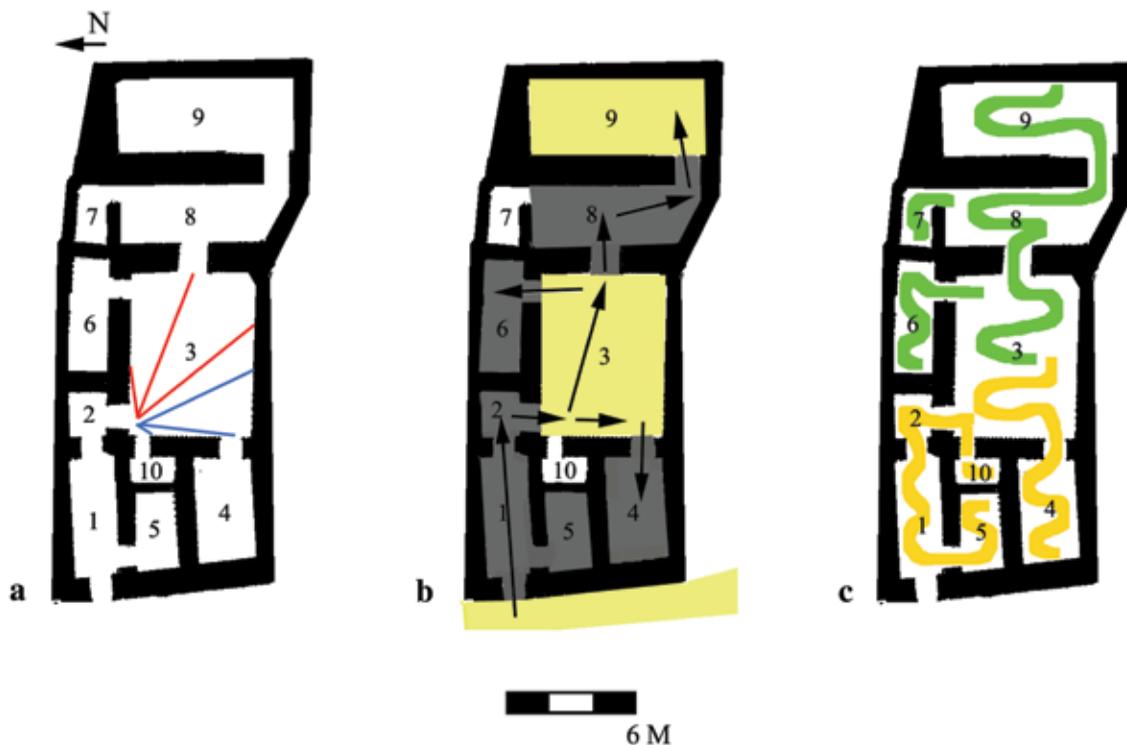


Figure 6.9. Model 4 (fully flanked houses with more than one row of rooms on the courtyard: 1 Store Street, II phase, AH, Ur): proxemic, nonverbal code of social inequality among resident families; (a) 60° isovists (red = 60° isovist area of 24 sq. m; blue = 60° isovist area of 7.5 sq. m); (b) light/shadow pattern; (c) smell-zone sectors

and Mallowan 1976, p. 23). On entering the courtyard 3 there is a sharp increase in light and temperature, then again shadow in the main living room 8, and a final explosion of light in the chapel 9, only half covered, at the end of the path.¹³ But only one family subset — the dominant one — may take full advantage of the light/dark interplay, and impress a potential visitor with a spacious and bright chapel (in reality a more private courtyard); no such symbolic space is available to the secondary branch of the family, whose visitors are hosted in the relative darkness of the living room 4. The cycle of experienced movement here is light-shadow-light-shadow, thus ending up with dark. The omens reinforce the ideology that inside the house light is good:

Doorways that open to the south signify happiness, while those that open to the north unhappiness. (CT 38, 12: 60–61; Guinan 1996, p. 64)

If a canopy of the house shines on the inside, its inhabitants will be happy. If the canopy of the house is black the inhabitant will have trouble. (CT 38, 14: 9–10; Guinan 1996, pp. 65–66)

In Model 3 houses, the bent entrance 1 remains offset to the west side of the house, but major sight lines from the inner door of this passage are equally directed toward the two living rooms 6 and 7, thereby amplifying the effect of both spaces (fig. 6.8:a); the living room 9 is hidden from view of a courtyard entrant, and this may perhaps indicate a relatively less important family subset. Families residing in the living rooms 6 and 7 have the visual control over visitors accessing the house from the entrance.

Smells, light, and shadow are linked to reinforce cultural conventions. The 9.14-meter co-presence smell zone may divide the buildings into two nearly equivalent sectors, the courtyard being the boundary between smell areas or the center from where the entire house is within olfactory range. It is not surprising that bread ovens (like modern *tannur*) and fireplaces are placed in the open courtyard, thereby expanding various smells across the entire house. But if cooking is carried out in the single living rooms (where fireplaces are also attested), the smell zone of the dominant family is out of olfactory reach both for visitors and the secondary family (fig. 6.9:c). It is perhaps this asymmetric manipulation of smell that is hinted at in the omen:

If a man's house (its walls) smells variously of ghee, oil, aromatic plants, or wine will lose its wealth, he will have his property taken over, find his material circumstances reduced, or lose an heir. (CT 38, 17: 100–4)

Indeed, smells that are boasted of by kings for their royal residences¹⁴ must be concealed by the dominant family within the house. No asymmetry in smell zones is present for Model 3 houses whose living rooms (loci 6, 7, 9) all lie within the same olfactory range (fig. 6.8:b).¹⁵

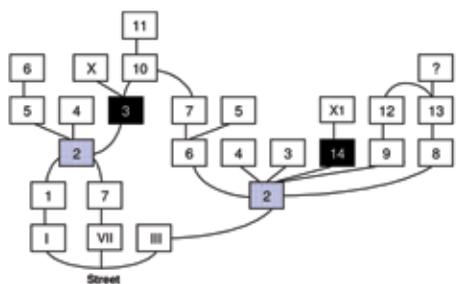
Compared to the other house types and their spatial solidarity with the external world, the graphs of Model 5 (double court houses) are deeper and more articulated, thereby

¹³ See Woolley and Mallowan 1976, p. 29.

¹⁴ See Guinan 1996, p. 67, and Ellis 1968, pp. 29–30, for the use of these substances in the mortar of royal buildings.

¹⁵ A similar visual and olfactory pattern may be documented in other third- to second-millennium sites;

Model 3 houses: House K, TA, Nippur, House from Old Babylonian/Kassite Babylon, House 3, Harâdum; Early Dynastic III/Early Akkadian House I from Tell Asmar, Vb; Model 4 houses: “Bâtiment Central,” Sippar, House B 27, Larsa, House from Isin (Brusasco 2007, pp. 32–33).



<i>High Accessibility</i>	74-86	<i>Middle Accessibility</i>	96-108
OR2 Courtyard	86	OR1 Entrance-lobby	104
OR3 Stairway/Passage	80	OR4 Lavatory	108
SR2 Courtyard	78	OR5 Main Living r.	106
SR6 Main Living r.	74	OR7 Kitchen	104
SR7 Passage	78	(ORX Living r., I Fl.	111)
SR10 Chapel	75	SRIII Entrance-lobby	98
		SR3 Lavatory	100
		SR4 Living room	100
		SR5 Private Lavatory	96
<i>Low Accessibility</i>	113-128	SR8 Service/Storage	97
ORI Entrance suite	124	SR9 Kitchen	97
ORVII Entrance suite	124	SR11 Archive room	97
OR6 Chapel	128	SR14 Stairway	100
(ORX Living r., I Fl.	131)		
SR12 Service room	116		
SR13 Service room	116		
<i>House A.I.</i>	2286		

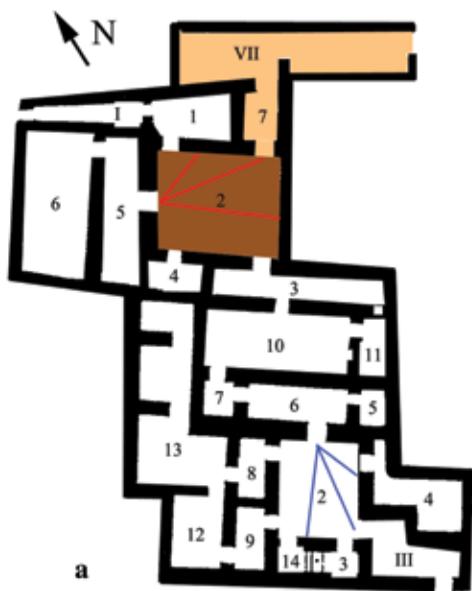


Figure 6.10. Extended family house of Model 5 (1 Old Street Street/3 Straight Street, III phase, AH, Ur): proxemic, nonverbal code of complex social inequality among resident families and extremely complex relations with the outer world; (a) 60° isovists (red = 60° isovist area of 17.8 sq. m; blue = 60° isovist area of 17 sq. m), and pavement textures (beige cream = clay; brown = brick); (b) smell- and sound-zone sectors (yellow = smell zones; green = sound zones)

suggesting a more complex dialect of approach and avoidance toward the outside world with sharper physical barriers and boundary regulations (fig. 6.10). In Model 5 structures, the duplication of the chapel suite suggests complex social inequality among resident families. Although the presence of bulky archives in the north sector (No. 1 Old Street) points to the most dominant role of this house part, the moderate integration of the living room 5 and its direct connection to the long series of north entrances I-1 suggest respectively limited control over internal relations and stronger supervision of external affairs. By contrast, the other family branch residing in the south sector (No. 3 Straight Street) (two families inhabiting the living rooms 6 and 4) display more control on internal movements (see smaller accessibility value) and less dominance over outer relations.

Complex regulation of movements are linked to manipulation of fields of view, light and shadow, smell, as well as sounds. In the north sector (No. 1 Old Street), sight line from the main living room 5 stresses control over the entrance suite VII-7, leaving “unprotected” the other passageway I-1, probably a secondary entrance for family members (fig. 6.10:a). It is interesting here to note the role that sounds produced by groups of individual visitors or users may have played in the construction of space. Based on the presence of winding circulation paths and the use of mudbrick (integrated with baked brick in some important areas such as front walls, foundations, main living room, and some courtyard walls), sensory leakage out of the house into the neighborhood and from the streets into the residence must have been moderate. Yet within this soundscape, the long dark passage VII-7 and its clay floor would have created a reduced reverberation of footsteps, a sharp contrast to the amplification of sounds produced by the brick pavement of the courtyard 2 (fig. 6.10:a).¹⁶ May this contrast have been a way, together with a neat increase in light (in the courtyard), to impress visitors by stimulating awareness of the transition between the covered entrance and the house courtyard?¹⁷ Such visitors must have been of a special kind, since this effect is not normally reproduced in the other house types which are uniformly brick paved. We know from letters recovered in No. 1 Old Street that the house owner Ea-Nasir was a seafaring merchant of international repute involved in long-distance expeditions and official relations.¹⁸ The particular status of visitors to this part of the house may thus account for the elevated sound input.

Moving from the outside to the chapels, the patterning of light-shadow-light-shadow-light is attested in both units, except for the family resident in the living room 4 (south house) which has no private chapel behind it. This may be the least powerful subset of the lineage. With a circulation path of ca. 37 meters from the north house to the south unit, the 9.14-meter co-presence smell zone may divide the entire building in at least two different smell sectors (fig. 6.10:b). Within each house, the courtyard is the center of olfactory range, thereby suggesting privacy control of independent cooking activities in No. 1 Old Street and 3 Straight Street. Only in this latter unit are both resident families included in the same smell

¹⁶ Although the brick paving is meant to protect the open space from damp and rain, the sound effects must also be considered as they may have a bearing on the construction of different spaces.

¹⁷ McMahon has hypothesized this effect for the long and narrow passage and tunnel from Gate A at Khor-sabad (McMahon 2013, pp. 174–76). Although here setting and building materials are different from

those used in residential architecture, one may assume that the soundscape of houses and royal residences may be construed on similar principles.

¹⁸ He is an *alīk Tilmun* “one who travels to Tilmun,” modern Bahrain, for the acquisition of copper ingots in exchange for silver; he receives investors (also the palace people, UET V, 667: 4, 123, 805; UET V, 20, 81), who supply trading capital for importing copper.

zone. The hearing co-presence zone of 30.17 meters may also subdivide the building into two different areas: activities implying the sounds of movements and conversations may be out of hearing range if carried out in proximity of the entrance spaces of both sectors, spaces reserved for social interaction with outsiders (fig. 6.10:b). Overall, it would seem that the building is purposely designed to maximize specific visual, aural, and olfactory effects and restrict them to the individual units. In sum, visitors and/or users are thus presented with a full range of kinesthetic changes as they move from the outside: a winding circulation patterning, a floor surface change (north sector only), distinct smell and sound zones, as well as differential manipulation of light and dark.¹⁹ It is these mental maps of the house and its configuration that are elaborated by textual evidence.

Interaction of Verbal and Nonverbal Meanings in Mesopotamian Houses

House Loci in Words and in Practice

Investigation of parts of the house in words and in practice evidences interesting dynamics of the relation between different verbal and nonverbal sign systems. Activity-area analysis has shown that courtyards, main living rooms, living rooms, kitchens, and chapels are multifunctional loci. But are the ancient linguistic definitions of these spaces in tune with their multipurpose character, or is this somehow concealed by language? Assuming that nonverbal signs are the deep structure of language, and that language draws upon perceptual experience and re-elaborates it, then it would not be surprising to see that ancient linguistic designations generally provide a partial semantic coverage, and that a surplus of (nonverbal) meanings remains hidden. For example, in inheritance documents from Ur, Nippur, Sippar, Kutalla, and Larsa both words to designate the kitchen, É-MUHALDIM “house of the cook” and É-IM.ŠU.RIN.NA “house of ovens” (Kalla 1996, p. 252), refer to the main cooking activities. But the nonverbal, spatial analysis of artifact/feature distribution has suggested a surplus of meaning for this space that in some dwellings may double as a living room for poorer residents and/or slaves (for the Neo-Babylonian period, see Baker 2010, pp. 184–85), a feature that, related to social asymmetry and power inequality, would be kept concealed, for obvious reasons.

However, whenever the word “kitchen” is simply uttered it stirs up in the speakers a set of additional mental and perceptual images which are part of a “lived space”:²⁰ the word may remind one of fragrant flavors, food, and pleasure, but also poverty, slavery, constriction, and an association with shadow and darkness.

Another poignant example is the designation of the “chapel,” É-PA₄-PAH, *papāhum*, or É-KI-SÈ-GA “House of the funerary sacrifice.” Preliminary activity-area analysis suggests a multipurpose locus with a blend of ritual, domestic, recreative, and business functions. It is actually far more than a private courtyard in which ancestors, family gods, and/or protective spirits are worshipped (van der Toorn 1996, pp. 69–73): domestic activities (summer

¹⁹ Similar access and perceptual dynamics may be present in other Mesopotamian double court houses: Ur III House J, TB, Nippur, Akkadian House XXXIIA, Tell Asmar, IVA, etc. (Brusasco 2007, p. 34).

²⁰ See Lefebvre 1991 and McMahon 2013, p. 173: “a space dependent on the inhabitants, on daily routines.”

sleeping,²¹ food production and consumption), manufacturing tasks (weaving, temporary storage), and business interactions are also carried out on daily base. The organization of space itself and the patterns of feature and find distribution allow for such an interpretation. In the farthest side from the entrance, beyond the family burial vault under the pavement,²² a penthouse roof sloping toward the middle of the room covered the cultic features: a low brick altar (1 m wide × 0.35 m high) running against the wall, a table (0.60 × 0.60 m and 1 m high) plastered with a panel imitating woodwork, and a chimney for burning incense (Woolley and Mallowan, 1976, pp. 29–30). But this space has also a high concentration of status items (i.e., tablets, cylinder seals), various pottery types (jars, small vessels), and utilitarian implements (knives, pins, chisels, etc.), thereby suggesting a mingling of various activities (Brusasco 1999–2000, pp. 71–77).

Does this perhaps mean that sensory (habitual) experience receives only a coarse-grain coverage by language because the experience itself is coarse-grained? Or would it not be more natural to think that ancient loci designations do not cover their multiple functions because culture has these subtle distinctions only at the level of nonverbal and perceptual semiosis? To think otherwise would imply that there is nothing outside language, whereas we know that habitual, unconscious actions may be difficult to express in words.

Family Genealogies and Social Space

In order to add dynamics and context to the study of the interaction between ancient texts and social space, the family genealogy of a few case studies is illustrated and then compared to the reconstruction of nonverbal sign systems. In Model 4 No. 1 Store Street, AH, Ur, the relationship between verbal and nonverbal sign systems is scrutinized through the developmental cycle of the family (fig. 6.11). If nonverbal spatial readings are projected onto textual evidence, there appears to be corroboration between textual and material sign systems. Asymmetry of movement, fields of view, smell, and patterns of light and shadow seem to be constructed to reinforce control and power of the main family residing in the main living room 8. By contrast, hiding/revealing space, sight lines, and smell tend to despatialize the family subset occupying the secondary residential loci 4 and 6.

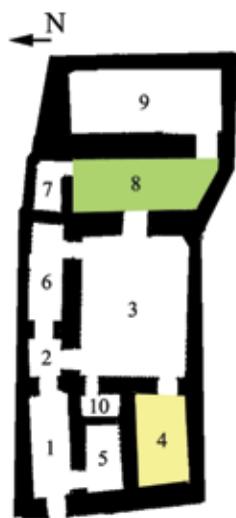
A phenomenological reconstruction of family life and daily activities brings to the fore the following social dynamics. The twenty documents dating to the Rim-Sin (1822–1763 B.C.), Hammurapi (1792–1750 B.C.), and Samsu-iluna (1749–1712 B.C.) periods, and discovered in the vaulted tomb (in main living room 8) of the second occupation of the house, confirm the presence of an extended family with vertical inheritance and social inequality among the resident families.²³ Upon the death of the father, inheritance document UET V, 143 indicates that in 1818 B.C. (Rim-Sin 5) the eldest son Enlil-issu bought the house from Nuratum, son of Atta, for fifteen shekels of silver. As the new family head he is entitled to a 10 percent extra

²¹ As suggested by ethnographic records from the Near East, it would appear that in the hot season sleeping may take place in open spaces or on the roof, while in winter it may occur inside living rooms (Brusasco 1999–2000, pp. 76–77, p. 92).

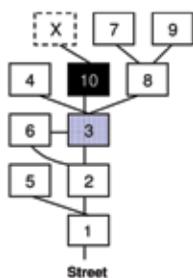
²² For ritual reasons, the family vault is usually located under the chapel pavement, but there are a few

exceptions (where space is not available) in which it can be found in other types of rooms (Woolley and Mallowan 1976, p. 30; Brusasco 1999–2000, p. 73).

²³ See Brusasco 1999–2000, pp. 161–62, for the findspot analysis of this archive.

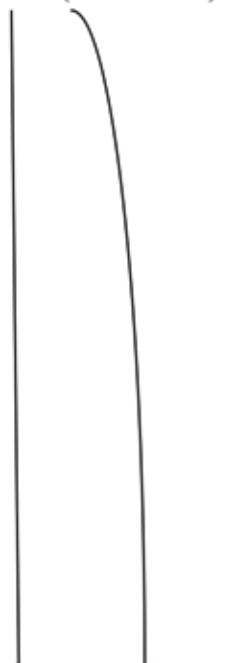


<i>High Accessibility</i>	18-22
R2 Passage	19
R3 Courtyard	18
R6 Service room	22
R8 Main living r.	22
<i>Middle Accessibility</i>	24-26
R1 Entrance	24
R4 Living room	26
R10 Stairway	26
<i>Low Accessibility</i>	31-37
R5 Entrance suite	33
R7 Lavatory	31
R9 Chapel	31
(RX Living r., I Fl.	37)
<i>House A.I.</i>	289

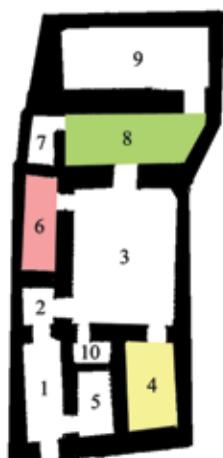


▲ Enlil-issu ▲ Enlil-iqišam

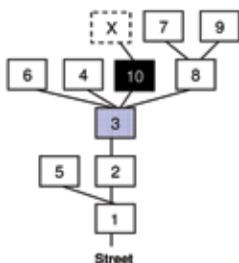
(1819-1812 BC)



a



<i>High Accessibility</i>	17-22
R2 Passage	20
R3 Courtyard	17
R8 Main living r.	22
<i>Middle Accessibility</i>	25-26
R1 Entrance	25
R4 Living room	26
R6 Living room	26
R10 Stairway	26
<i>Low Accessibility</i>	31-37
R5 Entrance suite	34
R7 Lavatory	31
R9 Chapel	31
(RX Living r., I Fl.	37)
<i>House A.I.</i>	295



▲ Enlil-issu ▲ Ili-ippalsam ▲ Enlil-iqišam

(1736 BC)

(1748-1739 BC)

b

Figure 6.11. No. 1 Store Street, AH, Ur: family genealogy and accessibility change from (a) I to (b) II phase

share which may be identified with 44 square meters of the chapel suite, while the family of his junior brother Enlil-iqišam probably inhabits the less integrated living room 4 (UET V, 143, 153, 161; Figulla and Martin 1953).²⁴ From the main living room 8 and the chapel 9 Enlil-issu is able to control both ceremonial and business activities. In 1813 B.C. (Rim-Sin 10) he establishes a partnership and purchases grain from Appa and Ibqu-^dShatran (UET V, 415), while in 1794 B.C. (Rim-Sin 29) he can afford to buy from Sin-Iqisham and his son an orchard worth sixteen shekels of silver (UET V, 176).

These investments imply local scale business and movements of partners and merchants in and out of the house. It is to impress these people during business transactions and informal gatherings that the long, shadowy entrance sector must have been conceived, thereby creating a contrast of dark and light serially experienced during movement through the residence (see fig. 6.9:b). One could imagine the following experience of the house spaces and this kind of social interactions. After a regenerating pause in the coolness of the entrance 1-2-5-6 where preliminary business transactions may have occurred, on entering the courtyard the business partners Appa and Ibqu-^dShatran may have almost immediately stopped, briefly dazzled by the effect of the sunlight peeking through the open space, and then, after a 90-degree turn, looked at the opposite side of the court where Enlil-issu stood in front of his main living room 8. At this stage, the house master Enlil-issu may have wanted to show his guests into the chapel, thereby letting them experience a final sharp contrast of shadow and light. By contrast, no such effect was at the disposal of the junior brother Enlil-iqišam, who would have been invisible from his residential locus 4, except possibly for the smell produced by his fireplace.²⁵ Meanwhile, within the courtyard, a background sound of trampling, conversations, and various domestic tasks would have accompanied the guests on their way to the chapel.

At a certain point in time, a change in family needs would have determined a transformation of house layout, movement patterns, and sensory inputs. In phase II (1757 B.C., Hammurapi 35), thirty-seven years after the last documented business deed, it would seem that Enlil-issu is still the main actor and resides in the main living room 8, while his brother Enlil-iqišam occupies the living room 4. A new actor, Enlil-issu's son Ili-ippalsam, may live in the newly created living room 6 (as indicated by a blocking of the door between rooms 2 and 6) formerly a space included in the entrance suite. The family is now in some trouble and shows a fairly steep decline: a lawsuit concerning the boundary of a field testifies to increasing problems (UET V, 255), while Ili-ippalsam has to rent out two different houses, and one half of the rent is to be paid in advance (UET V, 201, 202; Brusasco 1999–2000, pp. 161–62; 2007, p. 90).

In the final occupation, it is interesting to note that a change in house layout is paralleled by a shift in family genealogy and scale of business activities. On the one hand, the new independent residential locus 6 needs to be created for Ili-ippalsam who has probably

²⁴ Sons usually divided the family estate in equal shares (Sumerian UR.A.SI.GA = Babylonian *mithāriš*), except where the eldest son is entitled to an “additional share” (Sumerian SIB.TA = Babylonian *elātum*), or a special share devolves to a favorite son (CH §165: “to his heir who finds favor with him”). Since the Code of Hammurapi does not directly refer to

the preferential right of the eldest son which is attested in inheritance texts from Ur, Nippur, Larsa, and Kutalla, then it may be a peculiarity of southern Babylonia, later documented also in texts from Arapha and in the Assyrian laws.

²⁵ See figure 6.9:c for the co-presence smell zones subdividing the house into two distinct sectors.

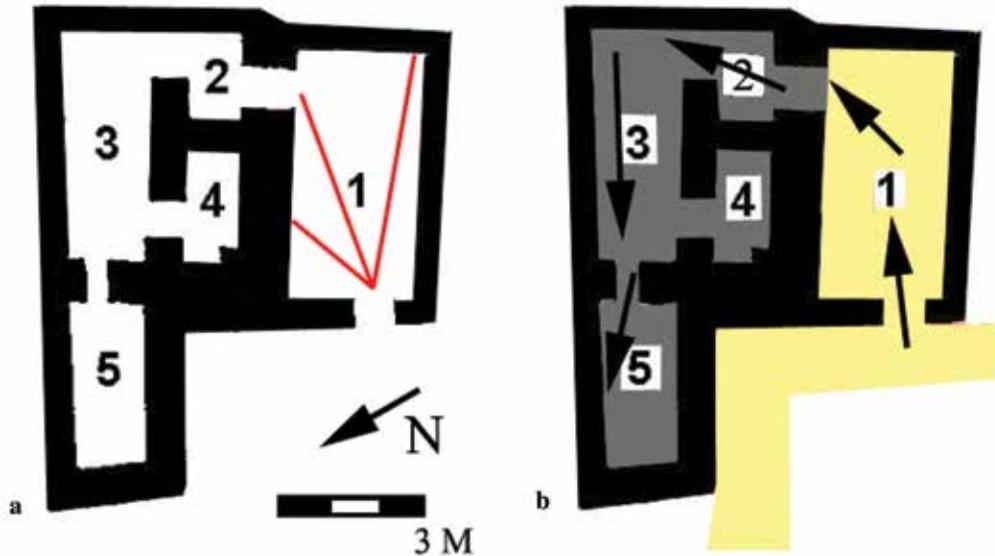


Figure 6.12. Dumuzi-gamil's house, 3 Niche Lane, AH, Ur; (a) 60° isovist (area of 8.5 sq. m), (b) light/shadow pattern

attained his majority, and on the other the parallel reduction in business activities from general trade to local house rentals (possibly also business activities with locally based kin: see the boundary dispute for fields hinting at rural ties of the family) leads to the contraction of the expanded entrance sector.

Variations in accessibility and movement are paralleled by manipulations of sensory patterns. The contraction of the entrance suite is probably a consequence of more limited business as suggested by textual evidence. But its reduced size also implies a relatively less dramatic contrast of light and darkness, as well as moderate variations of sounds: if locally based kin, instead of business partners and merchants, are the more likely visitors of the house, then there is relatively less need of creating sharp visual and sound effects. A smaller entrance may decrease the amount of shadow available and take the visitor more directly to the bright open courtyard. Likewise, silence is reduced and a generic background noise from the courtyard can be more easily heard. In addition, implying that each family is cooking in its own living room, smell co-presence zones seem to seclude the resident family of locus 4 from the olfactory range of Enlil-issu and his son Ili-ippalsam living in the east sector of the house, a perceptual asymmetry which is in tune with the information gathered from textual evidence. Enlil-issu and Ili-ippalsam are the dominant actors: it is the son who rents out houses during a financial crisis for the family.

However, such strong intersemiotic rapport between verbal and nonverbal readings of family sociology is not the norm. In fact, dissonant cases are very diffused. Analysis of a few examples in which texts and social space are not in tune with each other may serve to favor people and their contextual behaviors over static approaches based on accessibility alone. For instance, in the anomalous family of Dumuzi-gamil, the aspirant living in No. 3 Niche Lane (AH, Ur), atypical manipulations of space and access are employed to meet specific social needs (fig. 6.12). His family archive suggests that Dumuzi-gamil is both involved in local business with nearby houses and in long-distance trade (maritime expeditions) with formal

people (official merchants).²⁶ How is this peculiar context of a mix of local and international business being managed by this actor? In No. 1 Old Street/3 Straight Street, the merchant Ea-nasir has separated these different tasks by allocating them to two communicating houses (Brusasco 2004, p. 154). But to move to a double court house like Ea-nasir's No. 1 Old Street/3 Straight Street would have been beyond Dumuzi-gamil's financial means for the time being. A compromise is then found: the late addition of the entrance courtyard 1, a space of particularly big size (18 sq. m), may be a practical way of accommodating relations both on the local and international scale (fig. 6.12). Such an entrance is not as expanded as the sequence of entrance spaces of the double court houses which spatialize international relations (see fig. 6.10: Ea-nāsir's residence No. 1 Old Street/3 Straight Street, AH, Ur), but Dumuzi-gamil's interface space is far bigger than the ordinary entrance courtyards of similar house types. It takes, in fact, nearly half of the entire house (18 of 38 sq. m). The perception of courtyard size is further amplified by positioning an asymmetric external door on the edge of the house so as to maximize visitors' field of view (fig. 6.12:a). Undoubtedly, this optical illusion would have worked to impress his business partners visiting him. However, aural and olfactory contrasts, as well as the light/shadow interplay, are not particularly emphasized. With a maximum movement path of ca. 9 meters from the deepest space, locus 5, to the courtyard 1, hearing and smell – senses that come into play respectively at 30.17 and at 9.14 meters – do not divide the house into specific sectors. Likewise, more nuanced contrasts are played as regards light and shadow: an unusual dialectic of light-light-dark may be experienced by visitors and/or users as they move from the street to the back loci 2-3-4-5, via the courtyard 1 (fig. 6.12:b).

Power relations among family members may be complex and difficult to detect on the sole grounds of access analysis. Human behavior does shift to different constructions and uses of space depending on context. Domestic archives recovered in extremely articulated structures such as Nos. 1, 2 Bazaar Alley, 8–10, 12, 4–4a Paternoster Row, AH, Ur (Model 4) show that residential spaces exhibiting a similar integration within the network may hide different power relations: far from being a marker of power and control over movement and access, the strong integration of the living room 2 of No. 1 Bazaar Alley hints here at dependence toward the dominant family residing in 4–4a Paternoster Row (fig. 6.13:a). In 1886 B.C. Šumi-abiya (JET V, 185, Sumu-El 8) is the likely resident of No. 1 Bazaar Alley, which at this time was connected through a door to chapel 5 of No. 4–4a Paternoster Row, where the forebears of the moneylenders Dadā and Šat-Ea lived.²⁷ This is the wealthier subset of the lineage, the “Imlikum group,” so called after the most prominent member. The lineage is also composed of impoverished persons like Šumi-abiya and his descendant Ili-iddinam (JET V, 228), who appear as witnesses and/or debtors of the group and needed the patronage of their well-to-do neighbors and/or kinsmen (Diakonoff 1985, pp. 54–55).²⁸

²⁶ Dumuzi-gamil's archive shows activities such as bread production and local lending of money, dealing in commodities, sealing of goods, temple connections (JET V, 225, 226, 347–54, 365, 317, 363, 404, 405, 535, 798); on the international level, he supplies money as trading capital for oversea expeditions (JET V, 313–15), and receives money from very important merchants (Nūr-ilišu and Šîn-ašarid were “overseers of merchants”) (JET V, 126, 361); see Brusasco 2007, pp. 67–69.

²⁷ In phase I No. 1 Bazaar Alley is connected to the neighboring houses Nos. 4–4a Paternoster Row, 12 Paternoster Row, and 2 Bazaar Alley, while in phase II this complex structure is fragmented into independent residences by blocking the communicating doors between the single units (Brusasco 2007, p. 70).

²⁸ See Brusasco 1999–2000, pp. 157–58, for the findspot analysis of this archive.

Accessibility patterns may not follow the norm and may be misleading. But the patterning of sensory inputs suggests sharp visual, aural and olfactory contrasts, thereby stressing the importance of the north 4–4a Paternoster Row sector of the building. Smell co-presence zones of 9.14 meters emphasize roughly two distinct areas (circulation paths from south to north are much greater than the 9.14 m limits of smell): the north one, 4–4a Paternoster Row, and the south residences Nos. 1, 2 Bazaar Alley, 8–10, 12 Paternoster Row (fig. 6.13:b). Not only are the latter residences despatialized from the olfactory range of the main north house, but also sight lines and aural contrasts are experienced differently. In 4–4a Paternoster Row, asymmetry is employed in the positioning of the external entrance to amplify the effect of spaciousness of the courtyard 2, while the soundscape of this sector maximizes the sound of movement by varying the pavement textures of the entrance (clay) with respect to the courtyard (brick) (fig. 6.13:a). On moving from the street to the back chapel 5, one would have also experienced, beside a sound change, a sequence of light-shadow-light-shadow-light. No such articulation of lightscape and sound is found in the south houses.

Upon inheritance, the rule was to divide the paternal house and make further adjustments among the heirs. But particularly wealthy “equalitarian” families of the kind of House K at TA Nippur²⁹ (Model 3 houses) do not have to share the main residence as they can afford different additional houses (fig. 6.14). In this case, inequality and tension are thus transferred from the intra-family dimension to the inter-family relations among distinct branches residing in different buildings.³⁰ Textual sources confirm the presence of the “Middle House,” possibly inhabited by the younger Ninlil-zimu, a member of the junior branch of the family who becomes the richest and more powerful.³¹ In the “Additional House,” the other junior branch of the descendants of Lu-dingirra act as less powerful witnesses for the family business deeds (Stone 1987, p. 49).

The asymmetry of power among the family branches of the lineage is not visible within this building. Indeed, the eldest son’s preference share is not attested (see instead Model 4 and 5, where it is), and there appears a substantial equality in the division of the property between Ninlil-zimu’s elder sons, Abba-kalla and Im-ši-ši residing in House K.³² Perceptual inputs are also equally managed to emphasize sight lines from the main entrance toward both living rooms 6 and 7, while the light/shadow contrast and variations of soundscapes and smells are minimized (fig. 6.14).

In some Model 4 houses like No. 1 Baker’s Square, AH, Ur (or No. 2 Church Lane, AH, Ur), the textual presence of four actors does not match with the actual number of residential spaces detected on archaeological grounds (fig. 6.15).³³ In the phase II house history, Ningal-lamazi, the owner of the seal (UE X, 541), and her husband (the “son of Ningal-nam-nin-he-du”) are very active in business (connected to silver circulation from and to the house) and

²⁹ Owing to incomplete excavation, the plan of the northeast sector of House K is reconstructed through comparison with similar residences from Ur (i.e., No. 3 Gay Street, EM, Ur) (Stone 1987, pp. 50–51; Brusasco 2007, p. 85).

³⁰ Twenty-seven tablets describe the activities of the Ninlil-zimu lineage, one of the most important families that dominated Nippur in the Isin-Larsa and Old Babylonian periods; Stone 1987, pp. 41–53; see *ibid.*,

pp. 45–49, for reference to “at least three houses,” one of which is called “middle house.”

³¹ This junior group inherited further property (OIMA 1 13, 1745 B.C.; BE 6/2 43, 1737 B.C.; OIMA 1 22, 1 23, 1738 B.C.) and temple offices (OIMA 1 19, 1739 B.C.) (Stone 1987, pp. 43–49).

³² Only the temple offices are allocated to the eldest son, Abba-kalla (Stone 1987, p. 42).

³³ See Brusasco 1999–2000, pp. 163–64, for findspot analysis of tablets from this house.



Figure 6.13. House of the Imlikum lineage, 1-2 Bazaar Alley, 8-10, 12, 4-4a Paternoster Row, AH, Ur (pale blue = Šumi-abiya's living room 2); (a) 60° isovists (red = 60° isovist area of 14 sq. m; blue = 60° isovist area of 7.6 sq. m), (b) smell-zone sectors

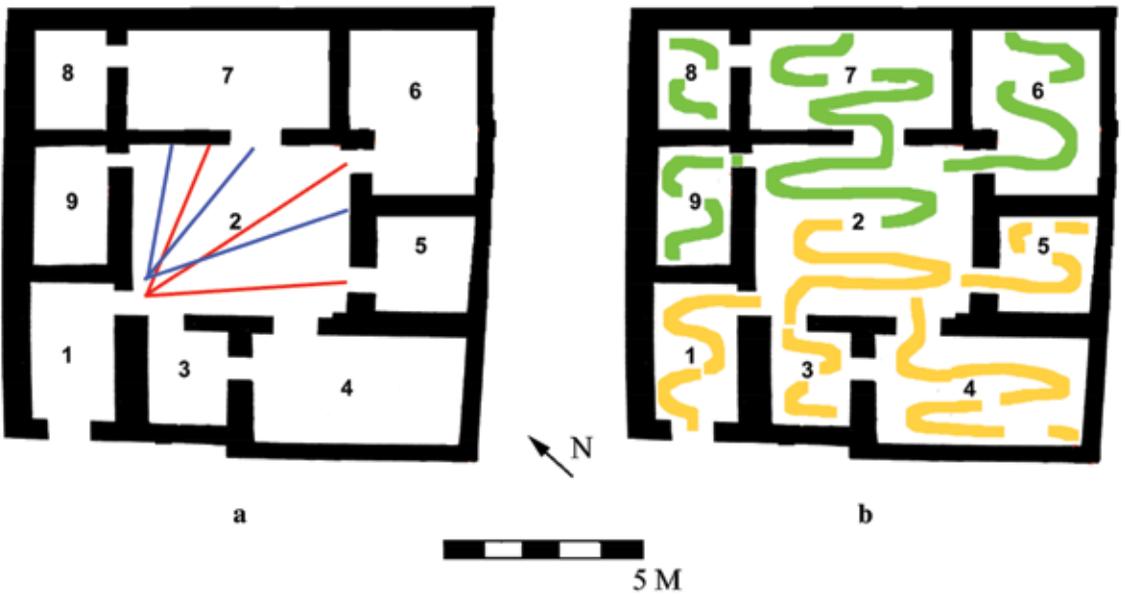


Figure 6.14. Ninlil-zimu lineage, House K, TA Nippur; (a) 60° isovists (red = 60° isovist area of 13.3 sq. m; blue = 60° isovist area of 12.7 sq. m), (b) smell-zone sectors

probably represent the family's leading branch residing in the main living room 4, while Gimil-Nin-giz-zida, probably the cousin of Ningal-lamazi's husband and the other owner of the seal (UE X, 453), is less prominent in business and may live in the additional living room 9 (earlier inhabited by his father). It can be hypothesized that still less powerful actors (or unmarried persons) such as Šamaš-ilum and Humba attested in the family archives (UET V, 44) are spatially invisible, being possibly relegated to upper floor loci or cohabiting with the remaining families.³⁴ As regards the second floor, sensorial variability and manipulation of light, smell, and sound may be difficult to detect from a ground-level analysis. But, in this specific case, it is possible at least to appreciate the apparently illogical position of the external entrance: once within the courtyard 1, the main field of view is oriented toward the secondary living room 9 and the stairs 2, thereby secluding visually the main house sector of the main living room 4 and chapel 5 (fig. 6.15). An anomalous pattern which has no apparent reason: may it perhaps be related to the house being the uxorilocal residence of the female Ningal-lamazi? In a patriarchal society such as Mesopotamia, although married women live in their husbands' houses, in default of male heirs there may always be "inheriting daughters" or epiclerates acting as social males for the sake of family continuity (S. N. Kramer 1987, p. 109; van der Toorn 1996, p. 7; Brusasco 2007, pp. 105–09). Power is in this case negotiated among sexes and gender roles are redefined accordingly: Ningal-lamazi may control the funerary rituals carried out in the chapel suite, while business transactions are more likely

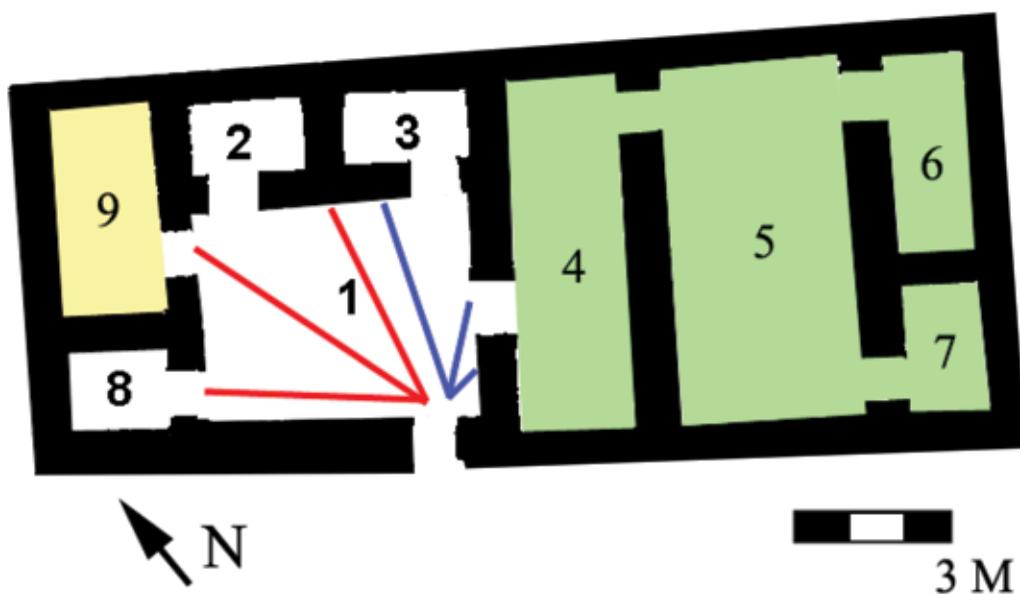


Figure 6.15. Ningal-lamazi's house, 1 Baker's Square, AH, Ur (green = Ningal-lamazi's chapel suite; yellow = Gimil-Nin-giz-zida's living room); 60° isovists (red = 60° isovist area of 11 sq. m; blue = 60° isovist area of 4 sq. m)

³⁴ They probably live in the house since Ningal-lamazi's father Šîn-ma-ilum addresses letters to them (UET V, 44).

to be mediated by the male line, that is, Gimil-Nin-giz-zida, the cousin of her husband. It is to his residential room that points the main isovist of the house.

Some problems do also arise when ethnographic materials are employed to shed light on the archaeological record. Although the general similarity between the courtyard houses from ancient Mesopotamian cities and some traditional Islamic ones suggests that the Mesopotamian household shares social traits with Islamic societies, it may be dangerous to draw general conclusions on the sole ground of morphological features (fig. 6.16). For instance, entrance suites may be equally segregated from the house network while expressing different

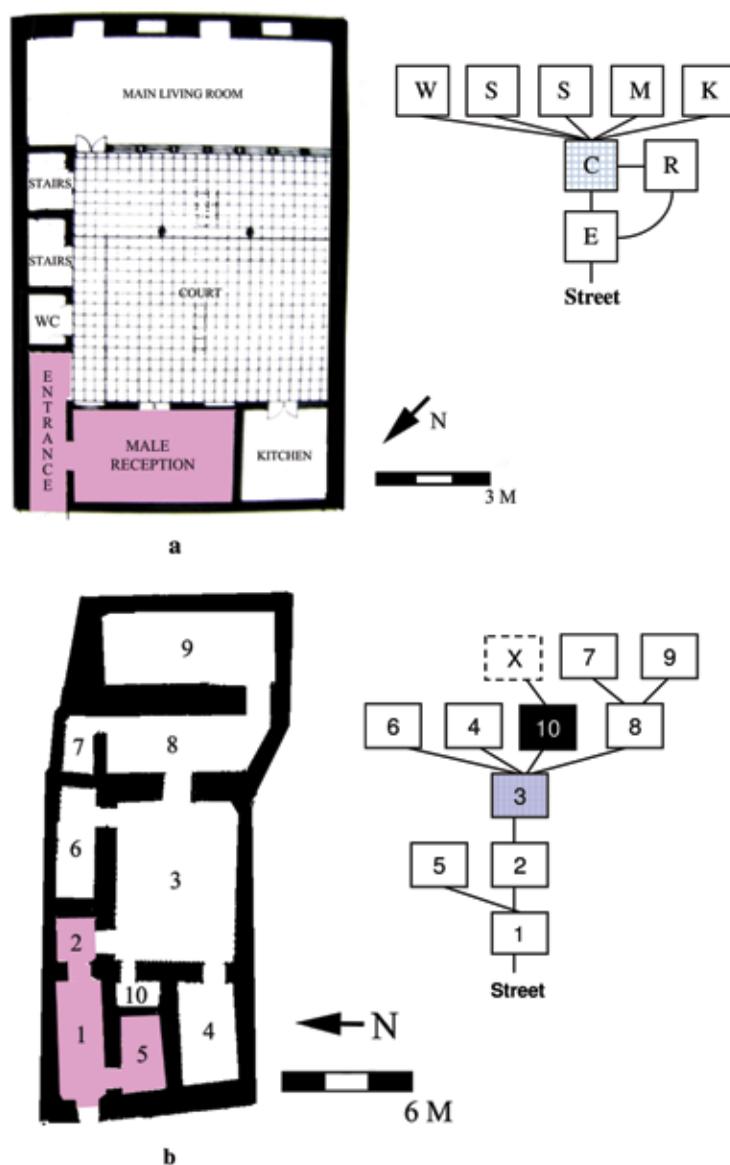


Figure 6.16. Details of entrance suites of (a) a traditional Islamic house from Baghdad (after al-Azzawi 1969) and (b) No. 1 Store Street, AH, Ur

sociological meanings: in Islamic societies they represent men's reception rooms, like the *driba-skifa* entrance of the traditional Baghdad house embodying the traditional custom of female seclusion (*purdah*), whereas in Mesopotamia entrance suites are generally used as loci for business activities carried out by the family as a whole (see lack of gender-specific sectors, Brusasco 1999–2000, pp. 87–88, 105–06; Brusasco 2007, pp. 35–36) (fig. 6.16).

Conclusions

The dynamics of the interaction between verbal and nonverbal sign systems has shown how meaning is created both through intersemiotic rapport and heterosemiotic conflict. Phenomenological experience of Mesopotamian houses that integrate layouts, accessibility, and perceptual development may serve to help us understand this relationship better. Examples of semiotic corroboration like No. 1 Store Street, AH, Ur, evidences how specific morphological and sensory features (asymmetry of movement, fields of view, smell, and patterns of light and shadow) which are visible in the archaeological record may be elaborated by texts. Then network chart analysis and perceptual inputs can be useful tools to predict social relations even when texts are missing. The following traits can be anticipated by means of spatial and sensory semiosis: (1) correspondence between residential spaces and number of co-resident nuclear families; (2) the presence of social inequality in family relations; (3) the change of house layout and sensory regulations in the course of family history as a reflection of a different family composition and a parallel shift in the scale of business activities.

The strong degree of corroboration between verbal and nonverbal signs confirms that spatial, cognitive maps or tacit rules are the deep structure of family archives. However, more complex elaborations of nonverbal readings may be required when power and specific contextual relations are involved. The following types of dissonance illustrate how manipulation of movement, vision, smell, and the light/shadow contrast are worked out in different situations: (1) nonverbal semiosis highlights all the possible shades of meaning blurred by textual designations of house loci (e.g., “kitchen,” “chapel”); (2) textual evidence shows that in wealthier lineages inequality and tension are blurred within the family, and are not visible within one single residence, but may be externalized among family branches residing in different dwellings (e.g., House K, TA, Nippur); (3) in some houses (Nos. 1 Baker's Square, 2 Church Lane, AH, Ur) asymmetric power relations are maintained through flexible spatial and perceptual inputs (vision, smell, light, and shadow) which may reinforce the family hierarchical relations (less powerful actors/unmarried people are relegated to upper-floor loci or cohabit with the main family; in uxori-local residences power is negotiated between genders through manipulation of space and vision); (4) the proxemic model of proximity for friendly relations is converted into proximity for submission (No. 1 Bazaar Alley, AH, Ur), but the patterning of sensory perception remains stable and reliable; (5) similarly integrated spaces may hide different power relations and have distinct symbolic meanings (they may be entrance suite for Islamic *purdah* versus entrance suite for the entire family in Mesopotamia or entrance suite for a blend of international and local scale business in No. 3 Niche Lane, AH, Ur).

This suggests that when symbolic frameworks and power are involved, nonverbal signs (just like texts/language) may be arbitrarily coded. Therefore, access analysis as a mere quantitative parameter may be misleading if not integrated with the examination of sensory perceptions, the quality of different spaces (activity-area analysis), their size variability and

orientation, the possible presence of upper-floor spaces, as well as all the subtle contextual associations both internal and external to the single houses. But since too often the intimate aspects of family life are only indirectly reflected in the textual sources and these may register anomalous patterns, an emphasis on the study of nonverbal signs, and an agent-based phenomenological model, may reveal a good deal of the hidden aspects of familial relations.

Only in this way may we realize that — to quote the German philosopher Martin Heidegger — “in the mere encountering of something, it is understood in terms of a totality of involvements” (Heidegger 1962, p. 189).

Abbreviations

CT 38	C. J. Gadd. <i>Cuneiform Texts from Babylonian Tablets, &c., in the British Museum</i> , Part 38. London: British Museum Publications, 1925.
OIMA 1	E. Stone and P. Zimansky. <i>Old Babylonian Contracts From Nippur</i> , Vol. 1: <i>Selected Texts From the University Museum University of Pennsylvania</i> . Oriental Institute Microfiche Archive 1. Chicago: University of Chicago Press, 1976.
UE X	L. Legrain and C. Leonard Woolley. <i>Seal Cylinders</i> . Ur, Excavations 10. London: British Museum Publications, 1951.
UET V	H. H. Figulla and William James Martin. <i>Letters and Documents of the Old-Babylonian Period</i> . Ur Excavations, Texts 5. Publications of the Joint Expedition of the British Museum and of the University Museum, University of Pennsylvania, Philadelphia, to Mesopotamia. London: Percy Lund, Humphries, 1953.
A.I.	Accessibility Index
I Fl.	First floor

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Clean and Unclean Space: Domestic Waste Management at Elephantine

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With a few notable exceptions (cf. F. Arnold 1998; Spence 2010), the interpretation of ancient Egyptian domestic architecture has been dominated by the question of function. When dealing with the ground plan of houses — usually the only evidence available for domestic architecture — researchers have tended to ask about the purpose of specific spaces. In a study on houses of the Middle and New Kingdom Manfred Bietak, for example, tried to identify certain rooms as “Wohnräume” (living rooms), “Schlafräume” (bedrooms), and “Bäder” (bathrooms) (Bietak 1996; cf. F. Arnold 1989). The more intricate a ground plan is the more urgent researchers have felt the need for such function-specific labels to the rooms of a house. A classic example is the way the large mansions at Kahun have been dealt with by several generations of researchers. Already the excavator William Matthew Flinders Petrie offered labels like “doorkeeper’s room,” “guest chambers,” “*mandara* or reception hall for strangers,” and “master’s private court” for certain spaces of the mansions (Petrie 1891, pp. 6–7). Herbert Ricke felt justified in identifying a “Haremshof” (court of the harem), a “Wohnung der Frau” (apartment of the wife), and “Kammern für Dienerinnen (oder Nebenfrauen)” (chambers for female servants or concubines) (Ricke 1932, pp. 52–55, figs. 47–48). Though using a more rigorous methodology, subsequent studies have followed a similar aim by trying to identify the specific function of individual rooms (F. Arnold 1989, pp. 84–88, fig. 3; Bietak 1996, pp. 31–37, figs. 12–13).

That such identifications can rarely be verified is generally blamed on the lack of care taken by excavators of domestic architecture with the archaeological evidence. Following this reasoning, Flinders Petrie would only have had to excavate the mansions at Kahun more carefully in order to find definite proof of which spaces people used to sit, eat, sleep, or work. More recent excavations of similar buildings have shown, however, that the archaeological record is often not as straightforward as would be necessary to identify the function of a room.

Archaeological remains in fact pose two fundamental problems. The first problem is the relationship between space and function in general. In a study of Middle Kingdom and Second Intermediate Period houses at Elephantine Cornelius von Pilgrim could convincingly show that most spaces of the Egyptian houses had a multifunctional use (von Pilgrim 1996, pp. 205–17). The same room could be used in a different manner at different times, while several spaces could sometimes serve the same function. For example, the inhabitants could use different rooms of the house for sleeping, while using these same rooms also for working or storage. Such labels as “bedroom” or “living room” may thus find no corollary in the reality of how houses were used by the ancient Egyptians. Only those activities requiring a fixed installation such as an oven or a quern emplacement were definitively linked to specific locations in the house.

The second problem regards the nature of archaeological deposits. Few activities in a household actually leave a physical trace — aside from those involving fire, for example. Sleeping, eating, talking, and playing music leave almost no physical imprint. Most archaeological evidence for activities conducted in a house is circumstantial, ranging from objects used to perform the activity to waste products such as broken pottery, ash, or stone chips. Such objects or waste products may be left at or near the place where the activity was conducted, but more often than not they are subsequently displaced, either to a place of safekeeping or a place of disposal. A rare exception to the rule would be the case in which inhabitants leave their house on the spur of the moment — during an earthquake or a fire — dropping objects at the place of their use. As a general rule, the archaeological context of an object relates not to the time when the object was put to its proper use but to the time when the object was no longer in use. Using archaeological evidence to establish where activities took place may thus be as difficult as attempting to do so on the basis of architecture alone.

The only activity for which archaeological evidence in fact does abound is the act of deposition itself, be it intentional, incidental, or accidental. Reconstructing acts of deposition may not reveal a lot about many of the other activities taking place in the house, and thus even less about the function of rooms. However, taking houses in the city of Elephantine as an example, this paper argues that the way waste products are deposited does reveal something about the way houses were used and — more importantly — how the inhabitants perceived different spaces of the house.

Even today the question how to manage garbage remains a basic problem of daily life. In Elephantine the problem must have been all the more pressing, since the town was built on a rather small island in the Nile. During more than forty years of excavation by a joint German-Swiss mission, a large number of houses have been studied, spanning four millennia, from about 3300 B.C. to A.D. 900. The evidence gained from these houses attests to a slow evolution in the way garbage was dealt with in the settlement. The following is an attempt to summarize this evolution based on a number of significant case studies.

Letting Waste Accumulate

Dietrich Raue excavated a rather curious case of waste management (fig. 7.1).¹ In the early Eleventh Dynasty (stratum XVI, ca. 2100 B.C.) the courtyard of building H 150 was constructed in the southern half of the “old city” of Elephantine. It remains unclear whether H 150 was a private dwelling or part of a larger residence. The court was about 15.5 meters wide × 9.5 meters deep. Along the east side — or at least part of the east side — two rows of wooden columns were placed on stone bases. The columns, octagonal in shape, were 3.2 meters high and must have supported a flat roof covering about a third of the courtyard.

During more than one and a half centuries, the courtyard was used for a variety of household activities. A dominant activity seems to have been the preparation and baking of bread loaves, a fact that at first led the excavator to interpret the building as a bakery.² But apparently other household activities took place there as well. Large quantities of cooking

¹ The final publication is in preparation. Preliminary reports are Raue 2002, pp. 170–74, figs. 4–5, pl. 18a–c; Raue 2005, pp. 30–31, fig. 4, pls. 6a, 8b, 9a–c; and Raue 2008, pp. 77–78, pls. 20–21. I am grateful to Dietrich

Raue for reading this section and supplying additional information.

² Raue 2002, p. 170; Raue 2005, p. 30. In Raue 2008 the building is referred to as a “house.”



Figure 7.1. Wooden column surrounded by waste deposits in house H 150 (ca. 2100–1950 B.C.) (photo by Dietrich Raue)

pots, for example, indicate that other kinds of food were prepared here. The waste products from these activities, primarily ash but also pottery and organic materials, were for the most part left at the place of their origin. Over time, heaps of waste accumulated and the floor level rose rapidly. By the early Twelfth Dynasty, about 1950 B.C., the courtyard was filled with waste up to the level of the roof. The gradual filling of the built space made it possible that the wooden pillars were still preserved upright almost to their complete height, a rather unique find (fig. 7.1).

Imagining life within the courtyard is difficult, however, especially during the later years of its use. In total, 3.5 meters of waste accumulated in the courtyard. That makes for an annual rise of only about 2.3 centimeters. But when the rise of the floor level reached halfway up the columns, the height of the ceiling became impossibly low and the roof was dismantled. Similar problems must have occurred at the doorways. Furthermore, the waste did not accumulate evenly within the court. Since most baking activity took place in the western, roofless part of the court, the ground level rose more rapidly in the west than in the east. At times deep depressions formed, making the floor surface highly irregular. Still, few attempts were made to level the floor surface. Instead, steps were at times constructed to overcome differences in the floor level.

Certainly the case of house H 150 is extreme and it is rather unlikely that the same kind of waste management — or lack thereof — was practiced in many other houses at Elephantine. Still, the case serves to illustrate what happens when waste is left inside a building, just where it is created.³

³ Some waste may also have been removed and dumped outside the building. Raue (2008, p. 78) notes

that a contemporary dump, about 1 meter deep, was found on the opposite side of the neighboring street.

Keeping the House Clean

The houses of the Middle Kingdom at Elephantine attest to a more sophisticated manner of dealing with waste products. A typical example is house H 70, which was excavated by von Pilgrim in 1991 (von Pilgrim 1996, pp. 134–41, figs. 48, 54, pls. 21:d, 23:a–d, 24:a–d) and re-studied by the author in 2011 and 2012 (figs. 7.2–4). The house is located in the northwestern part of the town and was constructed in the second half of the Twelfth Dynasty (stratum 13, ca. 1850–1750 B.C.). It occupies a plot that had formally been part of a much larger mansion, extending to the north, east, and west. House H 70 comprises an entrance room in the north (A), a large central space with four columns (C), and two rooms in the south (D and E).⁴ Along the west wall an open staircase led to a second story, probably comprising two additional rooms in the south. At the foot of the staircase lay the entrance to an additional chamber (B).

The central room (C) was about 6.9 meters wide and 5.8–7.3 meters deep. Two rows of two columns each were placed parallel to the south wall. Since the room was trapezoidal in ground plan the rows are not parallel to the north wall (fig. 7.2b). Most probably the trapezoidal area north of the two rows of columns was therefore never roofed and room C thus in effect was a courtyard rather than a hall (fig. 7.2a). The northern row of columns may have been added secondarily, so that originally only a third of the courtyard had been roofed. This would explain why the staircase along the western wall reached the roof level at the line of the back row of columns and not at the line of the front row of columns. Four column bases found in the destruction debris suggest that a loggia was located above the columns of the central space (C). The courtyard thus would have had a two-storied columned façade not unlike those of some contemporary models.⁵

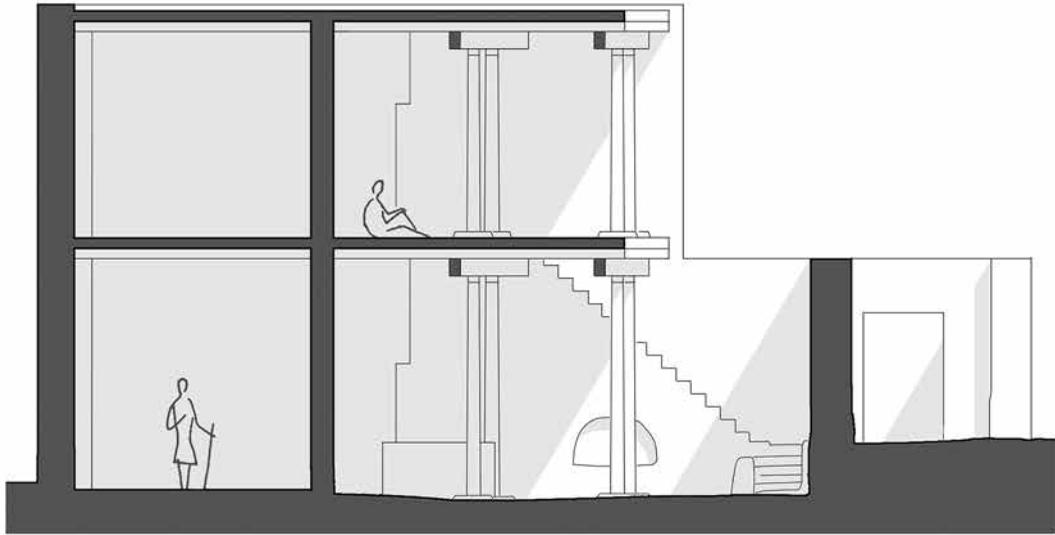
During the excavation of the house evidence for a wide variety of household activities and crafts were found, each creating a greater or lesser amount of waste. There is evidence for the production of bread, from the milling of grain to the baking of loaves. A fixed quern emplacement was found in the northeast corner of room C, while room B served as an oven (fig. 7.4). The owner of the house was also involved in the fishing industry. A large number of net sinkers were found (von Pilgrim 1996, p. 280) as well as fish bones. Nets must have been repaired in the house, and the fish scaled and prepared for consumption. Animals were kept in the house, primarily goats but possibly also poultry and other small animals. The discovery of over two hundred seal impressions in the house suggests that goods, mostly kept in wooden boxes, were received from the outside and consumed.⁶ Among these goods may have been textiles, since evidence for the production of textiles is lacking in the house itself. A scarab found buried in room D for safekeeping⁷ indicates that goods were also packed and

⁴ The building is actually oriented with its corners to the cardinal points. Following von Pilgrim 1996, north is here taken to be on the right side of fig. 7.2.

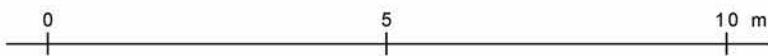
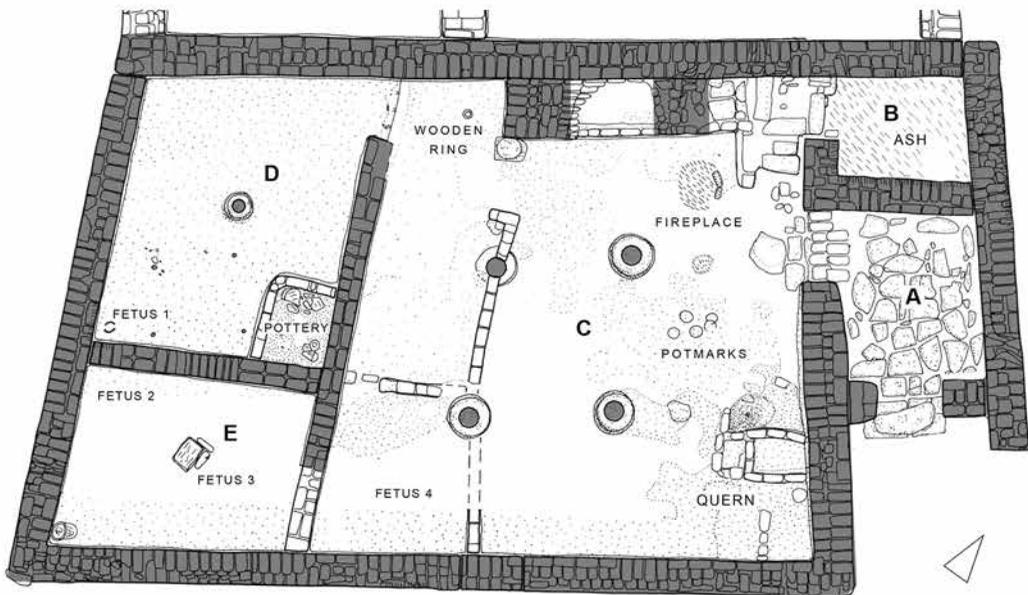
⁵ For example, Petrie 1907, pp. 17–18, pls. 1 (102), 18 (101), and 18A (2, 4, 20, and 59). According to von Pilgrim (1996, p. 204), these models depict rock tombs, not houses. Even if the relationship between house and tomb would have been so simple during this time, comparative studies would not be irrelevant, but to the contrary highly necessary and revealing. Cf. Spence 2011.

⁶ The seal impressions constitute the “Siegelverschlusskonvolut” (SKV) 17 (von Pilgrim 1996, pp. 234–74). Ninety percent of the seal impressions derive from boxes (type A), 8 percent from vessels (type B). Among only twelve official seal impressions are those of several priests and overseers as well as a nomarch, with whom the owner of H 70 must have had economic ties.

⁷ The scarab was found in 2011 together with a group of complete vessels in a small pit dug just next to the column base in the center of the room. The scarab bears a simple scroll-pattern decoration.



a



b

Figure 7.2. (a) Reconstructed section and (b) ground plan of house H 70 (ca. 1850–1750 B.C.) (based on documentation by Cornelius von Pilgrim)



Figure 7.3. House H 70 (ca. 1850–1750 B.C.)

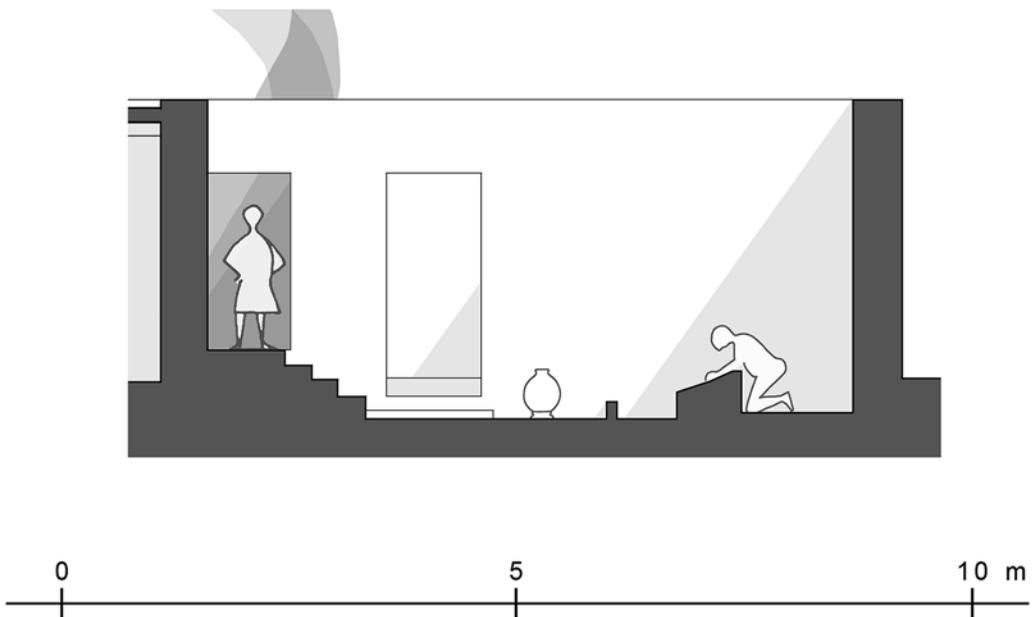


Figure 7.4. Reconstructed section of house H 70 (ca. 1850–1750 B.C.) with door to bread-baking room B (left) and quern emplacement (right)

sealed in turn, to be shipped out. Food must have been prepared for consumption, possibly on fireplaces located in the northwest corner of the courtyard. The consumption of food certainly also created waste, from leftover food to broken pottery, although no specific place for eating could be discerned archaeologically.

Most of these activities would have been performed best in the central space (C) of the house. The courtyard not only provided the most space, but also the best access to air and light. Because at least some of the courtyard was not roofed, fumes could exit the building directly. Not surprisingly, many of the fixed installations for household activities were indeed found in the courtyard, including the quern emplacement and various fireplaces. Left unchecked, most waste products originating from household activities would thus have accumulated in the courtyard, filling the enclosed space over time.

In contrast to house H 150, the inhabitants of house H 70 did make great efforts to keep the courtyard free of waste. A whole range of measures for managing refuse may be observed. The activity creating the most waste — baking bread — was removed entirely into a separate space, room B at the northwest corner of the house.⁸ Scorch marks on the walls of the chamber show that it was used in its entirety as an oven. The bread was baked in molds stuck vertically in the smoldering fire.⁹ Ash was allowed to accumulate on the ground, not least because ash is perfect for keeping and equalizing heat. The chamber thus in effect also served as an ash pit and was allowed to gradually fill up.¹⁰ Stone steps at the entrance prevented the ash from spreading into the courtyard. Curious but common at Elephantine is the location of this room at the northwest corner of the house, since the north wind would have carried the smoke into the loggia on the upper floor of the house.

Animals were apparently also relegated for the most part to a separate chamber. The floor of room E was found covered by a 6-centimeter-thick layer of loose earth and goat droppings and thus seems to have served as a goat pen. The animals of course had to pass through the courtyard and the entrance room when leaving the building.

The accumulation of waste in the courtyard was reduced mainly by improvements to the floor surface. The courtyard itself received a 4-centimeter-thick mud floor, allowing the inhabitants to sweep the court on a regular basis. How effective this was can be judged by the fact that the collapsed roof construction was found directly on this mud floor, without any dust in between (von Pilgrim 1996, fig. 54). A jar placed in the unroofed northern part of the courtyard may have held water for drinking as well as for sprinkling the floor, a common method to keep the floor surface clean and cool.¹¹ The entrance room of the house (A) even received a stone paving. The inhabitants could wipe the pavement with a wet cloth and thus reduce the amount of dust entering the house from the street.

Screen walls erected between the back columns of the courtyard may have served not only as visual barriers but also to shield the back part of the court from windblown dust and waste originating from the activities in the northern part of the courtyard. The adjacent room D was kept especially clean by a mud floor of higher quality. The cleanest part of the house may have been the second story, however, which was completely separated from all

⁸ For a discussion of this kind of room, see von Pilgrim 1996, p. 213.

⁹ In the nearby house H 73 a bread mold of type von Pilgrim 1996, p. 352, fig. 157:j is found still stuck in this position.

¹⁰ In other cultures pits are dug next to ovens to dispose of ash (Pfälzner 2001, p. 163). No examples of this kind have been found on Elephantine.

¹¹ Von Pilgrim 1996, p. 138. The jar found between the two eastern columns is of an earlier date (stratum 14).

waste-producing activities on the ground floor. Not known of course is whether some household activities did in fact take place on the upper story. Meat products might have been hung here to dry, for example.¹²

As a result of all these efforts, little waste actually accumulated inside the house during its period of use. In all likelihood, a lot of the garbage that did originate was removed from the house entirely.¹³ The closest site for dumping refuse would have been the neighboring streets. In the streets of the Middle Kingdom the quantity of waste like broken pottery or leftover food is rather small, however. The streets are actually too narrow to serve such a purpose. The street level tended to rise because of the deposition of windblown dust rather than the deposition of garbage (von Pilgrim 1996, p. 219). Refuse must have been carried farther, outside the limits of the settlement, probably using donkeys. The shores of the island would have been an obvious choice.¹⁴

All these efforts suggest that the inhabitants had a great interest in keeping the house clean. The main reason for keeping the courtyard as free from waste as possible probably was its role as the center of daily life in all its aspects. The courtyard probably served not only for waste-producing household activities, but also for activities for which the visible presence of waste would have been detrimental, such as eating, talking, playing, and performing music. Guests and clients may also have been received here. Even though we know only little about ritual household practices of the time the court would probably also have been the setting for certain private rites or celebrations.¹⁵ While some of these activities may have been relegated to the back chamber D or the second story, the courtyard was the only space that was big enough to accommodate a group of more than four or five people.¹⁶ The back part of the court that was protected by screen walls may indeed have been a place regularly used by the master of the house for sitting, eating, and receiving guests. From here he could watch and supervise all activities taking place in other parts of the courtyard, like the milling of grain or the delivery and dispatching of goods. The central courtyard thus was much more than a space for work like the court of H 150 and was treated as such, among other things through a sophisticated management of waste.

Creating Clean Space

During the Second Intermediate Period, domestic architecture at many sites in Egypt witnessed the transformation of the central courtyard into a columned hall (F. Arnold 1989, pp. 78–81). In his study of houses from this period, Cornelius von Pilgrim negated such a development for Elephantine (von Pilgrim 1996, pp. 203–04). A review of the houses he published suggests that a similar process in fact did occur also at Elephantine. Revealing in this respect is a comparison between a plan of a block of houses in the northern part of the city (areas

¹² Compare the model of the slaughterhouse of Metre; D. Arnold 2005.

¹³ For the removal of garbage, compare Pfälzner 2001, pp. 163–64; D. Arnold 2012.

¹⁴ Midden deposits have in fact been identified in excavations north and south of the settlements. Reports are forthcoming.

¹⁵ A small figurine and an offering table were found here in 2011, although from an earlier phase of the

building. A total of four infants have been found buried in rooms C, D, and E, suggesting that a special significance was attached to this part of the house.

¹⁶ Room D is big enough to accommodate up to five people. The column placed in the center of the room would have made such a gathering rather awkward, however.

II and III) during the Thirteenth Dynasty (stratum 12, ca. 1750–1650 B.C.) and a plan of the same region during the Seventeenth Dynasty (stratum 11, ca. 1650–1550 B.C.) (von Pilgrim 1996, figs. 59 and 65). While in the former, all houses comprise courtyards, in the latter, three large columned halls can be discerned. What is more, several of the former courtyards were transformed directly into halls.¹⁷

Another example is H 84, the largest house of the Middle Kingdom excavated so far on Elephantine (von Pilgrim 1996, pp. 85–97). Interpreted by its excavator as an administrative building (*htm.w*) (von Pilgrim 1996, pp. 231–34, 254, 261–67, 270), H 84 in fact conforms in ground plan to regular houses of the same period.¹⁸ Until the early Thirteenth Dynasty (stratum 13, ca. 1850–1750 B.C.) the house encompassed a large courtyard (A) with an L-shaped portico in the southwest corner. During the later Thirteenth Dynasty (stratum 12, ca. 1750–1650 B.C.) the building — now bearing the number H 81 — was reduced in size and part of the courtyard was transformed into a hall with six columns (C) (von Pilgrim 1996, pp. 100–09).

The transformation of a courtyard into a roofed hall certainly would have enhanced the cleanness of the large central space of the house. Keeping previous measures such as the separation from the street in place, the amount of dust settling in the space was reduced and the impetus to keep the space clean was enhanced. While at first certain household activities like grinding grain continued to be performed in the central, now roofed space, such activities were gradually banned from the hall. While representative examples for houses of the New Kingdom are still missing from Elephantine, from sites like Amarna central halls are well known that were used exclusively as “living rooms,” for activities like eating, talking, and playing music. Waste-producing activities were relegated to auxiliary areas of the house.

Though not well preserved, house BC at Elephantine may be considered an example for this kind of arrangement (fig. 7.5, left). This house of the Twentieth Dynasty (stratum 6B, 1200–1000 B.C.) was excavated in 1989–1992 by Achim Krekeler in the western part of the city, just next to a sanctuary.¹⁹ From a narrow alley separating the house from the sanctuary an entrance door leads to a broad hall (16). South of this hall lay the central space of the house (2), surrounded on three sides by smaller rooms (1, 3, 4, and 5). One of these may have been furnished with a staircase leading to the roof (5). The central space itself was probably a hall with two columns. Opposite its entrance doorway may have been a bench for the master of the house, of which nothing is preserved, however. On the northern side of the broad entrance hall (16) lay a wide open courtyard (17), also accessible directly from the street. This courtyard could have served various household activities which were banned from the main living quarters in the south.

The result was a growing distinction between “clean” spaces on the one hand and “unclean” spaces on the other. The impetus for this distinction may have been a growing sense for domesticity and the separation between “life” and “work.” While such a separation has

¹⁷ Good examples are the court of house H 53 (C), which became a six-columned hall (H 49:A), and the court of house H 89 (C), which became a four-columned hall (H 47:C).

¹⁸ The building thus comprises a large central space (A) and several adjacent rooms (C–P), among them a room with a single column (C) typical for houses at Elephantine. The only difference is the overall size, the number of storage facilities, and the great

amount of seal impressions found here — all a question of quantity rather than quality. The building may thus have been the residence of an official rather than an exclusively official building.

¹⁹ The final publication is in press (Krekeler, in press). For preliminary reports, see Krekeler 1993, p. 174, fig. 13; Krekeler 1996, p. 109, plan 5. The pottery is published in Aston 1999, pp. 84–128, providing also a ground plan of the Ramesside phase in fig. 5.

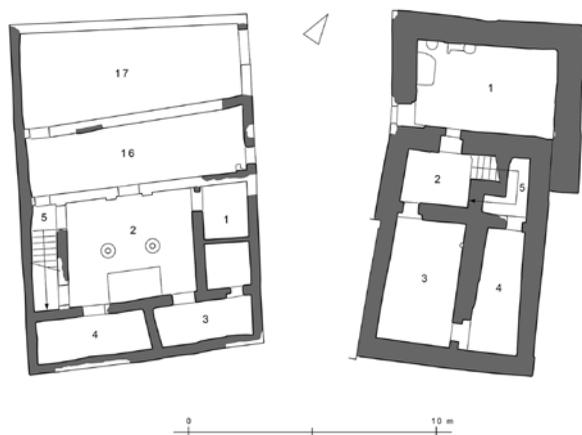


Figure 7.5. Ground plan of houses BC (ca. 1200–1000 B.C., left) and F (ca. 400–300 B.C., right) (based on documentation by Achim Krekeler)

always been a question of luxury — at Kahun it is already visible in the large mansions (cf. F. Arnold 1989, pp. 84–88, fig. 3) — by the time of the New Kingdom the idea began to be realized also in houses of a very small scale. In the workmen’s village at Amarna (Walled Village), for example, quern emplacements, mortars, ovens, and animal troughs are found in the front and back rooms of the (very small) houses, but never in the central “living room” room, which instead is regularly furnished with a bench and a hearth for heating.²⁰ Such a distinction is never found in houses of earlier periods at Elephantine.

Distinguishing Clean and Unclean Space

By the end of the Late Period, the distinction between a “clean” house proper and an “unclean” auxiliary space had become even more pronounced and was expressed in the architecture of the house. The house proper was now constructed as an independent, compact, multi-storied building with a single access. Spaces used for household activities like baking, keeping animals, and various crafts were arranged around the periphery of this main building.

An example for this arrangement is house F from the fourth century B.C. (stratum 3), which was also excavated by Achim Krekeler in the western part of the city (fig. 7.5, right).²¹ The house proper comprises an entrance room (2) and two chambers (3 and 4) on the ground floor as well as a staircase (5). The thickness of the walls (80 cm) suggests that the building had four stories, greatly multiplying the amount of living space.²² In front of the entrance door, and thus outside the house proper, lies a forecourt (1). Here a grain silo, a quern emplacement, and a bread oven are located. Weights found in the southwest corner suggest that a loom stood here. All waste originating from related activities — and probably others as well — was kept away from the house proper.

The distinction between a “clean” house proper and an “unclean” service area remained the standard arrangement until settlement at Elephantine ceased in the ninth or tenth century A.D. A typical example from the latest phase of occupation is house K 20. The house and its surrounding area has been the subject of a detailed investigation by the author since 1999, joined by a multidisciplinary team (figs. 7.6–10).²³

²⁰ Kemp 1987, pp. 40–46. Looms also seem to have been located in the front room. Kemp and Vogelsang-Eastwood 2001, pp. 382–87.

²¹ The final publication is in press (Krekeler, in press). For preliminary reports, see Krekeler 1993, p. 179, fig. 17; Krekeler 1996, pp. 111–15, plan 8. Cf. Aston 1999, fig. 10.

²² For the relationship between wall thickness and building height, see F. Arnold 2003, pp. 168–69.

²³ For earlier work, see F. Arnold 2003, pp. 73–77 and 98–102. The project is a collaboration of the Swiss Institute in Cairo and the Römisch-Germanisches Zentralmuseum (RGZM). The pottery is being studied by Denise Katzjäger within a project of the Austrian Research Fund (FWF).

House K 20 was constructed in the second quarter of the fifth century A.D. (stratum 01), refurbished in the second half of the sixth century A.D. (stratum 02), and inhabited at least until the ninth century A.D. (stratum 03). The house proper was a compact, multistory building, 5.8 meters wide and 9.1 meters deep. On the ground floor it originally seems to have comprised an entrance room (A) in the north, a staircase (B) in the middle, and a second room (C) in the south (fig. 7.6). In stratum 02 the configuration of the ground plan was completely changed, however. The entrance now lay in the west, leading to a much smaller entrance room. From here, rooms in the north and south were accessible, as well as a staircase in the east.

From legal texts we know that houses of this period commonly comprised three stories (F. Arnold 2003, pp. 134–38; see also Muhs, this volume). The rooms on the ground floor (*kella*) were usually used exclusively for storage. Living rooms (*symposia*) were located on the first floor, bedrooms (*akkubita*) on the third floor. House K 20 may only have been a two-story building (fig. 7.8). The northern room on the ground floor may have served as a living room (*symposion*), in the first phase as a room to receive visitors directly at the entrance. This would explain why the walls of the room were furnished with a decorative pattern of burnt brick. The southern room had an underground cellar, at least in the second phase.

The interior of the house had already been excavated by Friedrich Zucker in 1907 and again by Peter Grossmann in 1969, so that no remains of the original stratigraphy were preserved. Only the entrance room of the second phase still possesses its stone pavement. The adjoining rooms were probably furnished with mud floors. Evidence in other houses of the same period indicates that waste or dust was never allowed to accumulate inside the house proper. In house M 10, for example, the collapsed roof construction was found directly on top of such a floor (F. Arnold 2003, p. 77). A rare exception is the cellar in the southern room of K 20, which was partially filled with garbage after it collapsed in the seventh century. The floor level in the rooms remained consistent throughout the three centuries of their use. As a result, steps had to be added at the entrance door once the level outside the building had risen significantly (*ibid.*, p. 99, fig. 61).

Outside the house proper, the inhabitants added several courtyards (figs. 7.6–7). At first only a single forecourt (F) was built on the north side of the house, just in front of the original entrance of the house proper (stratum 01). In the second half of the fifth century, the courtyard area was extended along the entire west side of the house. The area was at first subdivided into three courtyards, later into four (H–K). When the house was refurbished in the sixth century (stratum 02), the courtyards were abandoned. Some of the activities continued to be performed in the same area, though without the protection of a wall.

Unlike inside the house proper, the inhabitants made little effort to clean the courtyard area, leaving most waste products more or less where they originated. From the time of construction in the second quarter of the fifth century until the abandonment of the courtyards in the second half of the sixth century A.D., the inhabitants allowed about 60 centimeters of refuse to accumulate (fig. 7.9). This would make for an average rise of about 1 centimeter every two years — less than in house H 150 described at the outset. A careful study of the refuse inside the courtyards — as well as in the adjoining streets — has made it possible to reconstruct the spatial distribution of various activities in this area. In addition, different phases of use could be distinguished, some of shorter, some of longer duration (fig. 7.6).

While only the northern courtyard (F) existed, most of the refuse originated from a bread oven located in the northeast corner (fig. 7.6:1). The ash retrieved from the oven was allowed

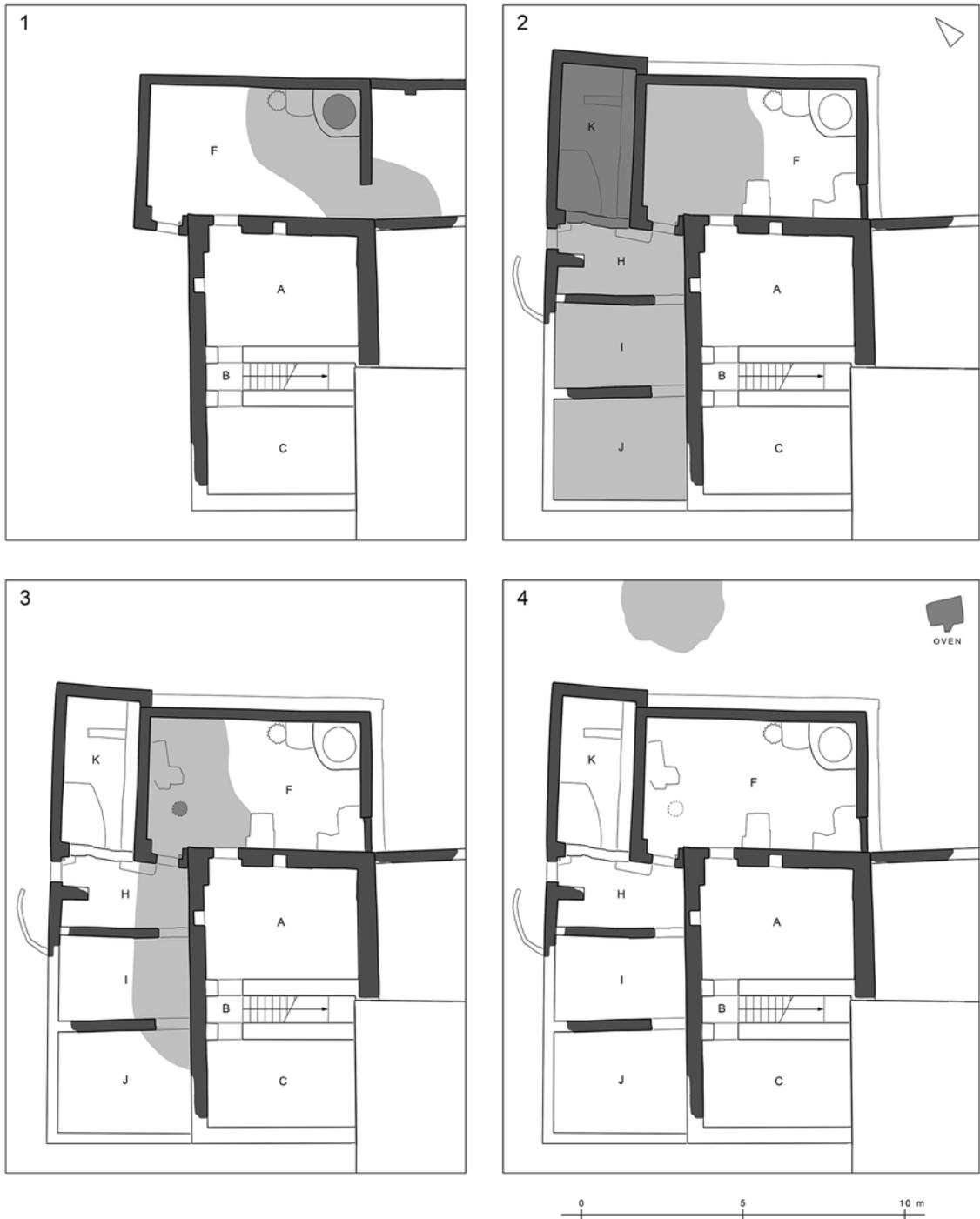


Figure 7.6. Waste deposits in House K 20: (1) ash from a bread oven (ca. A.D. 425–475); (2) dung from goat keeping (ca. A.D. 475–550); (3) stone cuttings (ca. A.D. 475–550); (4) ash from metal manufacturing (ca. A.D. 550–600)



Figure 7.7. Northern courtyard of house K 20 (ca. A.D. 425–550)

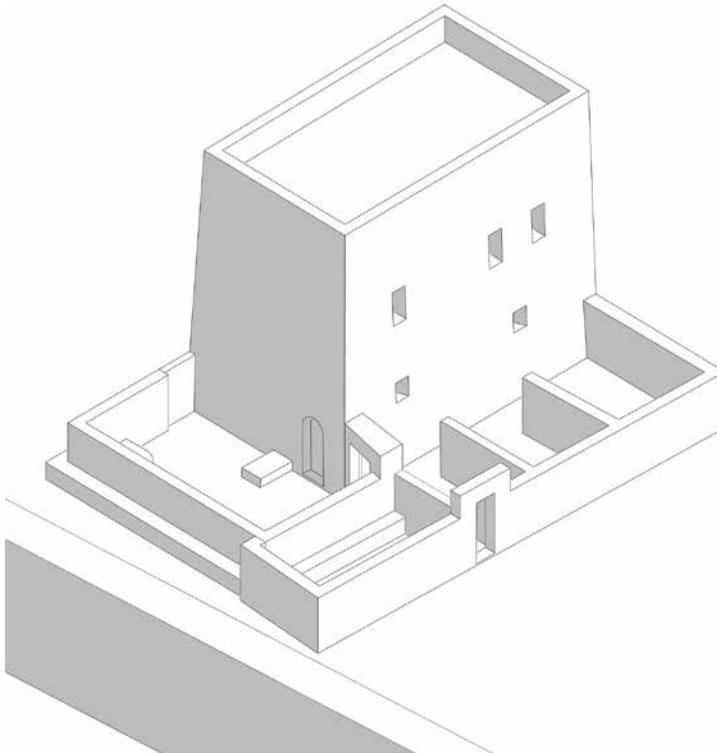


Figure 7.8. Isometric reconstruction of house K 20 (ca. A.D. 475–550)

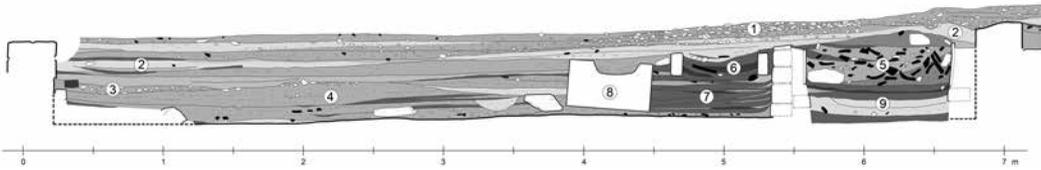


Figure 7.9. Profile of northern courtyard of house K 20 (ca. A.D. 425–550): (1) black granite chippings; (2) dust from deteriorating walls; (3) black granite chippings; (4) organic material, mostly dung; (5) pottery dumped into abandoned bread oven; (6) fireplace; (7) ash; (8) column drum reused as mortar; (9) ash within oven

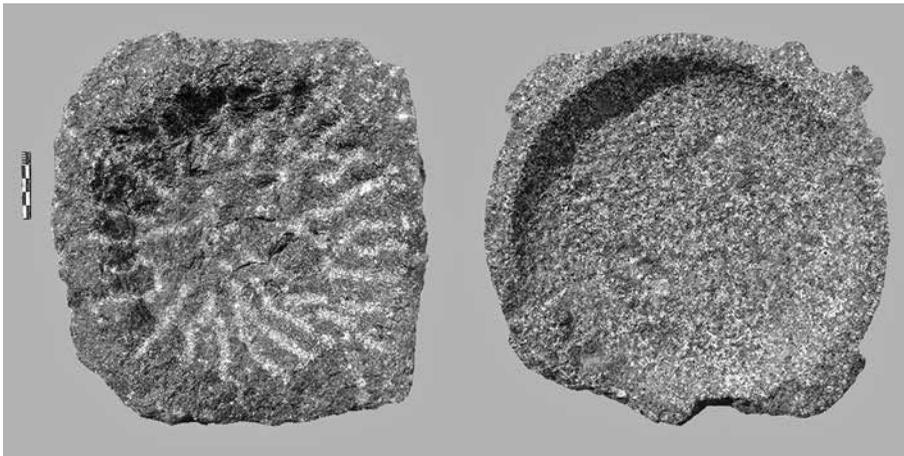


Figure 7.10. Two examples of stone bowls manufactured in house K 20 (ca. A.D. 475–550), one half-finished (*left*), and the other finished (*right*) (photo by Caroline Vormelker)

to accumulate in the direct vicinity, some spreading through a door to the area outside the courtyard (fig. 7.9:7). At some later point, a fireplace and a mortar made from the capital of a column were added to the oven in the west (fig. 7.9:6 and 8). The oven itself was rebuilt several times, before it fell into disuse about A.D. 475.

The western courtyards (H–J) seem to have been built at this time primarily to keep animals (fig. 7.6:2). Dung originating from goats and possibly also sheep abound in this area, particularly at the northern end. This part of the courtyard (K) was later blocked by a low barrier, to turn it into a goat pen. The separation of the court into distinct spaces was particularly suitable for keeping goats, as they could thus be separated into groups when needed. The dung also spread into the northern court, especially its western end (fig. 7.9:4).

The northern court (F) now was used mostly for a different purpose, however. Between distinct layers of dung dense clusters of black granite chippings are found, originating from stone cutting (figs. 7.6:3 and 7.9:3). Several semi-finished pieces indicate that the inhabitants were manufacturing granite bowls, probably to be used as kitchen ware (fig. 7.10).²⁴ The raw material originated from the nearby temple of Khnum, particularly statue bases. A

²⁴ The remains of stone manufacturing are being studied by Friedrich Mangartz and Stefanie Wefers.

depression in the ground at the western end of the north court was probably used to fix the work pieces in place while they were being cut. Large pieces of red granite found next to it may have been used as a workbench. The stone chippings eventually spread not only in the western half of the court but also into the adjacent western court. The distribution of the chippings among the layers of dung suggests that the mason did not work continuously, but periodically. The stonecutting work even continued after the courtyards were abandoned, at least until the end of the seventh century (fig. 7.9:1).

Outside the limits of the courtyard evidence for another activity could be traced, the manufacture of non-ferrous metal (fig. 7.6:4).²⁵ Again, the raw material may have derived from the ruins of the nearby temple. A small oven for smelting metal was found outside the northeast corner of the northern court, as well as fragments of crucibles. A heap of ashes deposited farther west may be attributed to the same activity. A large quantity of broken molds was found in a nearby trench that had been dug when the enclosure wall of the temple was removed. The molds suggest that the craftsman produced mainly small pans, some decorated with crosses. Whether the craftsman was indeed associated with house K 20 cannot be verified. Because of the fumes and amount of waste, activities like the manufacturing of metal would most certainly have been relegated by any inhabitant outside the limits of his own home. From the amount of material found the craftsman did not seem to have worked long in the area, possibly just for some months until a certain amount of available raw material was exhausted. This must have occurred sometime during the second half of the sixth century.

The total amount of waste found in the courtyards of K 20 is considerable — more than 40 square meters altogether. Missing within this refuse is classic household garbage, however, such as broken pottery and leftover food. These waste products would not have originated in the courtyards, however, but at the place food was regularly consumed, that is, in the living room (*symposion*) of the house proper. Since the living room was regularly swept and nothing was found in the courtyards, such garbage must have been removed farther away.

Like in the Middle Kingdom, streets did not lend themselves easily to the deposition of waste, since they were rather narrow. In the direct neighborhood of K 20 there existed two major possibilities to dump garbage, however. One was the ruin of the dismantled Khnum temple nearby, where in fact huge amounts of garbage from the sixth and seventh centuries have been found. The area of the former temple must in fact have been one of the main dumping grounds for the whole neighborhood. Another possibility would have been abandoned houses, like neighboring house K 19 or — from the seventh century on — house K 26 on the opposite side of the street from K 20.

How much garbage was deposited at these sites from any particular house is impossible to say. It is equally difficult to gauge how much garbage actually originated from house K 20 aside from the 40 square meters found in the courtyards. The general impression at Elephantine, and in fact at other sites in Egypt, is, however, that the amount of garbage produced during the Late Antique period was in fact much bigger than at any early period of Egypt's history.

²⁵ The remains of metal manufacturing are being studied by Jörg Drauschke and Christian Eckmann.

Cleanness as a Category of Space Differentiation

Over a time span of several millennia, attitudes toward waste management changed. Taking houses from different ages as examples, these changes have been described in the preceding pages as a gradual evolution, although this of course is a vast oversimplification for which many exceptions will undoubtedly be found. In house H 70 of the late Middle Kingdom (ca. 1850–1750 B.C.) the inhabitants tried to keep the central space of the house free of waste. What could otherwise have happened is shown by house H 150 (ca. 2100–1950 B.C.), which over time drowned in waste up to its roof level. In house BC of the late New Kingdom (ca. 1200–1000 B.C.), the central space of the house was reserved for activities not creating waste — the “living room” was born. House K 20 of the Late Antique period (ca. A.D. 450–550) is an example for the complete separation of a house proper, kept clean by its inhabitants, and auxiliary spaces, where waste was allowed to accumulate unchecked.

These changes neither reduced the amount of waste produced nor did they make waste disposal more efficient. In fact, the reverse may be true — the amount of waste produced seems to have multiplied over time, and a courtyard of the Late Antique period seems farther removed than ever from any ideals of cleanliness. Instead the changes seem to reflect an evolution in specific attitudes of inhabitants toward the spaces they were living in. The driving force could have been the wish to separate “life” from “work” — a concept similar to but not identical with the distinction between “private” and “public” spheres. The result was a growing sense of “domesticity” — the creation of space reserved for activities like eating, talking, and receiving guests. A comparable phenomenon would be the evolution of the “salon” in European domestic architecture. Whether an enigmatic term like “salon” actually existed in the Egyptian language is not clear. The closest equivalent in the New Kingdom may have been *st-hms* (literally “place of sitting”), a term rarely mentioned in texts, however (Gardiner 1947, p. 207 (424); cf. Peet 1930, pp. 146, 150, and 164 n. 58). In Coptic the term *symposion* was used, derived from the Greek, where it referred to a different kind of space, however, one reserved for male-only drinking parties (F. Arnold 2003, p. 136, with further literature; and Nevett, this volume).

The examples described from Elephantine exemplify how difficult it is to describe the “function” of rooms from a modern perspective with any amount of clarity. The use of rooms can be described only vaguely, and functions seem to blend into each other. Archaeological evidence generally tends to highlight the problematic nature of such terms as “bedroom” or “kitchen” rather than help in assigning them to specific rooms of a house. In fact, archaeological remains in general do not inform us about the spatial distribution of specific actions. Archaeology instead reveals where objects no longer needed for such actions were discarded. By tracing attitudes toward waste disposable in space, we are able to reconstruct attitudes of the inhabitants toward the space they inhabited, however. By doing so we garner some indication of the significance that was given to certain spaces of the house, and thus one of the fundamental elements of what “function” actually constitutes in the mind of the user.

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Creating a Neighborhood within a Changing Town: Household and other Agencies at Amara West in Nubia

Neal Spencer, British Museum

Around 1300 B.C., the Egyptian pharaonic administration founded a new town at Amara West in Upper Nubia (fig. 8.1). This region, upstream of the Second Nile Cataract and known as Kush to the ancient Egyptians, had been under pharaonic rule from ca. 1500 B.C., though the history of Egyptian engagement, entanglement, and occupation of the area stretches back into the fourth millennium B.C. (Smith 2003; Edwards 2004, pp. 101–11). Fieldwork in the town, undertaken on behalf of the Egypt Exploration Society (EES) in the late 1930s and 1940s, revealed large parts of a walled town, enclosing areas of housing, storage facilities, and a decorated sandstone temple (fig. 8.2; P. Spencer 1997). A British Museum research project investigating ancient lived experience at the site was instigated in 2008, combining new fieldwork with a range of scientific analyses.

The town of Amara West, in its initial form, falls within a long tradition of planned, essentially royal, urban foundations, attested in both Egypt and parts of Nubia (Kemp 2006, pp. 193–245). Typical components include a cult temple, an official residence or administrative building, storage facilities, and housing areas, all set within a walled enclosure. At Amara West, the 2.8-meter-thick town wall, studded with buttresses and corner towers, was accessed through decorated sandstone gateways and enclosed an area of 108 × 108 meters. The West Gate was decorated with a large-scale scene of Ramesses II triumphing in battle against Nubians, reflecting the rhetoric of complete cultural domination espoused by the Egyptian state (Smith 2003). The temple and its ancillary buildings occupy much of the northeastern quadrant of the walled town, fronted by an extramural courtyard embellished with royal stelae. This temple, with a ground plan and decorative program typical for temples of this era, is notable for the presence of the latest royal inscription in Upper Nubia: a year 6 text of Ramesses IX, running around the inside of the hypostyle hall (P. Spencer 1997, pp. 36–37, pl. 27:d). The other important formal building in the town was the residence of the Deputy of Kush (E.13.2). Identified on the basis of a series of architectural fittings inscribed with the names and titles of holders of this post, the building comprised a large number of rooms, some of which could be interpreted as formal reception spaces. The Deputy of Kush was the most senior position within the Egyptian administration of Upper Nubia: both him and his counterpart, the Deputy of Wawat (Lower Nubia), reported to the Viceroy [King's Son] of Kush, who had oversight of the regions south of Aswan, Egypt's traditional border.

Two areas of housing and other structures were excavated by the EES (fig. 8.2): a strip of buildings running north of the Residence, along the inside of the town wall, and an area of structures immediately south of the temple. The excavators produced architectural plans,

identifying four main phases, and alongside the photographic record, these demonstrate the potential of Amara West for researching pharaonic house architecture and elucidating aspects of the lived experience within an ancient Egyptian settlement; consideration is given below to the question of how “Egyptian” this settlement was.

The publication of these excavations, on the basis of archival records (P. Spencer 1997), indicates that the earliest architecture at the site was aligned to the walled town, reflecting the presence of an overall vision for the urban layout. A large proportion of the built area, outside temple and residence, is dedicated to large-scale storage: buildings with rows of



Figure 8.1. Map of Egypt and Nubia, with location of Amara West (map by Claire Thorne)

contiguous corridor-like magazines (N. Spencer 2014). It remains unclear how much housing was provided in this first layout; the southwest quadrant has yet to be investigated extensively, and may have accommodated blocks of small houses, as found at other Egyptian towns in Nubia, for example, Sesebi (Fairman 1938, p. 152, pl. 8). This first phase of buildings

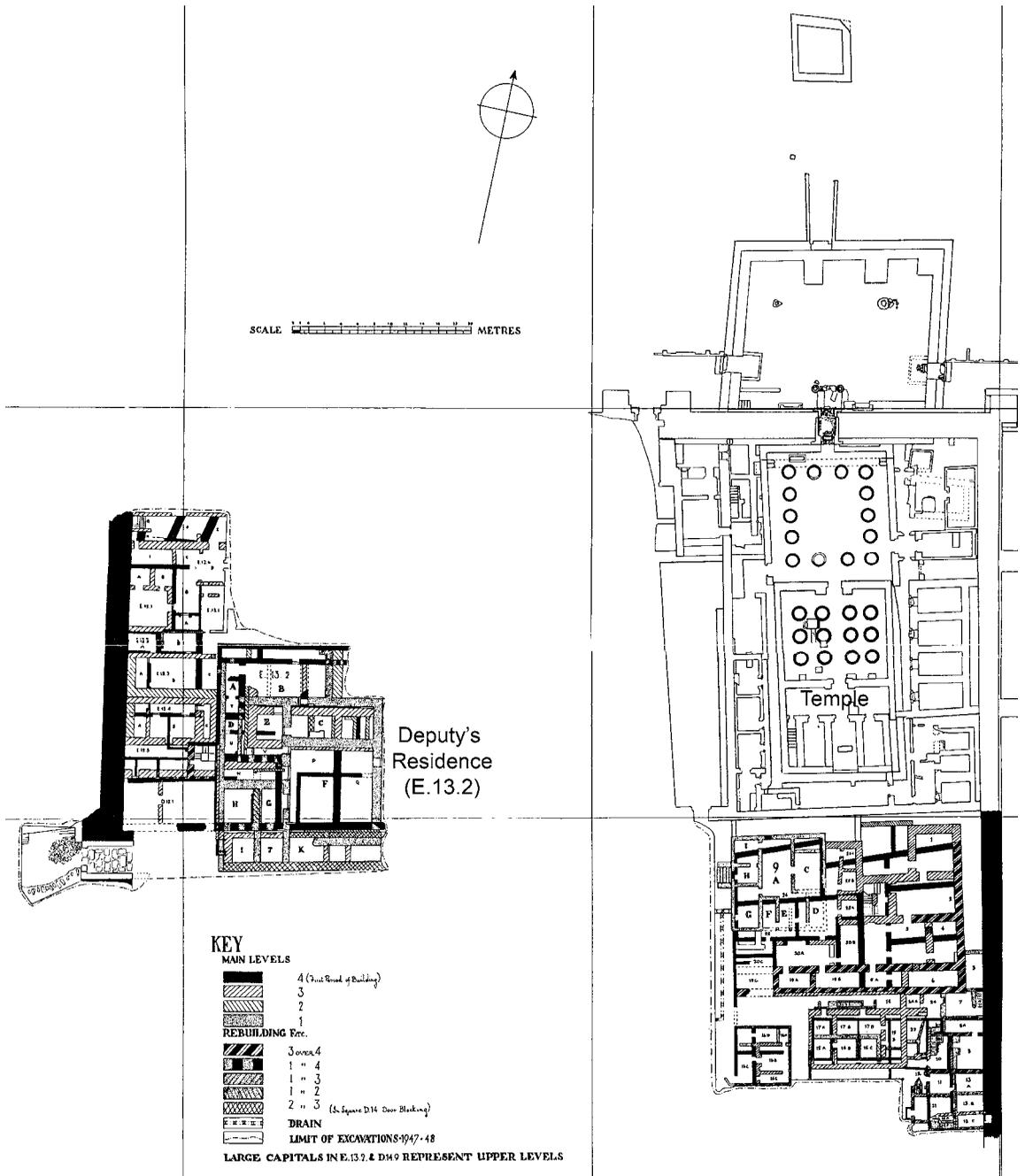


Figure 8.2. Plan of areas excavated by the Egypt Exploration Society, 1938-39, 1947-50 (courtesy of the Egypt Exploration Society)



Figure 8.3. Area E13 at the end of 2013 season. View north, with palaeochannel in background

was systematically leveled, suggesting a centralized decision to reorganize the layout of the town. Subsequent architectural phases see the density of buildings increase, a prevalence of smaller, contiguous structures, and a considerable increase in the number of houses.

This paper presents preliminary conclusions that can be drawn from several seasons of new fieldwork within one area of housing (E13) at Amara West (fig. 8.3). Architecture and associated surfaces from the two or more centuries of occupation allow insights into the role of individual/household agency; unfortunately, none of the houses at Amara West can be associated with a named individual, a near-universal problem with the archaeology of ancient households (Nevett 1999, pp. 39–50). Throughout this paper, I refer to the agency of individual/household. Agency theory holds that people do not simply react to changes in an external world, but play a key role in the formation of that world (see Dornan 2002 with further references); “individual/household” here represents a person, or several individuals, residing within the same architectural unit. These households can, in the absence of relevant texts from the settlement, only be accessed as architectural units, but I assume that many housed family groups, similar to that attested in contemporary papyrological evidence (Valbelle 1985b).¹ The presence of one hearth and one mastaba — a low bench — in most houses further supports the notion of a group of individuals sharing lives around food production and warmth.

¹ This is, in many ways, similar to Julia Hendon’s “household” or “domestic group,” defined as task-orientated, co-residential, and a symbolically meaningful social group (1996). The role of the individual

is somewhat underplayed, and many of the finer-scale changes, e.g., in the layout of a room, may have been decided upon, and enacted, by one person.

This paper argues that each household, whether multiple persons or an individual, were, it seems, responsible for most decisions to enact changes upon the built domestic environment. The potential for architecture and artifacts — the material house occupied by “living and experiencing” inhabitants (Fredriksen 2007, p. 134) — to inform our understanding of the constitution and perception of social life remains somewhat underplayed in studies of ancient Egypt.² Furthermore, the well-documented historical context and exceptional fluvial record preserved in the palaeochannel north of the site allows a consideration of how individual/household agency was framed by a dynamic natural environment and colonial entanglement — both, in some senses, agencies affecting the construction and experience of homes. The architectural remnants of houses at Amara West are effectively the cumulative outcome — a material encoding (Gillespie 2000, p. 18) — of a whole series of strategic and pragmatic decisions made by a variety of actors, not least at individual/household level.

Neighborhood E13

A magnetometry survey of Amara West (fig. 8.4) revealed a block of buildings north of the Deputy’s Residence, distinctly orientated at a 45-degree angle to the town walls. Subsequent excavations have clarified the presence of seven or eight houses of modest size, which represent the latest preserved architectural phases in this zone. These contiguous houses are bounded by the massive town wall to the north and narrow alleys to the west and south, the latter setting the houses apart from the Deputy’s Residence; an eastern limit to the housing block is defined by another alleyway, though this has not been excavated.

Six years of excavation in this zone, which covers an area of 730 square meters, has revealed a complex history of architectural modifications, rebuilding, and repurposing: the cluster of houses visible in the final phase is very different from the buildings constructed here when the town was founded. There remain limitations to our understanding: erosion and other taphonomic processes (see Schiffer 1987) have removed direct evidence for upper stories that may have existed; the latest preserved architecture may not be the last structures built on the site.³ Furthermore, the decision to not dismantle and remove the latest architectural phases during excavation has resulted in reduced opportunities to expose earlier phases, which are thus less well understood.

The earliest buildings in this zone (phase IA; fig. 8.5) are set directly on the alluvial surface of the Nile island upon which the town was founded. A large rectangular building (E.12.6: 14 × 13 m; P. Spencer 1997, pp. 189–90, pl. 113) dominated the northwestern corner of the town. Its form, with four contiguous rectangular spaces defined by 90-centimeter-thick walls, suggests that it may have been a storage facility, similar to those found south of the temple (*ibid.*, pl. 76). A 4-meter-wide passage separated the town wall from this building, and

² The evocation of life in a quarter of Tell el-Amarna (Kemp and Stevens 2010, pp. 473–516) is a model for deploying archaeology to convey a populated urban quarter and the range of activities occurring therein. More research has been undertaken on house architecture as a mirror of social and wealth hierarchies, whether in Egypt (Tietze 1985) or beyond (Brusasco 2004).

³ Ceramics collected across the surface of the southern part of the town revealed occupation here extended beyond the end of the New Kingdom, into the tenth and ninth centuries B.C., but no architecture of this date has been identified as yet. The cemeteries adjacent to the town seem to have been in continuous use from the thirteenth to eighth centuries B.C. (Binder 2011; Binder, Spencer, and Millet 2011).

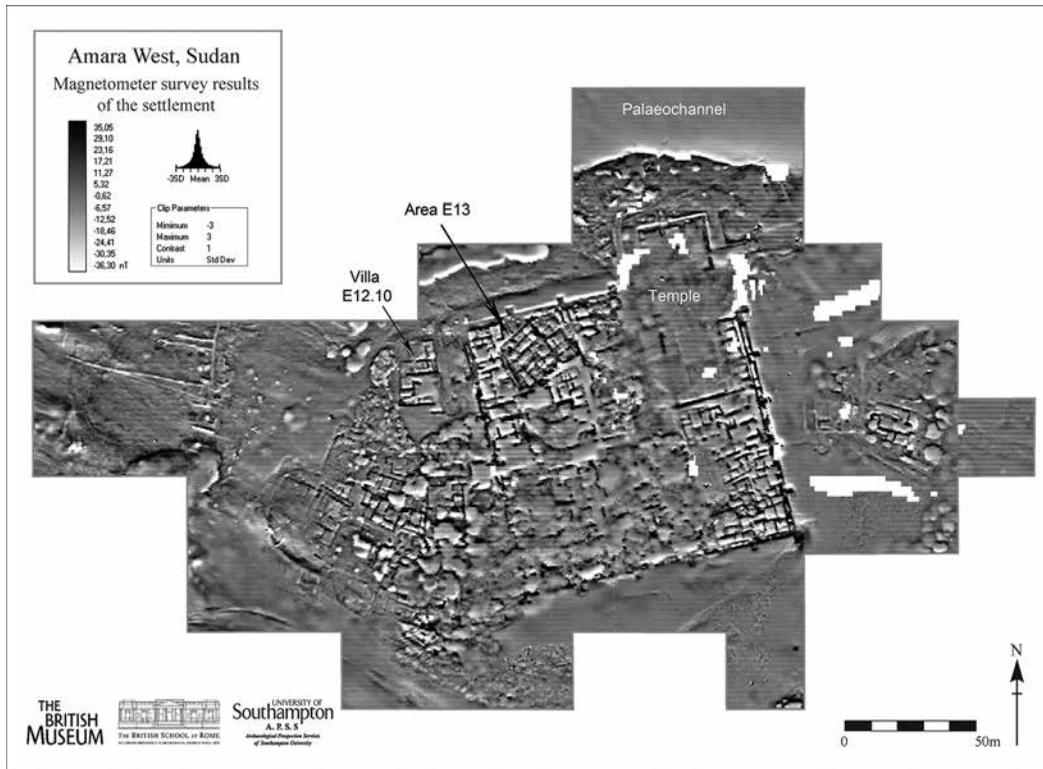


Figure 8.4. Magnetometry survey of Amara West Town (British School at Rome/University of Southampton)

Table 8.1. Preliminary architectural phases at Amara West

Phase	Date	Buildings in E13	Equivalence to EES Phases ^a
IA	Early Nineteenth Dynasty (Seti I), ca. 1300–1250 B.C. ^b	Enclosure wall; kiln 5029 in building E13.15; E12.6	Level Four/Five
IB	Early–mid Nineteenth Dynasty (Ramesses II and later), ca. 1250–1210 B.C.	Magazine complex E13.14, house E13.10	Level Three
II	Mid-Nineteenth Dynasty to early Twentieth Dynasty, ca. 1210–1180 B.C.	Houses E13.3, E13.7, E13.8	Level Two
<i>First villas constructed in western suburb (late Nineteenth/early Twentieth Dynasty)</i>			
III	Early–mid Twentieth Dynasty (Ramesses III or later), ca. 1180–1140 B.C.	House E13.3 divided [E13.3-N and E13.3-S]; houses E13.4+9, E13.5, E13.7	Level One (Two?)
IV	Mid–late Twentieth Dynasty, ca. 1140–1100 B.C.	House E13.4+9 divided [E13.4 and E13.9]	Level One
V	Late Twentieth Dynasty onward, ca. 1100–1000 B.C.	Small-scale adjustments to architecture	Level One

^a This tentative concordance is restricted to the West Town excavations of the EES; there is no direct equivalence to the buildings revealed south of the temple, where “Level One” might be considerably later than that in the West Town. Furthermore, the rebuilding phases of the Deputy’s Residence (E.13.2) may have progressed at a different rate. Paser, deputy in the reign of Ramesses III, was active in Levels Two and Three (P. Spencer 1997, p. 168), which might suggest that the Level Four (first) residence had a longer use-life than many of the adjacent buildings.

^b Bricks in the enclosure wall were stamped with the cartouche of Seti I (P. Spencer 1997, pp. 151–56, pl. 8).

^c A scarab bearing the name of Ramesses III was found buried in the first floor of house E13.3-S.

^d Ceramics as late as the eighth century B.C. have been found scattered across the southern part of the town mound.

led, at its eastern end, to an area (E13.15) that contained a small pottery kiln cut into the natural alluvium. This was exposed beneath a later house (E13.8); it remains unclear whether it was set within an open space or a dedicated building.

The end of phase IA is marked by the systematic leveling of architecture across the town at Amara West. Evidence for this leveling operation has been encountered in the western (P. Spencer 1997, pp. 189–90) and eastern town areas (*ibid.*, pp. 103–20) — both excavated by the EES — but also across zone E13 (fig. 8.6). As it included the Deputy's Residence (*ibid.*, pp. 163–65) and was consistently executed across the site, one can assume that this was a program instigated by the administration, perhaps in tandem with a possible re-orientation of the cult temple (*ibid.*, pp. 27–28). Ceramic evidence from area E13 suggests that this leveling operation occurred during the early to mid-Nineteenth Dynasty. The subsequent phases of buildings form the focus of this paper.

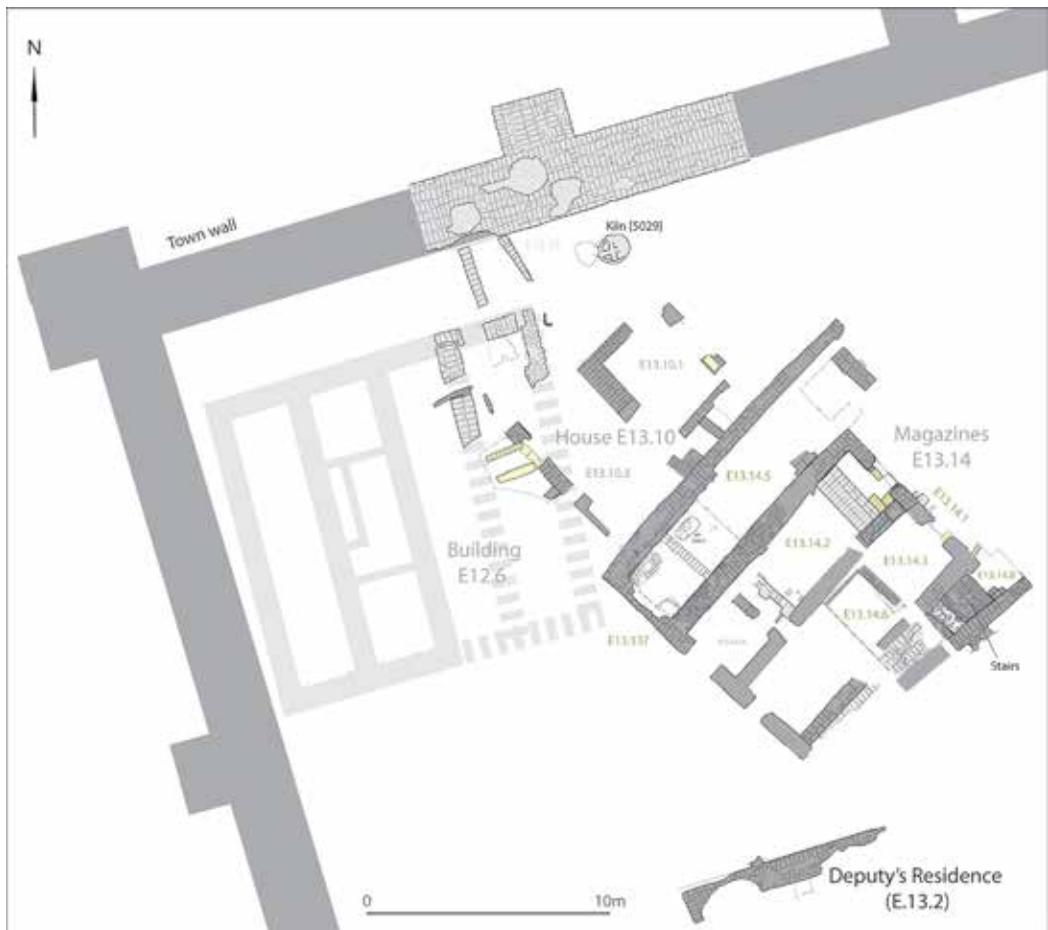


Figure 8.5. Plan of area E13 magazines, phase IB (with selected phase IA features in lighter gray)



Figure 8.6. Brickwork of E12.6 and kiln 5029 (phase IA), leveled to one course, preserved beneath phase II house E13.8. View southeast



Figure 8.7. Plan of area E13, phase II, incorporating elements of phase IB architecture

A Vertical Perspective: Creating House E13.7

Following the leveling program, area E13 was provided with a large-scale storage complex (E13.14), set at a 45-degree angle to the previous architecture (fig. 8.7). This orientation represents a confusing anomaly within the walled town at Amara West. Firstly, no other buildings, at any phase, diverged so markedly from the orientation of the town walls. Secondly, immediately to the south of E13 lay the Deputy's Residence, whose northern wall was repeatedly refurbished on an almost identical plan.

The storage building (E13.14) comprised at least three contiguous vaulted magazines (fig. 8.7), similar (though smaller in scale) to those found associated with temples in Egypt. Each measures 9.8 meters in length, and between 2.5 and 2.8 meters in width (fig. 8.8); some were provided with schist floors, in others a trampled mud floor was deemed sufficient. The magazines were accessed from a narrow corridor running along their northeastern ends. A broad staircase, 1.6 meter wide, provided access to the roofs of the magazines, or possibly an upper story. A more detailed description of the magazines is not pertinent here, but rather that these considerable structures continued to shape the lived environment in this part of the town, long after the area was overhauled and repurposed.

The northernmost magazine (E13.14.5; fig. 8.8) remained virtually unchanged for the remaining 100–150 years of occupation, seemingly used as a de facto rubbish dump for the neighborhood that grew up around it. Its northwestern wall doubled as the southeastern edge of house E13.10 (fig. 8.7), later replaced with house E13.3. The house (E13.7; fig. 8.9) created to the southeast of magazine E13.4.5 embodies the individual/household-level agencies that created spaces for living at Amara West. Old spaces and walls could be integrated into a new building, modified, or even demolished so as to produce a space deemed suitable for living within. A complete plan of E13.7 has not been revealed, but the majority of the rooms have been fully exposed, revealing that the house was set around two contiguous, roughly square spaces. In the southwestern corner of the dwelling, room E13.7.6 can be interpreted as the focal point of the house, with a wide mastaba (4727) set against the south wall (fig. 8.10). The importance of this space, and particularly its south wall, is made clear by the yellow paint applied to the wall behind the mastaba, in contrast to the other walls in the room, finished with a whitewash applied to the lower 100 centimeters, topped with a black line, above which a plain mud plaster coating covered the brickwork.

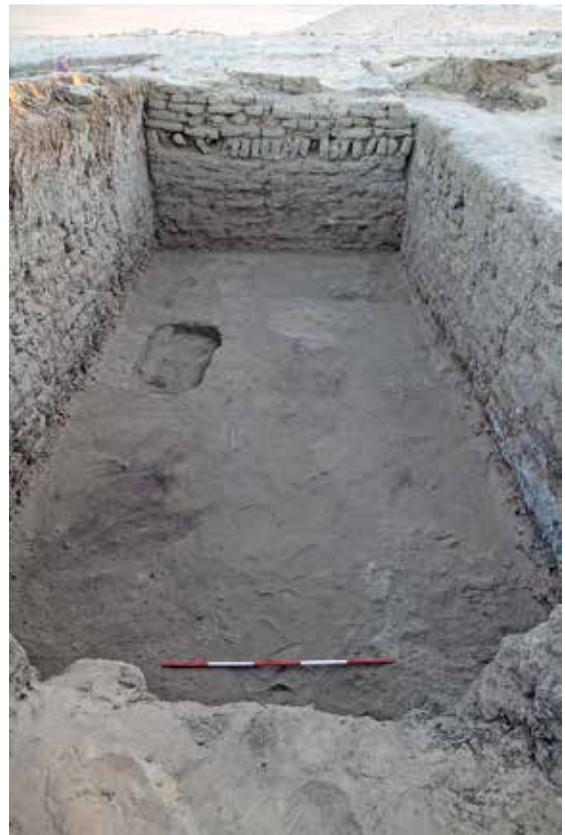


Figure 8.8. Magazine E13.14.5, looking northeast, with base of vault springs visible on side walls



Figure 8.10. Mastaba 4727, against southern wall of room E13.7.6, with architecture of house E13.4 (phase III) above and dividing room in two



Figure 8.11. Molded and painted elements (clockwise from top left: F4890a, F5003a, F5133d) from a niche (?) in room E13.7.6

contemporary site of Deir el-Medina (e.g., Bruyère 1939, pp. 65–67, 259), a planned settlement for housing those working on royal tomb building and decoration; these niches are assumed to have held anthropoid busts or stelae (Meskell 1998, p. 231). A hearth at the center of the room (5760), refurbished (4774) when a new floor was laid, creates a combination (hearth, mastaba) familiar from many houses at Tell el-Amarna, the large settlement in Middle Egypt founded by Akhenaten in ca. 1346 B.C. as his new capital. The series of impressions in the floor of room E13.7.6 suggests that vessels (water jars?) were set up on pot stands in front of one end of the mastaba, and along the west wall.

A room (E13.7.3; fig. 8.9) to the east featured similar proportions to the mastaba-room, and the same white/brown color scheme on the walls. Both rooms were probably provided with a wooden column set upon sandstone bases; in room E13.7.3, column base 5737 was later deemed superfluous, as successive hearths (5726 refurbished as 4743) were built against the stone, perhaps repurposed as a seat. The room was provided with a series of four installations against its east wall; their function is uncertain, but perhaps related to cereal grinding, as a door provided access from this room into a narrow southern space (E13.7.4) fitted with at least one bread oven (4559). Two further rooms (E13.7.9 and 10) to the northeast of E13.7.3 may form part of the same house, but further excavations are needed.

Whereas room E13.7.6 seems to have been built against the outer southwestern walls of the earlier magazine — it is unclear what lay here before — the adjacent rooms had to be fashioned within a space occupied by the earlier magazines, namely the southwestern ends of magazines E13.14.2 and E13.14.3, but also the space under the upper part of staircase 5225. The builders, perhaps including the first inhabitants of the new house,⁶ took different approaches, dictated by the type of space sought. The most drastic measures were taken to create room E13.7.3: the southeastern wall (5740) of magazine E13.14.3 was cut through and leveled, though its stone pavement was left in place (fig. 8.12). The builders only demolished the amount of wall that lay within the limits of the planned new house, the remainder was left standing (later overbuilt with house E13.6).⁷ In contrast, the other wall of this magazine (5773) was refurbished on the same plan, now acting as the northwestern edge of the new room. Alongside the reuse of existing walls (southwest, northwest), or demolishing and replacing a significant wall with one laid out on a different plan (southeast), one further approach was taken in creating house E13.7. To create a northeastern wall, a mixture of bricks and rubble was built up to bridge the width of magazine E13.14.6, as northeast of here this remained standing. A mud plaster coat, subsequently whitewashed, created the appearance of a properly constructed wall (4750), though it is less than 10 centimeters thick in places.

What motivated this significant expenditure of effort, demolishing parts of a substantial brick wall over 60 centimeters thick and around 2 meters in height? Seeking a square-proportioned room, rather than a corridor-like space typical of magazines, must have been an important factor. This was achieved through building out into the street, with the new wall (4737) lying 65 centimeters beyond the line of the original magazine wall (figs. 8.5, 8.7). This colonization of public space is a recurring feature in this part of Amara West, with buildings projecting farther and farther into the street, resulting in an increasingly narrow alleyway

⁶ Though others could be co-opted or contracted to undertake work: an ostrakon from Deir el-Medina describes payment for “a workroom and another wall” (McDowell 1999, pp. 65–66).

⁷ An intermediate phase, postdating the leveling of the magazine wall, but before the architecture of E13.7.3 shown in fig. 8.9, is poorly understood, and might represent an earlier form of room E13.7.3.



Figure 8.12. Room E13.7.3, with exposure of leveled remains of phase IA magazine wall (5740) and schist floor

between the houses and the Deputy's Residence. There are other implications to consider here: the destruction of parts of a large-scale storage facility — presumably one associated with the central administration of the town, if not the Deputy himself — must have been accepted by those higher authorities, perhaps in recognition of the changing needs and function of the settlement.

A very different approach was taken in creating the northeastern part of house E13.7. Rooms E13.7.10 and E13.7.9 were built within the existing architecture of the old magazine E13.14.2. Through subdivision with wall 4125, spaces of acceptable proportion were created. Stratigraphic information, including layers of collapsed brick rubble in room E13.7.9, indicates that the vaulted ceiling of the old magazine was still extant at this stage. The rear room is notable for the lack of a laid floor associated with the phase II occupation: a silty deposit of ash, sand, and charcoal (5702) sat above rubble from an earlier wall. De facto, rather than carefully laid, surfaces are a feature of many back rooms in the later-phase houses at Amara West.

Considering the plan of house E13.7, in as much as it is accessible, suggests a household seeking components familiar to us from the houses at Tell el-Amarna, namely a broad room with mastaba fulfilling the function of principal reception space, but also the center of much activity within the houses. Other adjacent rooms comprised food processing (?), a bread oven, and (presumably) more restricted spaces at the back. The unusual plan (fig. 8.9) of the house, particularly the projection of room E13.7.9 to the east, is a direct result of reusing existing magazine architecture in this part of the house. The builders of E13.7 took decisions in creating their house: where did effort need to be expended to create spaces of a

certain type? Where could existing spaces be repurposed with relatively minor architectural interventions? The solutions combined co-optive (repurposing earlier space) and constructive (creating new spaces) approaches in design (Ingold 2000, p. 175). Such decision-making is hidden from view when presented with static, normalized, house plans.⁸

A Horizontal Analysis: Creating a Neighborhood

Phase III sees the broadly contemporary construction of a range of new houses in E13 (fig. 8.13), transforming an area that had one or two houses, adjacent to a suite of storage magazines, into a dense cluster of dwellings; this was the phase at which the two alleys took on their final appearance. A survey of these modest houses, with ground floor plans of between 27 and 69 square meters, allows insights into approaches in physically constructing the houses, and how components were prioritized and selected. Three different approaches were taken for the new houses: (1) subdividing an existing house; (2) creating a new house following the plan of an earlier, underlying house, with some adjustments; and (3) laying out a house on a new plan, over the leveled remains of earlier architecture.

The last of these approaches was deployed for house E13.5 at the eastern edge of the neighborhood (figs. 8.13–14). This comprised a broad first room with hearth at its center, but also access to a small food-processing court which lay outside the house proper. The latter is built with walls thinner than found in the house, and may have been unroofed, or only sheltered with a simple reed roof. Returning to the house proper, the second room provided access to both a staircase and to a room at the back of the house with mastaba against the back wall. It is worth emphasizing that one could reach the upper story without passing through the room with mastaba. Furthermore, the mastaba room in these later houses is further removed from the front door, and indeed the center of the house, than in many Amarna houses. Are we seeing a shift from house as a setting for self-presentation and display of the homeowner (Spence, this volume),⁹ but also the control of access to inner and upper areas of the house, toward an environment fashioned with privacy as a key priority (see Arnold, this volume)?¹⁰

Off the mastaba room, to the left, lay a rectangular room, implicitly the most private space in the house. Brick paving was restricted to the mastaba room (at least in an early phase, with hearth 5620) and that preceding it; a simple mud floor was preferred in the front room, while the rear space only featured a trampled surface. All the doorways in the house were provided with stone jambs and thresholds, many reused from earlier structures, perhaps

⁸ House E13.8, broadly contemporary with E13.7, was created with other limitations: built between house E13.3 and the massive town wall, the key components (entrance room, oven room, reception space with mastaba, and rear room without laid floor) were squeezed into a trapezoidal plan.

⁹ Ian Shaw (1992, p. 147) discusses implied codes of conduct within a house, based on *Instruction* texts, but these are idealized texts, and as with idealized

house plans, may have reflected perceived norms and aspirations more than reality.

¹⁰ The developing emphasis on privacy, and discrete architectural units for each house, becomes yet more pronounced with the “tower-houses,” imposing structures reached by steps, in Egypt of the first millennium B.C. (see Marchi 2014). A similar phenomenon, the development of houses with more controlled access and emphasis on privacy, has been proposed for fifth-century B.C. Greece (Nevett 1999).



Figure 8.13. Plan of area E13, phase III



Figure 8.14. View north over house E13.5

from the magazines of the phase IB.¹¹ Furthermore, these doorways were set off-axis, thus the reception room would not have been visible directly from the street. It is unclear whether the staircase led to a series of upper-story rooms or simply roof space; fragments of mud bearing impressions of roofing beams and plant material were recovered from the front room. This whole house was seemingly laid out with scant regard for earlier architecture, which was leveled to create the new building: the plan thus reflects the wishes of its builders, largely unconditioned by the existing built environment (other than the amount of space available).

Architectural interfaces indicate that house E13.6 (fig. 8.13) was built later than both E13.5 and E13.4+9 (the successor to E13.7 discussed above). Even if the interval was very short — perhaps merely days or weeks — this indicates that house E13.6, though displaying many similarities with the adjacent dwellings and set off the same alley, may not have been part of a planned group of houses. House E13.6 was created over earlier architecture and deposits, and while the broad first room, an intermediate room, and a mastaba room mirror the arrangement of adjacent house E13.5, the remaining plan is significantly shaped by the presence of existing architecture. To the southwest, off the middle room, lay a suite of two rooms which contained bread ovens (fig. 8.15) and a grinding installation, but also a staircase to the roof or upper story. This was placed within a relatively small space, limited by the presence of house E13.4+9, whose eastern side had been at least partly built before E13.6 was laid out. The mastaba in the main room of house E13.6 was flanked by doorways into two rear rooms, the only house in this neighborhood with more than one back room. Again lacking a laid floor, these were created through adding brick walls within the space of magazine E13.14.5.

Whereas these two houses display, to varying degrees, an architectural plan reflecting a desired layout, house E13.4+9 is a stronger reflection of previous architecture, not only house E13.7 but the earlier magazines that had shaped the layout of that house. The walls were leveled to just over 1 meter in height, in contrast to the almost complete destruction seen after phase IA. The rubble from the leveling of the upper parts of the walls of house E13.7 was packed into the truncated rooms, creating the level platform on which the new house could be constructed (fig. 8.17). Despite this careful leveling, the old wall layout was largely replicated, new walls being constructed directly over the truncated walls of E13.7. Why had the latter walls been leveled at all, rather than simply heightened? The upper parts of the walls may have required repair, due to eroded or damaged brickwork. It is also likely that the builders sought a level building surface, creating an almost blank canvas upon which the new house could be created, though it is clear (see below) that the new plan was known before rubble was deposited. A desire to facilitate access to the contemporary street level, where fine silt and occupation detritus had accumulated, may have been the primary motivation.

This approach — building over an earlier house with many spaces persisting between old and new dwelling — was likely to have been commonplace, due to space constraints, the cost of making considerable changes (in time and materials) and perhaps even a desire to maintain the house as a recognizable symbolic and social entity (see Paz 2012, p. 427).¹² The replacement of the house of Ranefer at Tell el-Amarna (Kemp and Stevens 2010, pp. 95–103) provides an example of a house being rebuilt and enlarged in the same location within a Royal Residence city. The approach seen with houses E13.4 and E13.9 is mirrored at

¹¹ Two thresholds were reused inscribed blocks, one a doorjamb citing an “overseer of the double granary, Horhotep” (F6900).

¹² Another practical aspect of such house replacement is rarely considered: where did the occupants live during construction work?



Figure 8.15. House E13.6 (phase III): room with ovens, with grinding emplacements visible in room beyond

Elephantine, where early Eighteenth Dynasty houses preserved the Second Intermediate Period street alignment, before walls were leveled to around 1 meter in height to create a new building level around the time of Tuthmoses III (Raue 2010, pp. 346–47).

Working with a rectangular plot of ground in the southwestern corner of this block (fig. 8.13), defined by two alleys, the old magazine (E13.14.5), and oven court (E13.13) to the north and house E13.5 to the east, the builders did not use the maximum ground area available. Rather, a 7-meter-wide strip of ground overlooking the east-west alley was left clear, within which house E13.6 was subsequently built. It is tempting to assume some degree of coordination between household groups, which would imply E13.6 was built very soon after E13.5 and E13.4+9, but the extent of house E13.4+9 may simply have been all that was required by the inhabitants-to-be. In any case, the shape of the plot and size of the house resulted in a transverse, rather than longitudinal, arrangement of rooms: upon entering, one could turn left into a room with ovens and the stairwell, or turn right into the main reception space. This experience offers a distinct contrast with houses E13.5 and E13.6, where the progression was more limited to a movement from street entrance toward back of house.

The main room of the house (E13.9.28), with mastaba (4758), was almost identical in size and position to earlier room E13.7.3; a small extension (ca. 40 cm) southward into the street echoed the expansionist tendencies of the builders of the earlier house (E13.7). To the west, the plan of room E13.7.6 was deemed too large, and was changed into three contiguous spaces: where no earlier walls existed, foundation walls were constructed before the rubble packing was deposited, indicating the new house plan had been formulated before leveling of earlier walls. The house was thus provided with a long entrance room accessed directly from the street, with a staircase and oven room provided along its western edge. Eschewing the broad room familiar from many New Kingdom houses, and indeed nearby (and broadly contemporary) E13.5 and E13.6, the builders of E13.4+9 were evidently more concerned with creating an entrance room with direct access to both reception space (again shielded from direct street views) and the rooms (E13.9.19 and E13.9.9) in the northeastern part of the house. The walls of these rooms were created through heightening (4145) an earlier wall, and constructing a new L-shaped wall (4114) on the opposite side, that effectively created a division between the two rooms. The doorway between these spaces, fitted with a schist lintel, was preserved to its full height of only 1.8 meter. This back room, created out of

earlier room E13.7.19, was simply the void left within one end of the old magazine, on top of the accumulated deposits and rubble of earlier phases. A large storage vessel was set in the floor,¹³ a feature found in at least three other “back rooms” of this phase, spaces that are also notable for the dense concentration of artifacts: from tools to items of adornment (N. Spencer 2014). These rooms would have been the most stable environments in the houses, insulated from both cold and heat: with one door and no windows, far from the light and air provided by the main door or stairwell, and with no walls exposed to direct sunlight or external thoroughfares.

This house (E13.4+9), the largest in the neighborhood, was soon subdivided to create two separate dwellings (fig. 8.16). A new doorway (4231) was cut into the street wall (4234; fig. 8.18), and the doorway between entrance room (E13.4.1) and mastaba room (E13.9.28) was blocked. The western house created by this division (E13.4) consisted of only three ground-floor rooms, though more space could be accessed via the staircase. The other house (E13.9) required more changes: the old mastaba room was subdivided, creating a broad (but small) entrance room from the street, and an intermediary space before the back two rooms. A staircase was created using the mastaba as a foundation, providing dedicated access to an upper story or roof, while a doorway was cut into the existing street wall and fitted with sandstone architecture.

This internal subdivision, with no direct consequences for adjoining properties or the street, required the inhabitants — perhaps now two distinct households and/or family units — to address several issues. Dedicated access to the street, and to the roof or upper story, was deemed essential, so both houses had street doors and staircases. Conversely, a mastaba was



Figure 8.16. Plan of house E13.4+9 (left), subsequently divided into distinct houses E13.4 and E13.9 (right)

¹³ In this case, the storage vessel was covered with a lid, itself created from a sandstone stela bearing a

depiction of Amun-Ra as a ram (F4096; N. Spencer 2009, pp. 50–51, pl. 6).



Figure 8.17. View of entrance room in house E13.4, with foundation rubble filling truncated architecture of house E13.7



Figure 8.18. View west along alley, with entrances to phase III houses E13.4 (left) and E13.9 (right)

not provided in either new house, unless in an upper story, indicating that a ground-floor setting for self-presentation and reception was not a primary concern.¹⁴ The provision for food preparation is also less clear in the new houses. While house E13.4 featured bread ovens (in room E13.4.2) and grinding emplacements (in room E13.4.1),¹⁵ no such features have been located in E13.9. Thus food preparation must have taken place beyond the house: whether in a communal space — though none is evident nearby — or through using the facilities of house E13.4. Storage facilities for food, for example cereal grain, is not evident in any of these houses, in contrast to the extramural villas discussed below. This may imply some centralized facility from which grain was distributed, or that cereal was stored in containers that have not survived.

Living in Neighborhood E13

Communal arrangements for food preparation are evident in this neighborhood. House E13.3, a phase II construction contemporary with E13.7 (fig. 8.7), had been subdivided longitudinally to create two small, long houses (fig. 8.13) around the same time as houses E13.4, E13.5 and E13.6 were built (N. Spencer 2014). Along with many of the phenomena discussed above (provision of street access and staircases in each house; the absence of mastabas),¹⁶ pertinent here is the absence of ovens in the later phases of the subdivided houses (E13.3-N and E13.3-S). Here, a roughly square courtyard (E13.13; figs. 8.13, 8.19) was accessible via a “close” fronting the two house entrances. Within the former space, a sequence of bread ovens, grinding emplacements, and also shallow pits — that may have been used to produce charcoal — were revealed. Of course, even when houses are provided with dedicated cooking facilities, it does not imply a sharing of food preparation could not occur on a regular basis.¹⁷ Other than the narrow alleys, there is little other communal space at Amara West, a well noted by the EES being a possible exception (P. Spencer 1997, p. 203); no squares or other open spaces have been identified, in contrast to Grid 12 at Tell el-Amarna (Kemp and Stevens 2010, pp. 499–500, fig. 10.10).

The alleys would have been dark and cool for much of the day; the worn corners of the exterior corner of E13.4 evokes regular human and animal traffic in these spaces, while the identification of a channel in which organic-rich liquid flowed down hints at the dirty,

¹⁴ A group of small houses, assigned to the Twenty-fifth Dynasty, cleared at Medinet Habu (Hölscher 1954, p. 14, fig. 19), are of similar scale and variability in internal arrangement to the two houses created out of both E13.3 and E13.4+9. Nonetheless, at least three of these were provided with mastabas on the ground floor. The published documentation is too limited to ascertain how these related, or incorporated, earlier architectural phases.

¹⁵ Despite well-preserved floors in the rooms, House E13.4+9, and the subsequent division thereof (E13.4, E13.9), were never provided with a hearth-setting, found in all other houses. This is particularly striking, as while cooking and food processing may have been possible in communal spaces, the hearth was also an important source of warmth within the

house. It may, of course, have been located in an upper-story room.

¹⁶ The southern house (E13.3-S) is unusual in having its three doorways almost along the same axis.

¹⁷ Architecture and fittings do not always reflect social interaction: cylindrical bread ovens (*tannurs*) in Turkey, strikingly similar to ancient examples at Amara West, were the focus of communal cooking, despite ovens existing in most houses; not firing each oven every day ensured these structures could last several years (Parker 2011). Paolo Brusasco (this volume) contends that extended (rather than nuclear) households are more likely to share kitchens and courtyards at Ur and Nippur; textual evidence to support such a situation in Egypt is not known.



Figure 8.19. Space (E13.13) for communal food preparation, including bread ovens, grinding emplacements, and pits (for charcoal production?). View north; door in background right provided access to houses E13.3-N and E13.3-S

smelly atmosphere that may have pervaded here.¹⁸ Houses are generally found with clean floor surfaces, except in those rooms with bread ovens, as if rubbish (charcoal, bones, other debris) was regularly cleared out. Little is known about refuse disposal in the town: very few midden deposits have been encountered, and all at a very small scale, such as in the alley along the western side of the neighborhood. Much refuse may have been deposited beyond the walls of the town, and indeed deposits were found under villa E12.10 in the western suburb (N. Spencer 2009, p. 55), or simply dumped in the river.

Space does not always fall into the neat categories of private or public; the phenomenon of intermingling of households — a term used for the planned houses at Giza (Tavares and Yeomans 2009, pp. 12–13) — is possible with E13.4 and E13.9, as no blocking has been identified between room E13.4.1 and E13.9.19. At Amara West, the two narrow houses created out of house E13.3 shared a close (E13.3.11), a space for access to house and oven court, but also enabling inter-household circulation without stepping into the street. While we might see such a space as borne of necessity — prompted by a wish to create dedicated entrances to each house — it would have had consequences, intended or not, on how the households interacted. Even communal spaces such as alleyways could be partly colonized or restricted

¹⁸ The Deputy's Residence is the only residential building where a bathroom installation has been identified (P. Spencer 1997, pp. 163–64, pl. 118). For the relative rarity of such features, see Gräzer Ohara 2009; a small neighborhood at Tell el-Amarna con-

veys a similar picture of floors being kept clean and few sizeable waste dumps (Kemp and Stevens 2010, pp. 499–503). Smell, sound, and to a lesser extent touch are rarely considered in urban archaeology; see Tringham 2012; Brusasco, this volume.

— symbolically or physically — for specific tasks or purposes, particularly when space was at a premium (see Abu-Lughod 1987, pp.167–69), as it was in neighborhood E13.

Communal spaces and alleys, and of course the area outside the town walls used for agriculture and other activities (garden plots were uncovered in the EES excavations; P. Spencer 1997, pp. 205–06, pl. 144), would also provide a sense of space and light not available in the houses. Doorways and stairwells provided the only significant source of light in the houses, where no windows have been identified to date. Many of the internal spaces were roofed, including rooms with bread ovens and hearths (e.g., room E13.4.2 was entirely roofed), which would have created unpleasant, smoky environments. The lack of light within the rooms should not be cast in purely negative terms: the dense agglomeration of contiguous houses, with windowless rooms, would ensure cool temperatures on hot days, and the retention of warmth during cold winter nights.

Access to the temple in the northeast of the walled town may have been restricted to select inhabitants in the town;¹⁹ built settings for communal or public cult are absent elsewhere in the town. Rather, provision was made within houses, though was not a primary factor considered when the architecture of a house was initially formulated. A deep niche set into the back wall of house E13.3-N (possibly for domestic cult, or simply a cupboard) is a rare example of a possible architectural setting, along with the stela(?)-niche discussed above (house E13.7). The adjacent house (E13.3-S) did not have a similar setting in the rear room, though an anthropoid bust was installed upon a simple pedestal of brick (N. Spencer 2014). No other house of this phase preserved evidence for cult emplacements, though stelae, door inscriptions, and amulets hint at the spiritual world accessed by inhabitants.

The houses in the town were, of course, occupied by individuals buried in the town's cemeteries. Bioarchaeological analyses of individuals buried in the cemetery (Binder and Spencer 2014) indicate a population of relatively low stature for the region and period (men of 5'5" and women of 5'), which may reflect dietary deficiencies, though a fair proportion of the individuals lived into their 40s and 50s. Nonetheless, a large proportion of the ancient inhabitants would have had shorter biographies than the houses within which they lived. Respiratory disease, dental pathologies, and osteoarthritis were common, and over half of the population studied thus far had sustained fractures, particularly of the spine (Binder and Spencer 2014). Most are well healed, which has implications for care of the injured — offering a different perspective on life in the ancient houses discussed here.

The characterization of the houses in E13 — at least from phase III onward — as a “neighborhood” might be construed as imposing a modern construct upon an Egyptian town in Nubia, particularly in the absence of textual evidence as to how individuals interacted. However, I would argue that the architectural record as preserved here provides clear evidence of social interactions that are an important characteristic of any neighborhood.²⁰ New Kingdom

¹⁹ Levels of access to temples have been the subject of much research in major settlements such as eastern Thebes (Bell 1997) and, at the other end of the spectrum, Deir el-Medina, where the rich textual record from this site indicates that the inhabitants fulfilled priestly duties in the modest temples (Valbelle 1985a, pp. 328–31; McDowell 1999, pp. 91–97). What was the situation in these royal towns created in Ramesside Nubia? At least in its initial form, Amara West seems to have been provided with few

houses, and with the size of the cult temple — and thus the range of rituals and maintenance required — it might be that a large proportion of the population contributed time (and thus had access) to the temples. The experience of the inhabitants in such towns has likely been played out across the spheres of temple, houses, and cemetery, and perhaps more so than within a large settlement in Egypt proper.

²⁰ David Frankel and Jennifer Webb, discussing a series of houses in prehistoric Cyprus, refer to “(house-

copies of a didactic text (Hagen 2005, p. 144) evoke an ancient Egyptian view of what it was to be living within a community of people:

You should not ignore your neighbors (on) the days of their need, and they will surround you in [your moment?].

You should not celebrate your festival without your neighbors, and they will surround you, mourning, on the day of burial.

You should not boast about grain at the time of ploughing; one shall see (it) on the threshing-flo[or].

You should not be hard-headed in fighting with your neighbors; your helpers [will fall?...]

The presence of communal spaces for cooking and retrieving water at Amara West implies a degree of social interaction and a desire for task-sharing, perhaps otherwise difficult to access in the archaeological record. Implicit in the architectural history of the neighborhood, with its repeated reformulation of houses, their interior layouts and extent, is the negotiation of spatial boundaries, in turn indicating inter-household relationships (not necessarily all positive). Furthermore, the proximity and adjacency of houses would have resulted in frequent contact and interaction.

Beyond the Walls

Beyond the program of demolition and rebuilding of, it seems, the entire interior area of the walled town after phase IA, the main development in the urban layout during the two centuries of occupation was the creation of a new western suburb.²¹ Buildings fan out from the West Gate over an area of around 6,300 square meters (fig. 8.4). The two large houses, or villas, excavated to date are both founded on deposits of rubbish, the ceramics therein indicating the villas were not constructed before the late Nineteenth Dynasty (N. Spencer 2009, pp. 50–7; 2014). These offer a stark contrast to the housing within the walled town: built as stand-alone structures, and up to 400 square meters in area, the houses in the western suburb feature an entrance hall, large courtyard, a non-axial progression through to a broad transverse room, private rooms (in one case with a bed alcove) set off that, and staircase access to a roof or upper story (fig. 8.20). As such, their plans bear closer comparison to the large houses at Tell el-Amarna, of similar scale (see Tietze 1985), though without the walled courtyards found at that site.

It is tempting to infer higher social status, or a wish to project an impression of higher status, for those living in these villas, given the larger area of the ground floor. Provision for foodways seems to reflect this, with a dedicated suite of rooms with multiple grinding

holds) successfully negotiating with their neighbors in response to both particular circumstances and broader processes of economic and social change within a long-lasting tradition” (2006, pp. 287–88). Such interactions at Amara West undoubtedly extended beyond the houses discussed here: the inhabitants of houses on the west side of the north–south alley, for example, E12.6 (Spencer 1997, pl. 116),

would evidently have interacted with those across the street in E13. On neighborhoods in pre-modern settlements, see Blanton and Fargher 2012.

²¹ “Building 3,” excavated by the EES east of the walled town, can also be interpreted as a large house (P. Spencer 1997, p. 206, pl. 133). It seems to stand alone; its chronological position within the history of the town is unknown.

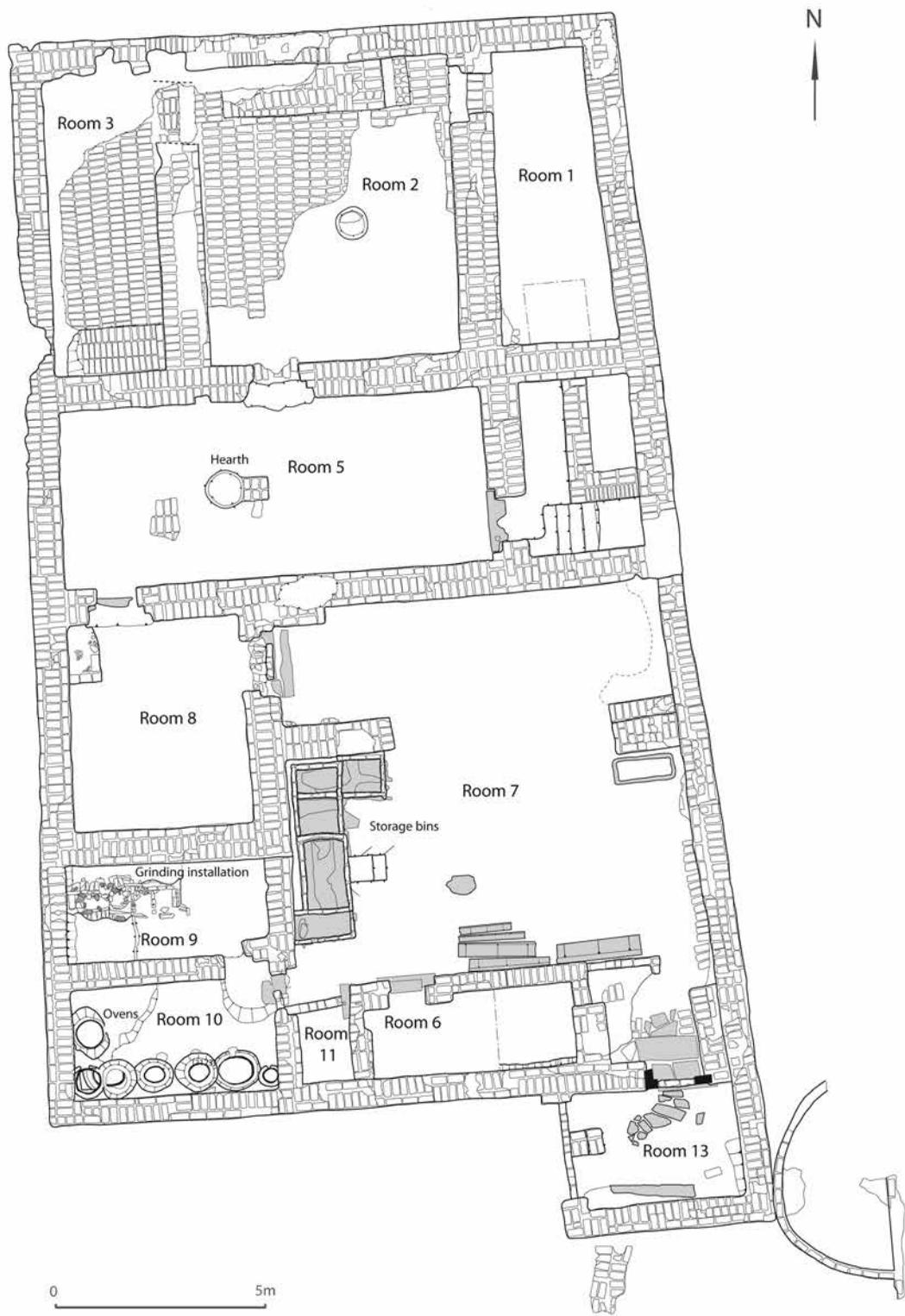


Figure 8.20. Plan of villa E12.10

emplacements and bread ovens, but also storage bins and silos, on a scale far larger than seen in the houses within the town walls. Archaeobotanical analyses seems to further underline a differentiation: emmer wheat predominates the botanical assemblages, at 89 percent rather than 45 percent in the smaller houses (Ryan, Cartwright, and Spencer 2012). Yet the artifactual evidence is consistent with that in the walled town, with no increase in objects of luxury materials (faience, copper alloy, calcite) or imported finewares. Given that building materials are identical to the smaller houses, namely the widely available river clay — there is no noticeable increase in the amount of stone architectural fittings — the only additional resource needed was time. Perhaps “acceptable cost given available resources” (Kamp 2000, p. 87) was thus less of a limiting factor than often assumed.

The desire for more space, and to seek new areas for housing, seems an obvious one, particularly within a bounded settlement that needed to cope with an increasing population, something hinted at through the increased density of houses from phase III onward. The villas are not laid out along a set of predetermined streets or alleys, indicating that the new suburb likely reflects a piecemeal development through individual/household agency.²² Implicit in this extension beyond the walls is the stability of the immediate region: a defensive barrier was not thought necessary, though the island location provided natural protection.

The blank canvas, free from architectural palimpsests, afforded by the new, previously unbuilt, area west of the town wall also allowed a more “ideal plan” to be realized for these houses,²³ without the necessity to demolish, appropriate, or modify existing architecture. The villa plans are more closely aligned to Tell el-Amarna houses than any other dwellings at Amara West (N. Spencer 2009, pp. 56–57), though we are still far from the idealized house and “garden-estate” of the eulogies of Per-Ramesses, Thebes and Memphis, or P. Lansing, all broadly contemporaneous with the Amara West villas (Ragazolli 2008). At least initially, the isolation of the new villas may have led to less casual interaction between inhabitants, compared to the contiguous houses set off narrow alleys in E13.

Change was also wrought upon these villas: E12.10 was provided with a new room against the south wall of the courtyard (fig. 8.20), additional suites of rooms were fashioned in the front part of D12.5:²⁴ one features two rooms (one with a hearth), a staircase, and a stone doorway. Was the large household being reformatted to cater to distinct subgroups or households? Further research is needed in this western suburb, not least in understanding the relationship between these villas and a range of contiguous buildings that spread west of D12.5. Could this western suburb reflect a different form of social structure — with households dependent on a large villa — as the town developed from an administrative creation to a more populous settlement less defined by centralized planning?

²² The process of creating a series of tightly spaced houses of modest size, set out on new ground, can be traced at Tell el-Amarna (Kemp and Stevens 2010, pp. 473–78).

²³ Kate Spence (this volume) speaks of “professionally built residences at Amarna,” but the scale, function, and historical circumstances of that town were

very different to Amara West, where only a handful of medium- and large-size houses and villas, across six generations of occupation, seem to fit with perceived standard types.

²⁴ A villa in the southern part of the western suburb, excavated in 2013.

External Agencies and the Historical Context

The development of neighborhood E13 and the western suburb thus seem to reflect, principally, individual/household agency, at one end of a spectrum of agencies. Specific circumstances and needs of individuals, families, and households must have played a considerable role in shaping this built environment, as attested textually for New Kingdom Thebes and its variations in the sizes of individual houses (Valbelle 1985b). The forms of architectural changes we see at Amara West may represent the material expression of family fluctuations. Beyond the inhabitants, and the local administration, there were several factors (environment, economy and production, social and political development) that would have shaped how the built environment was conceived and realized, including individual houses. These “big world” phenomena affected the “small world” of individual houses, and may have been the principal normalizing agencies, prompting the similarities we see in house plans. The ongoing negotiation and tension between individuals/households and state- or city-initiated urban development would have shaped the character of this settlement (see Paz 2012). However, any given individual/household might respond differently. Another factor, the apparent “Nubianization” of the settlement, fits awkwardly here, perhaps leading to heterogeneity rather than standardization.



Figure 8.21. Kite photograph of Amara West, with town foreground left, palaeochannel to right. The island of Ernetta, in the background, may be similar in morphology to the ancient island of Amara West (photo by Susie Green)



Figure 8.22. House E13.3: structure 4639 outside street door, presumably to reduce ingress of sand and other debris

Climate Change

Founded on an island adjacent to the north bank of the Nile, which here flows from west to east (fig. 8.21), the town would have been protected from sand ingress and high northerly winds by a narrow channel running around the north side of the island, associated vegetation and the dune complex that would have formed along the northern bank. This channel is now dry, creating the arid, inhospitable environment we see today. Investigation of flood deposits in the palaeochannel has provided a chronological framework for the local channel systems, supported by OSL (optically stimulated luminescence) and radiocarbon dates (Spencer, Macklin, and Woodward 2012). Importantly, it seems that the northern channel stopped flowing not long after the foundation of the town, leading to a dry period when life must have become more difficult for the inhabitants, before a brief re-activation of the channel, perhaps for a few decades. Our current hypothesis is that the subsequent, and permanent, failure of the channel was what prompted abandonment of the town, not, as previously assumed, the result of the region no longer being under Egyptian rule. More relevant here, however, is the sustained period in which the channel was not flowing, which seems to fall within the Ramesside period. During this period agricultural productivity would have fallen, or at least required more investment of labor to achieve the same returns.

The lived environment of people's houses would have been most affected by the increase in windblown sand, and other debris, blowing into the streets. Micro-morphological analyses of a series of deposits in the street south of neighborhood E13 revealed a considerable shift in the nature of accumulated material (Dalton, in press): the earlier deposits comprise fine

silt, perhaps eroded out from the mudbrick walls, mixed with episodes of rubbish dumping (including charcoal and splashes of pigment). In contrast, later deposits within the alley are characterized by a significant proportion of large-grained, likely aeolian, sand. Given the somewhat porous nature of the houses — with roofs of mud and plant materials — keeping such material outside the house would have been a constant challenge.²⁵ In response to this development, we see the inhabitants of the phase III and IV houses erecting simple structures outside their street doors (fig. 8.22). These barriers were roughly built with reused stonework (including old lintels and thresholds), grinding stones, mudbricks, and plaster;²⁶ their effectiveness is clear from the rising street levels, compared to the house floors maintained at a lower level. Erecting such barriers obviated the need for a more significant rebuild, such as heightening walls or raising ceilings, to keep pace with exterior accumulations. The resolution of the OSL dates is insufficient to directly correlate the drying up of the river channel with individual architectural phases, but one wonders whether the builders of houses in phase III were partly motivated by the need for further ecological adaptation to reduce the impact of the more arid environment.

The houses generally feature a southeast- or southwest-facing entrance, away from the prevailing wind, but toward the sun; the debris and discomfort brought by the former was perhaps considered a greater discomfort than heat. While house E12.6, across the north-south alley, had an east-facing entrance (P. Spencer 1997, pl. 115), it is notable that the two north-facing houses, D14.1-1a-2-4-5-5a-6 (ibid., pl. 77) and D12.5, were provided with doors rotated 90 degrees to avoid facing into the wind. This stands in contrast to Tell el-Amarna, where a northerly, or northwesterly, orientation was favored (Endruweit 1994, pp. 89–119).

“Nubianization” in the Town

A detailed consideration of cultural identity within Egypt-controlled Kush lies beyond the scope of this paper, yet an increasing presence of Nubian cultural markers within the settlement during the later part of the New Kingdom prompts the question: was the built environment also becoming more Nubian? The ideology of conquest and utter domination of Kush, expounded on formal monuments such as the West Gate of the town (P. Spencer 1997, pls. 11–12), needs to be set within the realities and experiences of those living in the area. At the time Amara West was founded, there had been 250 years of continuous interaction and entanglement of Egyptians and Nubians in this region, since the early Eighteenth Dynasty reconquest (Smith 2003). Sai Island, only 11 kilometers upstream of Amara West, witnessed the construction of a planned Egyptian town — near the location of an important Kerma (Nubian) center.²⁷ What “Egyptian” and “Nubian” meant in this context is far from clear, and scholarly research has principally focused upon “Egyptianization” (van Pelt 2013): the apparent predilection for Nubians to adopt Egyptian culture and customs. At Amara West, a

²⁵ The current project house, on nearby Ernetta Island, includes rooms roofed in similar style (mud, plant materials, beams of wood): roofing material is soon eroded and affected by birds and insects, leading to increased porosity. A windy day quickly results in all furniture and items in the room being coated in a thick layer of fine dust.

²⁶ A similar approach was taken by inhabitants of late Ptolemaic settlements in the Fayum (Marouard 2008, pp. 123–24 and fig. 2).

²⁷ The location of a large Kerma settlement is still unclear, but the sizeable cemetery reflects the importance of Sai under the Kerma polity (for a summary, with references, see Minault-Gout and Thill 2013, pp. 403–05). Kerma pottery was reportedly

phenomenon of “Nubianization” may be easier to trace, at least in terms of artifact assemblages, particularly from phase III — that is, the early Twentieth Dynasty — onward.

Intermarriage, and resulting offspring, is commonplace in colonial encounters (Smith 2003 with references) and would have created individuals with mixed cultural affiliations. The cemetery at Amara West is our best insight into this hybrid world, as the tomb architecture, burial assemblages, and treatment of the body provide explicit evidence that the inhabitants of Amara West were choosing to bury their dead within settings redolent of both Nubia and an Egypt that must have been spiritual homeland to some — even if they had no direct experience of Egypt itself. Thus within the same tomb, particularly those postdating the New Kingdom, we find flexed and extended burials, coffin fragments and funerary beds (*angareeb*), ostrich-egg jewelry and scarabs bearing Egyptian royal names, and superstructures included chapels with pyramids, but also low tumuli (Binder 2011; Binder, Spencer, and Millet 2011). Grave 244, of Twentieth Dynasty date, indicates that such hybrid cultural expressions were present during the period when Kush was under pharaonic rule. This five-chambered tomb is provided with typical Ramesside pottery and burials placed within painted anthropoid coffins, yet is marked upon the surface with a tumulus, the grave mound typical of Nubian funerary culture.

Should we project a similar cultural entanglement back into the town, where those buried in the cemeteries had lived some or all of their lives? The architecture suggests not. House plans, construction techniques, and the array of features within — decorated stone doors, mastabas, food-processing installations, storage, and ritual settings — are consistent with those found in contemporary Egypt. Artifacts from the houses at Amara West correlate well with assemblages found at broadly contemporary sites in Egypt, such as Memphis (Giddy 1999) and Tell el-Amarna (Kemp and Stevens 2010) other than three Kerma ax-heads found in house E13.8.²⁸ Textiles, wood, and basketry — artifact classes that do not survive — may have nuanced this impression, but otherwise, the consistency of the majority of architecture and artifactual assemblages with what is encountered in contemporary Egypt supports considering Amara West as a valid data set for investigating life in urban Egypt of the New Kingdom: the inhabitants and authorities were seeking to create an environment, and undertaking a range of activities, that largely echoes the situation in Egypt proper.

One structure represents an important exception, however: the oval building E12.11 (fig. 8.23; N. Spencer 2010). Located adjacent to one of the villas, it is divided into two internal spaces by a curving wall, with at least three mud floors laid in the main space. The provision of a cooking, or at least heating, emplacement against the back wall suggests it may have been a dwelling. This building bears similarities with a number of small circular buildings at Kerma (Bonnet 2004, pp. 8–9, fig. 6, e.g., nos. 16, 47), also identified as dwellings, and sits within the architectural traditions of Nubia rather than Egypt. Other purposes are possible — food processing, ritual setting — but in any case, the building reflects a conscious decision to erect non-Egyptian architecture in the heart of Amara West. Building E12.11 remains, to date, the only architecture that represents a rupture with contemporary Egyptian tradition.

found in association with brick structures predating the Tutmoside temple at Sai (Azim and Carlotti 2012, pp. 11–37), though a more precise dating was not produced; as such, this might be contemporary with the early Eighteenth Dynasty occupation of the island.

²⁸ F5652, F5655, F5659, F5663. If recognized as both old (by several centuries) and Nubian, it is fascinating to speculate how the inhabitants viewed these objects, though whether those who curated these artifacts perceived themselves as Egyptian, Nubian, or both is lost to the archaeologist.



Figure 8.23. View west over structure E12.11, with villa E12.10 background right

Ceramics, however, provide explicit evidence for a Nubian cultural presence within the houses. Handmade, basket-impressed restricted cooking jars are found throughout the houses, making up a small but distinctive percentage of the ceramic assemblage. Unfortunately, residue analysis on Nubian and Egyptian cook pots was inconclusive due to poor lipid preservation. The later occupation phases in the town see a distinct increase in the proportion of Nubian pottery, to around 10 percent of the total, though fineware remained rare. In tandem, there is a noticeable increase in the occurrence of non-textual markers: signs and images of animals incised into the exterior surfaces of large vessels. The percentage of luxury imports — such as Mycenaean stirrup jars — follows a converse trajectory, with a noticeable decrease after the late Nineteenth Dynasty. Is this a reflection that as the town became more populated, and less characterized by the administrative structures for which it was originally founded, that interaction with Nubian cultures, within the houses, became more common and/or less restricted?

Individuals project a cultural identity shaped through “establishing boundaries, masking differences and articulating similarities” (Nevett 2010, p. 71). At Amara West we can see this being played out through an adherence to recognizably Egyptian forms of domestic architecture, but more Nubian cultural expression through ceramic material that would have populated spaces, and been deployed in everyday activities — perhaps a more high-profile cultural expression for the ancient inhabitants. We might be glimpsing the development of a more heterogeneous urban experience and perhaps — though confirmation is precluded

with the evidence available at present — more individuals of Nubian descent living in the town. For those who would be associated, in death, with Nubian cultural markers such as funerary architecture and grave goods, we might imagine an expression of Nubian culture, whether hybrid or not, was also present within the houses.

Transformations in Pharaonic Activity within Nubia

Political agency also demands consideration. Textual records do not survive from any Nubian polities, until the Napatan era proper, and the chronology of Nubian pottery after the Classic Kerma period is not sufficiently refined to trace settlement and cemetery patterns across the five centuries of pharaonic rule in the region. A detailed understanding of how Egyptian towns, and the people housed within, interacted with existing indigenous settlements — a number of sites with “Kerma” and New Kingdom pottery were identified in the Centre National de la Recherche Scientifique survey around Amara West (Vila 1977) — requires further fieldwork and research.

Nonetheless, the archaeological and textual evidence indicates two major developments likely to have altered lived experience within these urban settings. Firstly, the reign of Seti I sees a considerable shift in pharaonic settlement patterns in the region, presumably the implementation of a change in state strategy. Alongside the construction of new temples in Lower Nubia in reigns of Seti I and his successor Ramesses II (Hein 1991), new towns are founded in Upper Nubia. Amara West is the best known, but Aksha (Rosenvasser 1964, pp. 96–99, fig. 1) displays many similarities, both in terms of scale and the creation of a planned, walled town. Whether changes in the location of principal gold extraction sites, or the control of desert routes and associated hinterlands, may have dictated the creation of these new towns (Hein 1991, pp. 82–83), the impact for the inhabitants is more relevant here. The two new towns were much smaller than earlier planned towns at Sesebi, Soleb, and Sai (and probably Kawa), with less provision for housing. At first, these towns may have felt more akin to outposts or staging stations — whether administrative, military, or otherwise — rather than true settlements; it is quite possible that some inhabitants of the earlier towns were posted to Amara West and Aksha. As discussed above, the character of Amara West seems to have changed during the course of the Nineteenth Dynasty, becoming more town-like. In parallel with the foundation of these new towns, many of the existing Egyptian settlements in Nubia may have witnessed considerable changes in demographic profile and function. There is little evidence for occupation at Sesebi from the mid-Nineteenth Dynasty onward (Spence et al. 2009); a similar picture emerges at Sai Island (Devauchelle and Doyen 2009), though the cemetery features burials through the Nineteenth and Twentieth Dynasties (Minault-Gout and Thill 2013) as at Tombos (Smith 2003, pp. 136–66).

The second development is, one assumes, not the result of pharaonic strategy, but a reflection of broader political and economic developments: the apparent dwindling of state investment in Upper Nubia throughout the Twentieth Dynasty. At Amara West, a “deputy of Kush” named Paser had installed new inscribed doorways within the residence building in the reign of Ramesses III (P. Spencer 1997, p. 168, pl. 166 [a–b]), perhaps in tandem with a renovation of the building at Level Three. A stela, presumably of the same individual (“the deputy of Kush, Paser son of Penne”; British Museum EA1784) is dated to year 11 of Ramesses III (ca. 1125 B.C.) and he is also mentioned upon a stela set up in the hypostyle hall of the temple (*ibid.*, p. 41). The blocks, some found in debris but others in situ, indicate that the activity

while Paser was in office occurred in EES levels II or III, that is, that the Residence was rebuilt at least one more time during the occupation of the town. This last manifestation did not yield any epigraphic evidence, other than a loose block bearing the cartouche of Ramesses III (*ibid.*, pl. 158). Of course, some of this activity may have been the result of autonomous, local, initiative, with due reference in inscriptions to the ultimate control of pharaoh.

After this activity during the reign of Ramesses III, there is scant evidence of significant investment at Amara West. In the temple, a small shrine originally inscribed for Amenemose was plastered and redecorated to honor later officials, including viceroys under Ramesses VI and Ramesses IX.²⁹ The activity of officials in the reign of Ramesses IX is presumably associated with the carving of the deep sunk-relief inscription around the peristyle hall of the temple, dated to “year 6, first day of *Smw*, day 25,” perhaps the official date of completing decoration in the temple.³⁰

This fall-off in state building, and royal or official dedications, is mirrored at other sites in Upper Nubia, where a small number of inscriptions attest to activity in the reigns of Ramesses III, IV, and IX, many naming the same protagonists found at Amara West, such as the Deputy of Kush Usermaatra-nakht or the Viceroy Wentawet (Hein 1991). How would this change affect the lived experience of inhabitants in these towns? On the one hand, a less controlled built environment may have resulted. With formal, official, construction projects not occurring at regular intervals, the housing areas may have more quickly reverted to less planned, more “organic,” layouts; that later houses rarely feature inscribed doorways may reflect a lesser number of state administrators posted to Amara West, or a reduction in the amount of state support for those holding office in Upper Nubian towns. Interestingly, the decrease in occurrences of luxury imported vessels, such as Mycenaean stirrup jars, is concurrent: as state involvement dwindled, so did the trade in luxury items. Other consequences are worth considering: if there was less state-sponsored gold extraction, did the range of activities within the town also change? Most intriguingly, did the reduction in state projects create an environment conducive to more evident expressions of Nubian cultural identity and perhaps, by extension, more inhabitants of Nubian descent? Many of these questions may never be answered through the archaeological or textual record, but they are important considerations in terms of how the urban lived experience could be affected by much broader historical and political developments.

Toward Biographies of Houses and Settlements

Neighborhood E13, and to a lesser extent the western suburb, provides a glimpse of houses shaped by both the existing built and natural environments but also the desires of inhabitants, and what they thought was both essential and achievable. Each of these houses, and in

²⁹ The “King’s Son of Kush, Siese” (Ramesses VI) and the “King’s Son of Kush, Wen(ta)wet, son of the King’s Son of Kush, Naherhu” (Ramesses IX; see P. Spencer 1997, p. 41). The latter is also named in a scene depicting officials kneeling before the cartouches of Ramesses IX, with an accompanying inscription naming the “King’s Son of Kush, Wen(ta)wet, son of the King’s Son of Kush, Naherhu” (*ibid.*, p. 39).

³⁰ A faience plaque bearing the name of Ramesses IX was found in the Deputy’s Residence, but its stratigraphic context is not clear (P. Spencer 1997, p. 169). In cemetery SAC5 at Sai, a plaque bears the name of a Viceroy of Kush Ramessesnakht, but also a cartouche of Ramesses III; it has been suggested that this viceroy held office in the reign of Ramesses IX (Minault-Gout and Thill 2013, p. 35 n. 6, p. 413).

turn neighborhoods and whole settlements, were home to individuals whose lived experience was largely set within these homes, likely to have been the setting for small-scale production and craft activities. The durability of some spaces and architecture is striking, particularly that of the phase IB magazines. We can only speculate how the inhabitants viewed the recent, very local past, given that earlier architecture, repurposed, persisted as a visible element within many houses. “Direct observation, partial knowledge, and hazy memory of old houses on the place where a new house was built” (Tringham 2000, p. 123) are thus ideas which resonate with what we encounter at Amara West.

The architectural developments outlined above attest to the changes wrought upon the built environment across six generations: vertical and horizontal house replacement, extension and subdivisions, made possible by the fundamental malleability of mudbrick architecture. Smaller changes were restricted to one room: in the front room of house E13.3-S, the grinding emplacement and associated mud plaster basin (4322, 4329) were located just inside the front door when the house was first occupied, but was then moved farther back into the room when the floor was relaid (N. Spencer 2014): perhaps a response to accumulations of windblown sand and dirt coming in from the street? The lack of preservation of textiles and wood precludes us assessing how any carpets, wall-hangings, and especially portable stools and chests may have been moved around, and thus changed the function and perception of these spaces.

The role of other agencies in shaping an individual’s home was rather restricted in area E13 at Amara West, beyond the foundation and planning of the initial town, and the major redevelopment of area E13: the decision to level the first phase buildings and create a new large-scale storage facility. It is perhaps important that this reorganization probably occurred during the reigns of Seti I and Ramesses II, within a generation of the town’s foundation, when the function, and character, of Amara West may still have been much as originally envisaged by those who selected the site for a planned Egyptian town. Of course, even where higher agencies attempted to shape the urban landscape, how that space was subsequently used was rapidly reworked by the inhabitants (see Paz 2012).

Nonetheless, partial biographies of houses, and thence the neighborhood and ultimately distinct settlements, can be constructed, particularly for area E13. I argue that most of the changes discernible in these houses — from reorganizing a room to building a new house — can be ascribed to individuals or households; the inhabitants were not “idly” responding to an environment imposed upon them (Hodder 2007, pp. 31–34). These decisions and changes — so often overlooked in both archaeologies (Hendon 2007, p. 273) and anthropologies (Gillespie 2000, p. 9) of houses — were what produced the “element of idiosyncrasy” which makes a home out of the built house (Kemp 2006, p. 244).³¹

The role of the individual might be considered a thoroughly investigated subset of Egyptological research, but largely in terms of formal monuments left by royalty and elite officials, not individuals’ roles in shaping their lived experience. Yet archaeology, and particularly architectural evidence, can also allow the construction of social phenomena: considering

³¹ The role of individuals in modifying houses has been recognized at sites such as Deir el-Medina (Meskell 1998, p. 215), though a detailed analysis and presentation of the evolution of the houses in

that community has yet to be undertaken. Rather, the rich textual data from the site has led to a better understanding of individual personalities than at any other pharaonic settlement.

a site in prehistoric Cyprus, David Frankel and Jennifer Webb seek to “tell the story of our settlement as a social history of relationships within and between neighboring families and successive generations” (2006, p. 290), though the “story” for Amara West is also considerably shaped by higher agencies (state, town) and environmental change. As illustrated here, a site such as Amara West is well suited to construct an (archaeological) “language of the house” as called for by Janet Carsten and Stephen Hugh-Jones (1995, p. 2).

Urban experience within ancient Egypt, and indeed other societies of the Near East and Mediterranean basin, has too often been characterized by the foregrounding of idealized, somewhat static housing, with implications for how we interpret lived experience (see also Allison 1999; Nevett 1999).³² This situation is perhaps more acute within the study of ancient Egypt, due to the nature of the most extensively used data sets, complemented by archaeological priorities. Firstly, planned towns, with their intimations of state control and orderliness, are prominent for most of the major periods of Egyptian history (Kemp 2006, pp. 193–244). Secondly, the unique combination of preservation and historical context of Tell el-Amarna, a city founded on virgin ground, occupied for only fifteen years and not re-inhabited, has favored typologies of houses (such as that developed by Tietze 1985), and foregrounding of plans (Kemp 1995, p. 146), rather than the nuances of differentiation and individuality. Recent excavations at Tell el-Amarna are providing insights into a more dynamic world, even within the restricted occupation span, in terms of both architecture and individual agency (Kemp and Stevens 2010).

That individuals and households were the principal agencies in creating these variable, nuanced environments for living, as found in other geographic and chronological settings (see Hendon 2007; Souvatzi 2012), is perhaps unsurprising. Dissonance from, rather than adherence to, “standard types” was commonplace, a reality poorly reflected in the literature of household archaeology (Nevett 1999, pp. 21–33); even the finished form of any house may be little more than a “fleeting moment” (Ingold 2000, pp. 187–88). Ruth Tringham discusses the prevalence of research on “what households do,” and calls for analysis of a more complex range of tasks and events (see Ingold 2000; Nevett, this volume), including “movement and embodiment, repetition and habituation, by people with faces, within a context of other players and the construction of place” (Tringham 2012, p. 86). The phase III houses of E13, and the earlier houses and buildings that they replaced, provide insight into how individuals/households were creating, and responding to, a built environment within which such activities took place. A detailed consideration of the function(s) — and also the intended purposes (Meskell 1998, p. 217)³³ — of rooms within each house lies beyond the scope of this paper, but micro-morphological and geochemical analyses should provide further insights into activities that took place within specific rooms (see Dalton, in press).³⁴ That the archaeological record (Amara West included) tends to foreground food processing, craft and production — and to

³² Ethnographies of houses have also been criticized for emphasizing a somewhat static and permanent impression (Carsten and Hugh-Jones 1995, p. 37).

³³ There is as yet no clear evidence for gender-specific spaces within these houses.

³⁴ Gold extraction and processing in Nubia was of considerable importance to the pharaonic state (Klemm and Klemm 2013). Towns such as Sesebi may have been founded to control and maximize gold extraction (Spence et al. 2009). At Amara West, hard

stone grinding stones suitable for quartz processing have been found in several parts of the site; the EES also recovered a ceramic vessel with lid, within a magazine dating to the earliest architectural phase, “filled with large and small lumps of gold-bearing quartz ... generous veins of gold and some small nuggets” (P. Spencer 1997, p. 106, pl. 81:d). Nonetheless, the small population, and paucity of such remains, suggests goldworking was not a vast industry at Amara West.

some extent cult and ritual — remains problematic. Talking, presumably among the most common activities of any inhabitant at Amara West, leaves no trace for the excavator;³⁵ sleeping,³⁶ and reading³⁷ are little better. Nonetheless, with many of these houses comprising only three to four rooms, flexibility of space use must have been essential, and rather simple circulation and access patterns for both inhabitants and visitors mask the complexities and dynamic nature of how people used, and moved between, spaces within houses (see Nevett 1999, pp. 156–57).³⁸

Responses to changing household circumstances would often have occurred rapidly, or repeatedly with seasonal variations,³⁹ but the replacement of houses (or substantial parts thereof) was also conditioned by the “use-life” of such buildings, as dictated by environment, construction material, and activities that occurred within. In Syria, studies of more recent mudbrick house compounds indicated an expected use-life of thirty to fifty years (Kamp 2000, p. 91), broadly consistent with what is found with present-day traditional mudbrick houses in the Amara West area.⁴⁰ Deterioration and collapse would be accelerated once houses were abandoned, typically beginning with the roof, followed by walls collapsing, undermined by wind erosion and a lack of maintenance (Kemp 1995, pp. 150–52); such buildings nonetheless continued to affect the inhabitants of other buildings.⁴¹ Individual/household-level choice was not, of course, only related to change and innovation, but also perpetuating the status quo, particularly maintenance of a building’s fabric and its symbolic purpose.

Beyond the individuality of houses and homes which together form a neighborhood, the choices witnessed through the architectural record at Amara West warns us against normalizing the character of settlements and towns as a whole, and in turn assuming that character was fixed. Rather than referring to “temple-towns in Nubia” and discussing motivations for their construction,⁴² we are reminded that these settlements had different foundation histories, longevity of occupation, and distinct climatic and environmental limitations. Moreover, until the hinterland of these sites is better understood, how each spoke, and responded, to existing indigenous populations in the local area remains largely unknown.⁴³ At Amara West, the increased density of houses might reflect an increasing population, and perhaps some

³⁵ Ethnographic documentation in Madagascar cautions us against assuming private conversations were best suited to houses — gossip is referred to as “granary talk,” that location seen as a more suitable setting for such interaction (Waterson 2000, p. 179). The closely spaced houses and rooms of Amara West, with construction methods precluding isolation of sound, may have prompted similar approaches to privacy.

³⁶ A bed alcove is found in one villa at Amara West (N. Spencer 2009, pp. 54–55, pl. 16), but where individuals slept is unknown for all other houses.

³⁷ The copying, and thus reading, of literary classics at Amara West is at least attested (Parkinson and Spencer 2009); scribal equipment, typically of perishable material, is rarely found in settlement contexts.

³⁸ Access diagrams are a common component in household analyses. For Egypt, see Spence 2010 and this volume.

³⁹ For example, did food preparation take place within different spaces in summer and winter?

⁴⁰ Abandonment of individual houses need not be permanent, circumstances prompting households to relocate, whether seasonally or for longer periods. Such “disoccupation” is very common in the Abri area, as parts of families seek work in Khartoum or elsewhere.

⁴¹ A papyrus records builders inspecting an abandoned house in Oxyrhynchus (A.D. 121), at risk of collapsing (Marouard 2008, pp. 127–28 n. 40).

⁴² The debate around the motives underlying Egyptian occupation of Nubia in the second millennium B.C. (Kemp et al. 1997; Smith 1997) affords almost no consideration as to how individual/household agencies could actively reformulate the nature of those settlements.

⁴³ David Edwards and Ali Osman (2012, p. 67) wonder if the construction of walled towns led to some resetting of indigenous populations.

more “Nubianized” inhabitants, made more feasible with a reduction in state investment at Amara West. The increasing hybridity of cultural expression was borne of the sustained entanglement between Egypt and Kush, but the scale and nature of that hybrid expression may have been specific to each settlement, and within each town, fluctuated across time. Amara West displays an evolutionary trajectory — attested at house, neighborhood, and settlement level — from a royal foundation to a more heterogeneous, perhaps self-organizing, community of individuals and households. The town was a very different place to live in 1180 B.C. than when founded approximately one century earlier.

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Crucial Contexts: A Closer Reading of the Household of the Casa del Menandro at Pompeii

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This article aims at underlining that dealing with Pompeian archaeology in general and with single households in detail needs a more differentiated analysis and knowledge of the several levels that constitute what we usually take to form a context. Choosing the Casa del Menandro (I 10, 4. 14–17) as a case study it will turn out that it is by no means sufficient to isolate and investigate the movable objects for a better understanding of households as social items. As I am going to demonstrate, a close reading in terms of social history does inevitably need the investigation of different layers of contexts — spatial ones, architectural ones, object-focused ones, historical ones, and others. And looking at the household inventories we firstly have to analyze how different sets of objects came into being before defining its so-called functions. Finally it will turn out that in certain cases we are able to detect different households within bigger ones and by this get a better understanding of Roman *familiae* living within the same boundaries.

People came back to enter the house, to get from room to room by perforating the walls and look for precious objects to take with them (fig. 9.1). They risked their lives — and at least three of them died there¹ — perhaps driven by their own poverty and the loss of nearly all their property as a result



Figure 9.1. Series of robber trenches in the Insula of the Menander at Pompeii (photo by J.-A. Dickmann)

¹ For the discussion of the three skeletons of the Casa del Menandro at Pompeii as former inhabitants or looters, see first Maiuri 1933, pp. 11–16 (reprinted in Stefani 2003, pp. 57–63); Ling 1997, p. 10; and Lazer 2009, pp. 94–95, contradicted by Cerulli-Irelli 1975, p. 295, and Dickmann 2011a, pp. 306–07.

of the eruption of Mount Vesuvius; thus the hypothesis of what happened shortly after the catastrophe.

We are not able to state when precisely people returned to Pompeii but very probably they did it only a couple of days or weeks after the 24th of October in A.D. 79 when the volcano buried vast areas to the south and west of it.²

There has been so far no systematic investigation of the traces of those people returning to the city and looting the houses. This is all the more remarkable since modern archaeology has become well aware of the importance of analyzing domestic finds and their contexts. Very often we are indeed confronted with mixtures of finds within restricted areas and spaces of Pompeian houses, mixtures that do not tell us anything specific about a certain use of objects or about characteristic areas or rooms they were used in.³ A closer look at the bigger Pompeian households would disclose that many of them had been reentered and looted at least partially shortly after the catastrophe. And before that, during the hours of the eruption, people had tried to gather valuable items, money, jewelry, silver statuettes, and other materials. Since some of the returning people must have been familiar with the topography that was still visible in its rough outlines it is not that surprising that many bigger houses were looted. Apart from the large estates it was therefore mainly smaller houses that offered numerous inventories and larger contexts of finds. Thus the usual storage of objects had at least partially been mixed up before survivors entered the ruins and archaeologists excavated them.⁴ Archaeologists aiming at contextual analyses were thus led to mainly investigate the smaller houses, which unfortunately do not show the same degree of spatial differentiation. So while architecture dominates the investigation of larger houses, it is the objects from smaller dwellings which attract people's interest. But there is no common sense what, in case of a systematic investigation of the Roman house as a household, comes first: the architectural structure or the analysis of the set of finds. There is of course no general answer to this question. But in the end this leads to the problem of what we call a context, and if we take it to be an architecturally defined space with all its interior furnishings or, on the other hand, a set of objects that represents daily activities of identifiable people in whatever area. In case of the Casa del Menandro, however, there is no such choice. Because the house itself had been looted and many objects taken away — as is to be suggested when looking at the number of robber holes⁵ — the historian and archaeologist examining its entirety as a household is forced to start with the study of the architecture.

The Casa del Menandro at Pompeii: A Case Study

The Casa del Menandro was located in a small side lane close to one of the two most important crossroads of ancient Pompeii, the Via Stabiana (*cardo*) and the Via dell'Abbondanza

² For the new dating of the eruption of Mount Vesuvius, see Borgogino and Stefani 2001; Stefani and Borgogino 2007; and Stefani 2011.

³ Compare Allison 2004, p. 124, esp. pp. 146–53; and Allison 2006, pp. 373–98.

⁴ Compare the number of finds in the neighboring Casa del Fabbro (I 10, 7; Allison 2006, pp. 158–213), or see Berry 1997, pp. 107–61, esp. p. 151 with statistics of found vessels in smaller units. This problem is well

known as the “Pompeii Premise” and has widely been discussed. Nevertheless this article is not the place to enter into or to retrace the debate that has been going on since the 1980s (see Binford 1981; Schiffer 1985; Schiffer 1987; Allison 1995; Murray 1999; and LaMotta and Schiffer 1999). Instead of a theoretical discussion there is a stronger need for the rereading of individual contexts.

⁵ For more details, see below.



Figure 9.2. Pompeii, Casa del Menandro (I 10, 4. 14–17). Dark green shading indicates the owners' central living quarters, light green indicates the slave quarters at the peripheries (basic ground plan drawn by N. Seelaender, Landesmuseum für Vorgeschichte Halle, Germany)

(*decumanus*; fig. 9.2). In A.D. 79 the house covered about 55 percent of the ground of the whole insula, that is, about 1,800 square meters. It was the dominating unit of the insula stretching toward all its edges and one of the few very big houses of late Pompeii.

A closer look at the ground plan allows a reconstruction of the broad outlines of the house's history. The series of neighboring houses forming the northern edge of the insula makes clear that the later Casa del Menandro had its origins in a small terraced-like house erected during the third or second century B.C. Only afterward, and probably in several successive stages, was it enlarged by taking over neighboring units or parts of them. These acquisitions were used to build the large columned courtyard (peristyle), the new reception rooms along the east portico (fig. 9.2, rooms 15–19), and the private baths at the southwest corner (rooms 46–49). Beyond that there existed several quarters which obviously were not designed to host the owner's family or his friends or guests. Small rooms or even cells lacking every sign of a minimal standard of decoration point to a simple use as spaces for working processes or storage. Especially those along the east side of the insula (rooms 35–38) have therefore been interpreted as slave cells. Their separation from the central parts of the *domus* by long corridors has ever been observed and taken as confirmation of this assumption. Because of the high preservation of wall decorations around the inner living quarters of the house excavations underneath the most recent level were reduced to a very restricted area inside the largest reception hall (room 18). Although we know of older and smaller dwellings below this part of the insula, we are not able to reconstruct the detailed history of the Casa del Menandro. This is also the reason why we cannot tell precisely when the successively added areas were taken over and rebuilt. As a result of this coarse description it is to be said that the *domus* as an atrium-peristyle house referred to the typical form of upper class houses. What instead is remarkable and should be investigated more accurately is the fact that it was almost entirely surrounded by large areas that do not show any sign of elevated living standards. Hence nearly half the ground plan was occupied by small and ordinary rooms, by open working spaces, and a garden.

Any effort to deepen our insight into the organization of Roman households is obliged to focus primarily on the very latest status of the houses, that is, the last months and weeks before the eruption. But older architectural structures always influenced the layout of ground plans and make it difficult to recognize characteristic ways of organizing the household. As mentioned above it is therefore necessary to analyze all the finds that are still traceable today.⁶ But one problem remains. As shown below the precise conditions of the excavation and the exact situation of the archaeological recovery are too important to deal with the finds alone.

Integrating Architecture and Finds

The Insula of the Menander was excavated by Amedeo Maiuri in the twenties and thirties of the last century and has been very carefully reinvestigated since the 1980s by Roger Ling

⁶ As far as the evaluation of the archives and excavation documents at Pompeii and Naples is concerned, the important studies of Penelope Allison cannot be overestimated. For the individual interpretation of

finds and types of objects and any suggestion toward certain functions and purposes, however, there still remain many problems and different interpretations; see Allison 2004, pp. 153–58.

and his team.⁷ Old photographs show that the house had collapsed nearly totally and that its walls did not rise much higher than about 3 meters. Since parts of the broken walls, many columns of the courtyard, and large amounts of wall plaster were found the excavators decided to reconstruct the house as totally as possible. Unfortunately, they started this task when the excavation was still going on.⁸ This observation alone raises doubts toward any suggestion of a detailed and minute excavation process. And this is one reason why not only movable finds have been less carefully documented but also the traces of robber trenches and holes were blurred by filling them in and blocking them. As for the robber trenches, there are still traces of at least fifty holes which underline a more or less systematic looting of many parts of the insula (fig. 9.3). And a detailed analysis of the fabrication with picks and hocks in case of still unwallied trenches reveals the direction the holes were hacked into the walls (ca. thirty cases). As for the Casa del Menandro, all living rooms around the peristyle (fig. 9.3, rooms 8–12 and 14–21) show traces of such trenches and therefore seem to have been looted. Many of the objects documented as coming from the living rooms were made of bronze — like hinges, lock fittings, rings, and bosses — and so originally were fixed to wooden doorslabs or boxes. There were almost no movable finds apart from some glass bottles (room 11), which originally were kept in a wooden box possibly locked and too big and worthless to be taken away. But who were these people? Were they the former inhabitants of the house, or neighbors who knew about the wealth of its equipment, or only survivors of the catastrophe who were familiar with the site and thus able to identify the grand houses of the buried city underneath the ashes?⁹

Interestingly, the contexts of finds in other parts of the Casa del Menandro are far more manifold. The so-called House of the Caretaker (I 10, 16), which seems to have formed its own household within the Casa del Menandro, offered a whole range of different objects, as there are, for example — coming from the entrance hall — simple jewelry, glass bowls, cups and flasks, bronze pans and cooking pots, simple pottery and tableware (*terra sigillata*), and iron tools.¹⁰ A marble table was placed against the rear wall — an old photograph shows that the excavators interpreted it as a kind of show-table to present some more individual objects as, for instance, bronze strigiles (scrapers), bronze jugs, or a so-called *casseruola* (Maiuri 1933, p. 432, fig. 163). The findspots and further observations made by the excavators enable us to get an idea of how the atrium area was organized. While the remains of a bed in the southwestern angle and some personal belongings — for instance, a glass cup (*modiolus*) and a so-called *Faltenbecher* of the *pareti sottili*-type — hint at a use of this angle as an individual and somehow more private space,¹¹ the northern half of the hall was strongly characterized by cooking and working facilities. Apart from the small platform to prepare food on and a niche,¹² which was the usual place to worship the house gods, many iron tools for gardening

⁷ See the volumes having been published since 1997 in the series *The Insula of the Menander at Pompeii*.

⁸ This is also confirmed by old photographs taken during the excavation and which today are kept in the phototheca of the Soprintendenza Archeologica di Pompei and of which a few have been published, for instance, in Stefani 2003, p. 88; Dickmann 2011b, p. 311, fig. 2.

⁹ A more detailed analysis revealed that the invaders were not the former inhabitants (see for now Dickmann 2011a, p. 306).

¹⁰ The internal unit had firstly been called the procurators house by the excavator Maiuri (1933, pp. 186–220); see also Allison 2006, pp. 124–43 with numbers 712–872; Opdenhoff 2011, pp. 259–63 (based on her unpublished M.A. thesis delivered at the University of Heidelberg in 2011).

¹¹ Stefani 2003, p. 164, D9 and pp. 169–70, E5; Opdenhoff 2011, p. 257 with fig. 1.

¹² Maiuri 1933, p. 205, fig. 94; Stefani 2003, p. 23 with photograph.

and agricultural purposes were found, probably formerly fixed to the northern wall. While the southern half of the atrium with its door leading to the service quarters and thus controlling the access from the street was furnished with personal belongings, it was the northern half which housed less individual and more common and universal items.¹³ This might perhaps be explained with the nearby doorways toward the *taberna* at the front of the house and the rear garden area. Both were working areas and probably used by more than one person. Thus it seems as if the different living and working spaces had been directly related to the doors in the eastern, southern, and western walls of the atrium.¹⁴

On the one hand, this atrium could have been used for sleeping and cooking, for worshiping and presenting certain objects on the table at the rear wall, as well as for the storage of tools. On the other hand, it worked as a secondary entrance to the big house leading to its back-quarters and from there into the central peristyle. But looking at the different contexts of objects from the small atrium area, it becomes obvious that it does not make sense to reduce the problem of interpreting the finds to so-called contexts which only follow the well-defined architectural structures, that is, rooms. Especially in smaller houses there probably was a remarkable difference between the simplicity of architectural features and — due to limited options — its multifunctionality. Space seems to have been differentiated along axes which more referred to social vicinity or distance than to different types of activities. This might lead to situations like in the atrium of the House of the Caretaker which do not at first sight show clear boundaries between different sections or angles within the same architectural unit.

Apart from more domestic and more public activities, like sleeping, on the one hand, and cooking, on the other, it is the objects found there which demonstrate a wide spectrum of activities which clearly refer to people of socially low origin.¹⁵ Tools and personal belongings as well could of course have been moved and thus might occur in very abnormal contexts, especially when we take into account the final catastrophe of the Vesuvian cities. People did not need to flee during the very first hours of the eruption but might later and suddenly have decided to gather their valuable items and escape from their homes. Until today we have two less-well-documented houses to reach a firm basis as far as our knowledge of “normal” sets of finds is concerned.

The formerly listed characteristics of the ground plan of the Casa del Menandro and — as one example — the aforementioned finds from the small entrance hall (room 41) give us a rough idea of the sharp distinction between the elevated living quarters and the servants areas. But due to the looting there are no reliable and representative statistics on the number and type of objects in both quarters. Because most of the elevated living rooms seem to have been plundered quite systematically it is difficult to evaluate the remaining contexts of finds. This is true for the western kitchen area (rooms 26–28) and the rear garden (R, S) as well. In this respect the Casa del Menandro stands for many other Pompeian houses whose inventories were distorted in a similar manner. Of course all the finds need to be integrated in any kind of thorough investigation of this big household but it is — as demonstrated

¹³ This twofold distribution seems to highly resemble the one of the Barber house famously described by Bourdieu (1973).

¹⁴ Again, compare Opendhoff 2011, pp. 259–63.

¹⁵ This is easily to be recognized when looking at the different forms, types, and materials of objects (ceramics, glass, bronze table ware, cooking and kitchen wares, gardening tools); see Allison 2006, pp. 124–34, pls. 51–58.

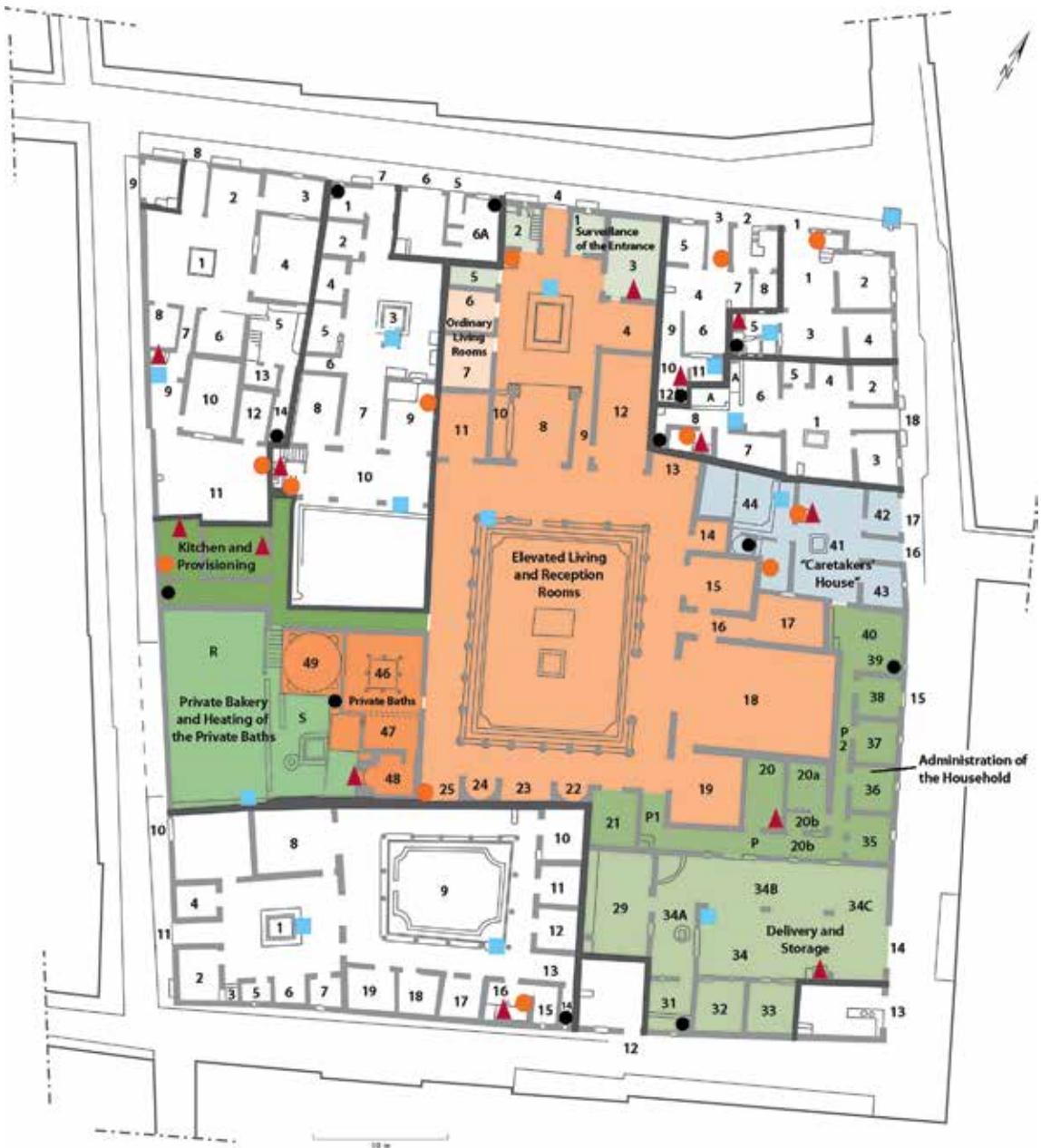


Figure 9.4. Pompeii, Casa del Menandro (I 10, 4. 14-17). Shading of the different servants' quarters including the mapping of cooking facilities (red triangles), latrines (black circles), water providing items (light blue squares), and worshipping niches (orange circles) inside the Casa del Menandro and its neighboring units (basic ground plan drawn by N. Seelaender, Landesmuseum für Vorgeschichte Halle, Germany)

below — not only helpful but indispensable to analyze the architecture and the spatial structure to learn more about the organization of this big Roman household.¹⁶

The Architectural Layout of a Roman Household

So what is a Roman household? The grand houses' household is analyzed below as a differentiated social and economic entity that did not only need certain spatial dimensions but a recognizable spatial differentiation and furnishing which guaranteed a steady provisioning and also waste management. As a first step all the architectural features, small fixtures, and installations must be seriously taken into account as well.

Often overlooked but nevertheless very important for any kind of living and working process are the latrines. Since they were equally used as disposals for fluids and other kinds of garbage they can tell us a lot about the organization of a household. Recent studies in the Vesuvian cities have clearly demonstrated that nearly every dwelling, small *tabernae* and workshops included, had their own toilets or cesspits (Hobson 2011; Flohr 2011). This is likewise confirmed by the Insula of the Menander. While the four separated shops and workshops at the edges of the insula were not excavated properly to prove the existence of latrines, all the other units, including the small houses at the north-eastern angle, had their own toilets.¹⁷ In contrast to this observation, the Casa del Menandro alone had at least five latrines. Surprisingly, they are not located near the central living and reception quarters but are evenly distributed in the peripheries of the big house (fig. 9.4, black circles). As they were clearly distanced from the main living rooms they were not intended for use by the owner's family or guests.¹⁸ Instead these latrines were built to serve the servants' quarters. However, the number and proximity to others is stunning. Because latrines usually were located in or near the kitchen or cooking podium, where they could also be used for draining waste water, a better understanding of the toilets is closely linked to an investigation of the cooking facilities (fig. 9.4, red triangles). Within the Insula of the Menander every unit had its own cooking podium, which usually was located in the rear part



Figure 9.5. Pompeii, Casa del Menandro (I 10, 4, 14–17). Small stove (*fornello*) in the large dining room 3 (photo by J.-A. Dickmann)

¹⁶ See the general remarks in George 1997, p. 317, which underline that archaeology so far has failed to investigate slaves' suites more properly.

¹⁷ The rentable apartment in I 10, 5 had its own latrine in the upper story. For the other latrines of I 10, see Elia 1934, pp. 268, 274, 278, 312, 334, 344; Ling

1997, pp. 29, 40, 95, 108, 114, 118, 145, 152, 173, 209, 214.

¹⁸ Contra Ling (1997, p. 140), who assumes that the owner and his family “had to penetrate the service quarters to use the latrines”; instead I prefer them to have used chamber pots (*lasana*).

of the house. Again, the Casa del Menandro shows a different distribution. There are six cooking facilities inside the house and very probably a seventh, located in the oven underneath the bathrooms (room 48). Aside from this domed oven and the large podium in the main kitchen (room 27) all the other cooking facilities were constructed as small stoves (so-called *fornelli*; fig. 9.5). The reduced platform with only one fireplace just allowed the production of simple dishes like the Roman *puls*, a mash made of cereals and one of the everyday meals of ordinary people. But *fornelli* have been much discussed without ever being properly studied.¹⁹ Often they were explained as heating facilities, which seems highly improbable. All these small stoves in the Casa del Menandro were again located in rooms at the periphery of the house and thus in the servants' quarters. Regularly placed against one wall of the room they were certainly used as cooking facilities. This is clearly visible from the construction. While the back and the thinner side-walls of the stove prohibited an equal spreading of the heat they instead protected the fire from ventilation. For heating purposes a central fireplace in the center of the room would have been much more convenient. When suggesting they had really been heating facilities one wonders why we do not find them more often at Pompeii. And since we know of many portable braziers fired with charcoal from smaller houses this was by far the more intelligent way to heat a room.²⁰

There is another argument that corroborates this interpretation. The cooking platform in the House of the Caretaker with its niche above has already been mentioned.²¹ A second very similar context originally existed in room 28 in the western part of the grand house but has been lost nearly totally in the meantime. It was Maiuri who observed the remains of a small stove of similar type at the foot of the east wall (Maiuri 1933, p. 215). Today nothing is left or anyhow detectable, perhaps due to the modern fill of the room. But in the north wall the upper part of a small niche is preserved which again alludes to small often only painted Roman *sacella* very often found in kitchens of Roman houses (Ling 1997, p. 101, pl. 46). These were places for worshipping the gods of the house and the hearth. The same combination of a fireplace and a niche was documented in the neighboring kitchen (room 27). Finally there are two further *fornelli* in the so-called slave quarters in the southeast area of the Casa del Menandro, placed against the south wall of the larger room 20, and a sixth stove located at the south wall of the stable courtyard (room 34). The seventh facility inside the Casa del Menandro where hot dishes could have been prepared was in the large domed oven (room 48) underneath the private baths. Without a shop nearby and far from the back entrance to the house the owner obviously preferred to have his own homemade bread. Although I cannot prove that the oven was also used to cook ordinary meals it seems highly probable that it was only fired from time to time when the baths were heated and at the same time bread was baked. But during the other days this oven could have easily been used for preparing simple daily and hot dishes (Allison 2004, p. 125). As with the latrines, there are abundant cooking facilities distributed around the main living quarters of the house and along its periphery.

This distribution of facilities inside the big household proves to have been a deliberately chosen form of organizing different working processes inside the *domus*, as a final look at the

¹⁹ Maiuri 1933, p. 38 with n. 24 (stove to prepare pigments); Ling 1997, p. 51 with n. 8, p. 114: "What function it served remains unclear"; pp. 139–40: "for cooking? for an industrial process?" Recently but again without a clear statement about its purpose, Allison 2006, pp. 26, 384.

²⁰ See, for example, the brazier from the peristyle of the Casa del Menandro itself (Maiuri 1933, pp. 433–34, with fig. 164).

²¹ See Ling 1997, p. 117. Ling neither seems to agree with this interpretation nor does he give an alternative explanation.

disposal and distribution of water inside the insula will underline (fig. 9.4, light blue squares). Because the cisterns did not offer fresh but only rainwater — while people took their running water from the public fountain outside the insula at the northeastern corner — this mapping of cistern heads inside the insula might not be thought that instructive. But rainwater was important and used for a variety of purposes, for gardening, for cleaning kitchen rooms and floors, for feeding animals, and was needed for every kind of repair work, like plastering or mixing mortar. Mapping the places where rainwater could be obtained complements the picture we have so far. There was a cistern head near kitchen areas in all the units of the insula. Inside the Casa del Menandro itself were five water-providing places, two of them in the old atrium and the peristyle, three others at the peripheries.²² All these different installations — the kitchens and cooking facilities, the cistern heads and the latrines — were located close to one other and created small centers of daily activities. And even the niches as focal points of domestic religion and private worshipping were installed nearby.²³

Taking this set of furnishings as a first sign of certain household activities it becomes obvious that the Casa del Menandro had at least three but in all probability up to six different household centers (fig. 9.4); firstly the so-called House of the Caretaker, secondly the area around the stable yard (room 34) in the southeast, and thirdly the garden area behind the baths. Due to the existence of its own cooking place and a separate latrine the quarters behind the largest living rooms (rooms 15–19) and those around the kitchen (room 27) in the west should also be interpreted as centers of daily work.²⁴ Lacking its own latrine, but providing a small stove (room 3; fig. 9.5) and the cistern head there is a sixth area around the main entrance of the Casa del Menandro in the north.²⁵

Identifying Slave Households within a Grand Pompeian *Domus*

Going one step further, this kind of differentiation of several integrated but seemingly autonomous households becomes even more clear. The stoves in rooms 3, 20, and 28 are placed in comparably large rooms which differ remarkably from the neighboring cabinets. The main purpose of these chambers has not been explained satisfactorily so far. Usually they are taken as storerooms although installations which clearly hint at that purpose, for instance, shelves or hooks, are missing and the rooms themselves are quite larger than typical cells for storage. The decision to install the small stoves instead alludes to their use as simple dining rooms, which at night very probably could have also been used as sleeping rooms. Additionally there was the niche in room 28 which shows that people probably used this chamber for offerings and prayers. So apart from recognizing different centers for activities it seems likely to construe these rooms as living or sleeping chambers and thus temporarily as areas where groups of servants or even families gathered for more than just work. This interpretation is corroborated by Maiuri's observation of remains of a simple bed that he saw in room A underneath the bath complex together with a bronze lamp stand and a bronze washing pan (Maiuri 1933, pp. 217–20; agreeing Ling 1997, p. 95). Linked to the latrine in E there is no

²² One more cistern head had existed in the western wing of the peristyle but was blocked when the courtyard was walled in early imperial times.

²³ For a more detailed analysis, see Fröhlich 1991, pp. 28–29.

²⁴ The upper story above rooms 20, 20a, and 35–40 might have formed a seventh household center, but at the moment this remains mere speculation.

²⁵ For further arguments, see below.

doubt that this room together with its adjoining cellar-like rooms functioned as a living and sleeping quarter for the slaves or freedmen whose task was the management of the oven and the mill. In the stable yard at the opposite end of the *domus* eating and sleeping respectively could have taken place in rooms 32 or 33 or in one of the formerly existing upper-floor rooms while in the House of the Caretaker we know of two beds, the already-mentioned one in the atrium and another in room 43. In the entrance sector at the northern edge of the Casa del Menandro we finally have to mention the small room 2, which not only had a steep staircase to the upper floor but was the findspot of sixteen tableware plates of different sizes, obviously a whole or nearly whole set. The storage of plates coincides well with the interpretation of room 3 as a living and dining room and being used to serve food. Together all these chambers seem to have formed a kind of a doorkeepers' unit and thus the sixth interior household.²⁶ To sum up: the western part of the Casa del Menandro was divided into the kitchen area, on the one hand (dark green in fig. 9.4), with the large cooking podium and its siderooms (rooms 26–28, M2), and the southern area with the garden and the bakery underneath the baths, on the other hand (lighter green, rooms A–E, R, S). As far as can be stated at the moment both quarters shared the same water supply but apart from that were run independently. On the eastern edge we can observe a tripartition into the House of the Caretaker (light blue), the central area around the corridors P, P1, and P2 (green), and a southern part with the stable yard and its surrounding rooms (lighter green, rooms 29–34). Again it is the water supply that was shared between the central and the stable yard area. And finally there was the entrance wing at the northern edge (rooms 1–3). Hence it becomes obvious that basic needs of the big household, different activities and responsibilities were organized by separating several areas which seem to have been inhabited by different people and groups of servants, actually slaves or freedmen. The identification of dining and sleeping rooms within these interior households enables us to suggest that these persons — and probably these were whole slave or freedmen families — were trained and specialized in conducting certain activities which could not or should not be carried out by non-trained people.

Without being able to describe the details because we lack any information, room 18 offers a further general insight. It was the biggest dining room of Pompeii known so far and was built to hold formal dinners and receptions. Therefore the house owner must have had a cook and persons familiar with preparing and serving whole series of dishes. The facilities for this service are to be located in the western servants' quarter where we have the large kitchen (room 27) and a separate stove in the neighboring room 28 thus demonstrating that the kitchen was indeed the center where more lavish meals were produced. And beyond that the adjoining garden area did not only provide the domed oven but also a mill, the lower part of which is still visible today in area S, and a deep water basin, the function of which remains somehow unclear.²⁷ Grinding, firing the oven, and baking bread needed well-trained people. Due to the existence of the adjoining rooms (A–C) and the latrine (G) it seems reasonable to expect this group of persons not only working but also living here.²⁸

Shifting the view toward the stable yard (room 34), a similar suggestion has to be made. Working there, for example, contained the care for the animals in the stable (room 29), the

²⁶ The absence of a latrine here cannot be explained at the moment and raises some doubts.

²⁷ I cannot see why these installations were mentioned neither by Maiuri (1933) nor by Ling (1997).

²⁸ Not that explicit Ling 1997, p. 95, and Allison 2006, p. 314.

unloading and storage of goods, and the maintenance and repair of carriages. In contrast to this well-lit quarter the central area long the P-corridors to the north differed remarkably in its spatial organization. Many small cabinets (rooms 20a, 35–38) and a second floor with further rooms hint at a considerably larger group of people living here. As various objects show — for instance, statuettes or fragments of two bronze mirrors²⁹ — these rooms indeed seem to have been inhabited, although it is admittedly difficult to determine whether they had been mere living rooms or were at the same time also used for storage purposes. Because we lack any more specific archaeological record concerning the activities executed here it is the close nexus between the large peristyle of the Casa del Menandro and the P-corridors that helps us to understand the idea behind it. Short ways to the reception area of the *domus* suggest that the people living here were directly involved in the realization of the receptions and the administration or management of the big household. From epitaphs and literary texts we know of such duties within big households, for example, the *dispensatores* (administrators of finances), the *cubicularii* (personal servants), and the *nomenclatores* (perhaps to be translated as masters of ceremony). If the suggestion and interpretation of the northern small house I 10, 16 as the so-called caretaker's unit is correct, the close relation between the latter and the administration quarter was reasonable. Finally and consequently we would then consider the small cubiculum 1, the small cabinet 2 with its cupboard, the niche, and the staircase to the upper story as well as the larger dining room 3 as the doorkeepers unit (*ostiarus*).

Apart from the architecture and the finds it is finally worth throwing a short glance at a third type of archaeological record, the graffiti. From the Casa del Menandro we know of about 160 such inscriptions which, as Henrik Mouritsen has shown, can be roughly grouped into four categories: texts, drawings, numbers, and simple rows of strokes (Mouritsen 2011b, esp. fig. 1) (fig. 9.6). Again it is helpful to map these records to see that there has been no equal distribution all over the house. Instead we find them concentrated around the entrance of the *domus*, the porticoes of the peristyle, and the kitchen corridors. Unfortunately, the wall-plastering in the servants' quarters were not protected since usually they had only been coarsely made or whitewashed plasterings. So until today all the graffiti have been lost and we are obliged to refer to the documentation which normally does not give the original size and characteristic style.

In the kitchen area twenty-seven graffiti were recorded concentrated on the walls to both sides of the entrance itself. Totally different from this context the neighboring room 28 that has been identified as the dining and sleeping room of the servants only offered one single graffito and three phallus drawings. It is the concentration in the corridor and around the entrance of the kitchen which alludes to certain assumable behaviors of the writers. Possibly short breaks during work sometimes stimulated the servants to scratch or write into the plastering of the walls. And since the kitchen door was the focus of movement in this area, the “author” could be sure that others sooner or later would find and read the texts. Out of more than twenty graffiti found here there were twelve alphabet-writings in Greek and seven smaller texts or personal greetings and only three numberings.³⁰ Three alphabet-writings only show the very first two letters, four others only three, four or five letters which clearly shows that the writers were learning. Mistakes at the fourth or fifth position identify them as

²⁹ Allison 2006, pp. 116–23 with numbers 649–702; Stefani 2003, p. 160, C27; p. 164, D6, D8; p. 169, E1; p. 188, K1.

³⁰ Della Corte 1933, p. 292, who cites twenty-seven numbers (with the alphabets as 157–60 and 167–74), while Mouritsen 2011b, p. 278, fig. 1, only gives twenty numbers (with ten alphabet writings).

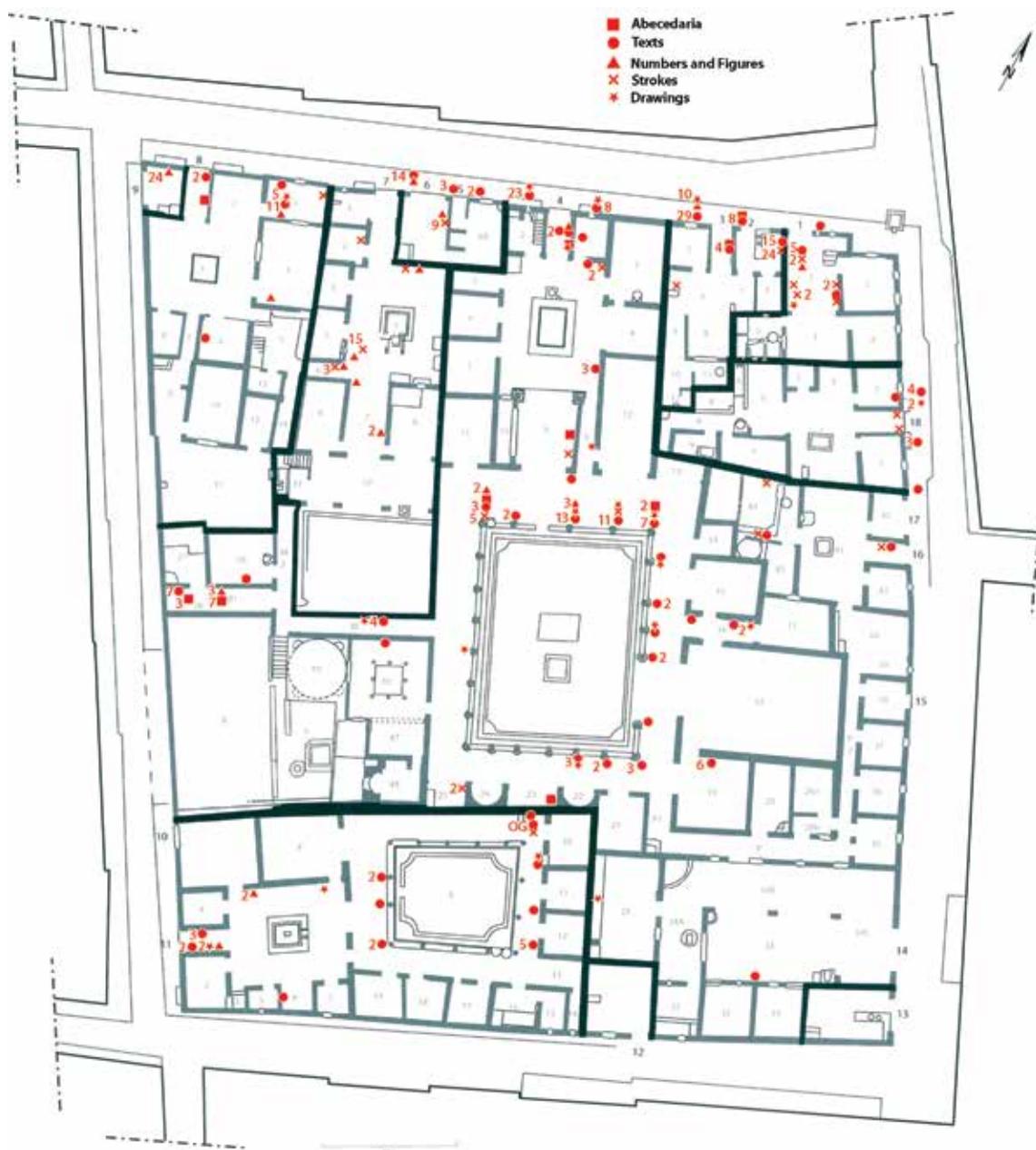


Figure 9.6. Pompeii, Insula of the Menander (I 10). Mapping of the graffiti by H. Mouritsen (after Meller and Dickmann 2011, p. 278, fig. 1)

beginners and therefore it seems likely that they were children.³¹ Additionally, Maiuri mentions that these alphabet-writings occurred to the right and below the one naming a certain Crescens, who might have been one of the servants. The writing on the lower part of the wall need not but could perhaps also point at children or younger persons. If this is the case it

³¹ Mouritsen 2011b, p. 281; similarly, Maiuri 1933, pp. 473–74 (“era forse qualcuno dei servi più giovani”).

would highlight that we should assume that not only servants but probably servant families lived in these areas.³² The identification of rooms for cooking and sleeping would be even more plausible. The presence of children who were trained by their parents and introduced into working processes furthermore provided the owner with young and strong servants, guaranteeing effective and successful operations within the household.

A second context of graffiti was recorded in the peristyle area. Seventy-one out of seventy-five inscriptions were scratched into the column shafts of the northern and eastern porticoes in front of the reception rooms. In this case the writers were adult persons because the graffiti were scratched into the columns at levels between 1.20 and 1.75 meters. Here there are only three Latin alphabet-writings (*abecedaria*) but about fifty texts showing that the authors were familiar with writing and reading.³³ The uneven distribution of inscriptions — absent in nearly all the living and reception rooms and present in only small numbers in the southern and western porticoes — leads to the suggestion that they were not written by the owners and inhabitants themselves but by guests and possibly by the staff waiting here for further orders or enjoying a short break. The latter seems plausible at least in the case of Chloe and probably also of Eutychia, two Greek-named women and therefore probably slaves or freedwomen, whose friendship is recorded in a fragmentary but Latin “dialogue” on one of the columns at the northeastern angle.³⁴ Due to their presence in the peristyle wing close to the reception rooms, at least Chloe but possibly both women may have belonged among those slaves who worked as administrators or servants in the immediate surroundings of the elevated living rooms.

Women and children allude to whole servant families, all of whose members were involved into the organization of the household economy and had to perform different tasks.³⁵ Unfortunately there is no further context or detail which tells us more about the size of these families. But on the basis of six separated servants’ quarters within the Casa del Menandro and the assumption of merely one or two children per family or servants’ unit we would have to calculate a number of about twenty people belonging to its staff.³⁶ The identified quarters within the Casa del Menandro, disposing of water and cooking facilities as well as having their own latrines formed the homes and centers of daily life within a really big urban house. If the assumption and identification of larger dining and sleeping rooms is correct these separate areas were appropriate to be inhabited as simple homes. The long corridors that formed a clear separation from the inner center of the *domus* made them hidden servant areas which very probably should not have been quit easily and without duties. So although it is difficult to consider the possibilities and range of individual movements throughout the Casa del Menandro especially for servants, this archaeological analysis offers further arguments. Due to the furnishings and installations of the several units the servants did at least not need to quit their living and working unit. Thus it can be suggested that only servants of

³² For a recent reflection on slave and freedmen families in the Roman household, see Mouritsen 2011a, pp. 137–43.

³³ Della Corte 1933, pp. 284–90 with numbers 67–136; Mouritsen 2011b, p. 279.

³⁴ Della Corte 1933, p. 285 with number 83; CIL IV 8321a.

³⁵ See Mouritsen 2011a, 134, and Saller 2011, pp. 121–27.

³⁶ The presence of slave children needs further detailed investigations. At least there are slight hints in the kitchen area. Of course the assumption of 1–2 children per unit remains speculative, but on the other hand does not seem to overcalculate the average number of members — thus the calculation of at least twenty people forming the staff of the Casa del Menandro.

higher rank and certain duties were supposed to move around and be present in the central parts of the house. As for the servants' quarters it does not only underline the degree of differentiation and organization of work and producing processes but also highlights the fact that the servants were expected to remain inside their units. The aim to reduce long-distance movements throughout the house was directly linked to the intention to hide any sign of labor, dirt, and miasma from the visitors and guests.

In economic terms the big Roman household of the Casa del Menandro was structured by spatially clearly separated quarters which as working and living areas of the servants hint at groups of well-trained people who day by day worked together. At least in the case of the kitchen area in the western part there are signs that point at family-like structures which as social core units guaranteed an early and adequate education of the next generation of servants. Personal interrelations thus created a certain stability within the household as a larger family (*familia* in the Roman sense) and should also have reduced the necessity of permanent control and surveillance. Concerning the daily provisioning of the house owner and his needs a certain specialization and education of the staff was beneficial which at the same time seems to have been combined with the owner's decision to offer the servants a minimal degree of personal or family-like space.

Conclusion

Despite the challenges presented by the archaeological record and excavation methods the Casa del Menandro at Pompeii provides us with important information and insights regarding the big Roman household. While the focus has always been on the reconstruction of the big households the detailed analysis of the formation process and the furnishings — either fixed or movable objects — for the first time was able to identify different and separate slave households within the big house. Architectural features like latrines, altars, ovens, and cisterns were recognized as central installations for these slave areas. It therefore seems highly probable that the slave families disposed of not only a spatial separation from the main living rooms but also a certain degree of familiar private sphere. It is only on the basis of a thorough investigation of all three categories — architecture, furnishings, and the formation processes — that we obtain a wider understanding of Roman households as complex social entities.

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Private House or Temple? Decoding Patterns of the Old Babylonian Architecture

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The subject of this paper is a large building, henceforth referred to as “MBA Building,” founded in around 2000 B.C. at Bakr Awa in the foothills of the Zagros Mountains not far from the headwaters of the Diyala River (fig. 10.1). The site of Bakr Awa was a settlement on the periphery of the eastern Tigris region in a cultural landscape that was under significant

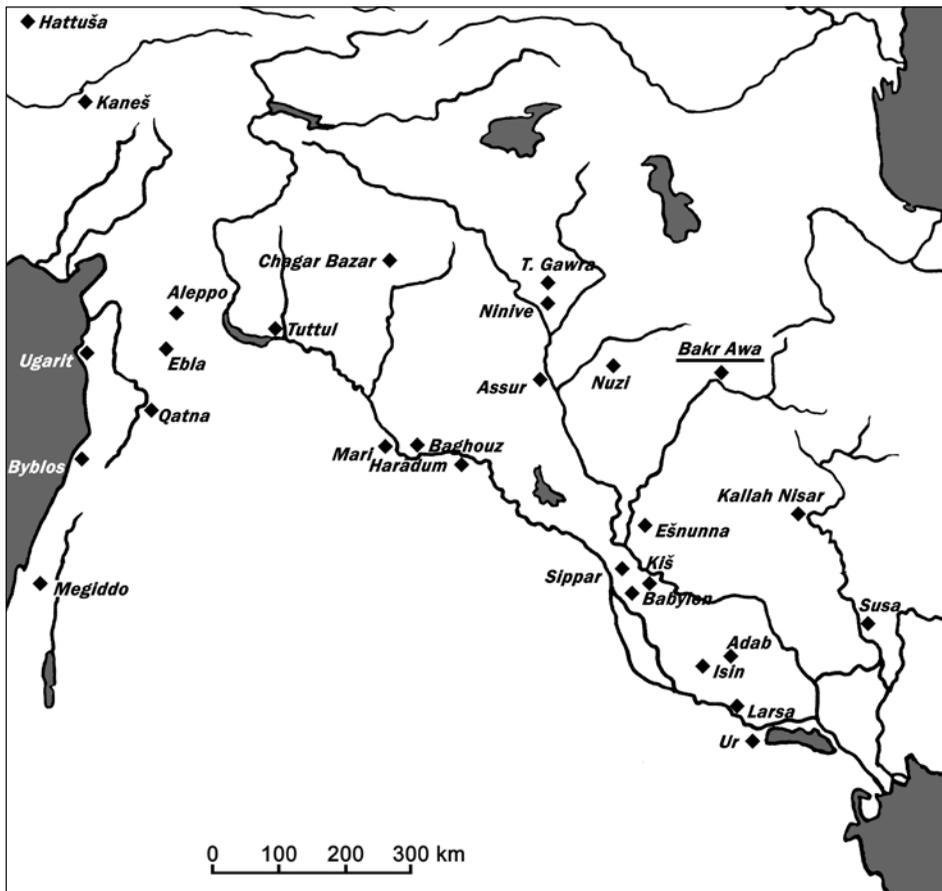


Figure 10.1. Mesopotamian cities about 2000 B.C. (map by P. A. Miglus)

influence of southern Mesopotamia during the third and second millennia B.C.; from the ninth to the seventh century it was under Assyrian rule and belonged to the province Zamua. It was excavated in 1960–1961 by the Iraqi Department of Antiquities and Heritage (Al-Husaini 1962; Madhloum 1965) and re-investigated by the University of Heidelberg during the seasons 2010, 2011, and 2013 (Miglus et al. 2011; 2013). In the eastern area of Bakr Awa the Iraqi excavators exposed the uppermost occupation level of a building which they interpreted as a temple. During the recent excavations the original floors and installations of this building were reached, which indicate that it was used as a dwelling.

The problem of distinguishing sacral from profane buildings is well known from several sites. In different periods and regions of the ancient world there existed building units difficult to fit in their local context. Structures which could have been used as dwellings/palaces or shrines/temples were excavated for instance in the Early Bronze Age layers at Beycesultan (cf. Lloyd and Mellaart 1962, pp. 27–57; Mellink 1964, pp. 303–04; Korfmann 1983, p. 229), and Kültepe-Kanesh (cf. Özgüç 1963, pp. 13–14, plan 1, fig. 1; Naumann 1971, pp. 436–38) as well as on the Late Bronze Age acropolis at Hazor (cf. Bonfil and Zarzecki-Peleg 2007; Zuckerman 2010). The discussion on their functions shows that in some cases the architectural pattern itself is not enough for the identification of a building, but more complex characteristics such as planning, location, decoration, installations, findings, other traces of human activities, and data of the socio-cultural and political environment are needed. Only comprehensive analysis of this kind can afford to link them to well-defined buildings of the same cultural

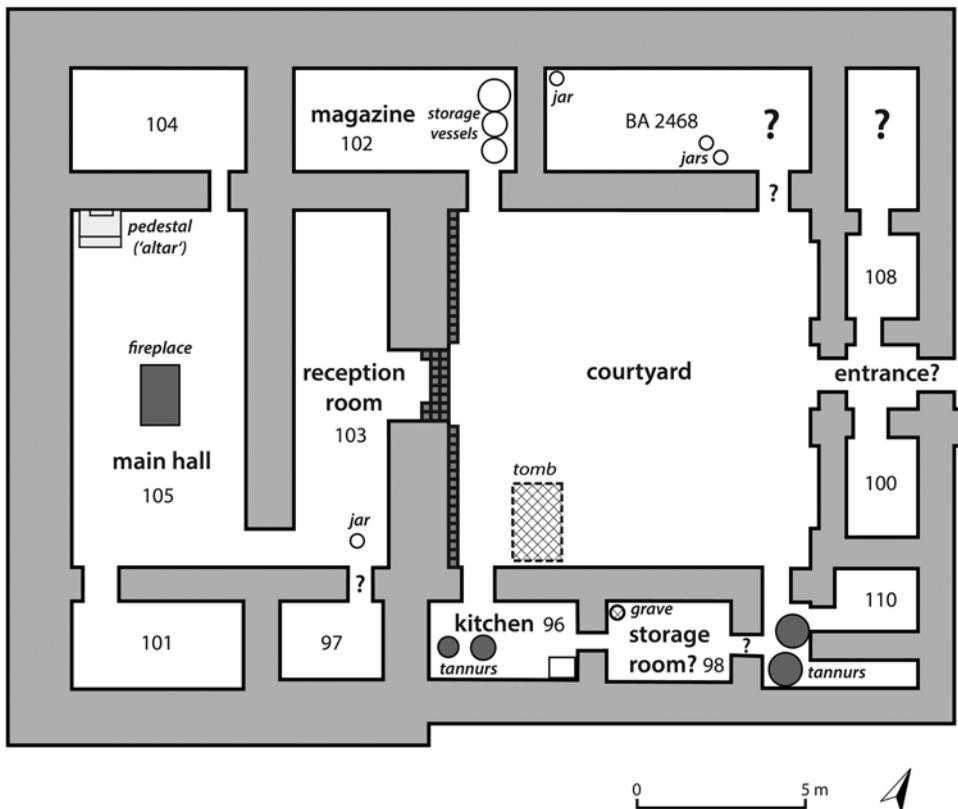


Figure 10.2. MBA Building at Bakr Awa (U. Bürger and P. A. Miglus 2013)

landscape or that of the neighboring regions. Such a combined approach should be used as far as possible to understand the function of the MBA building at Bakr Awa.

Building Description

The MBA Building was a 30 × 22-meter-large mudbrick structure (fig. 10.2). Its walls were well preserved except for the destroyed eastern part at the slope of the mound where the entrance may have been located. A central courtyard formed the core of the house with two big rooms attached to its western side. On the other sides it was adjoined by single rows of smaller chambers.¹

The courtyard measuring ca. 11.0 × 10.5 meters was originally paved with pebbles, pottery sherds, and mud plaster, while a line of burnt bricks ran along its western wall. A wide door in the center of this wall led into a big reception area (room 103). No installations were preserved in this room except for one pottery vessel set into the brick floor remains of the first occupation level. Behind the reception room lay the main hall of the house (room 105). The latter was paved with small pebbles and had two special installations: a pedestal and a hearth. The mudbrick pedestal in front of the northern wall was discovered during former excavations but had never been published in detail. This structure, called “altar” by the Iraqi excavators, seems to correspond to similar installations in the main halls, so-called domestic chapels, in the dwellings of the Isin-Larsa period at Ur and Tell Harmal, where they were usually located in a corner (Woolley and Mallowan 1976, pp. 29–30, pls. 43–46:a; Miglus 1999, p. 72; Bürger and Miglus forthcoming). The second installation was a rectangular, 1.25 × 1.84-meter hearth bordered with burnt bricks in the center of the room (Miglus et al. 2013, p. 55, fig. 17). Its core, consisting of pottery sherds and clay, was coated on the surface with fine hard burnt mortar. Similar hearths were excavated in some halls of the Ur III and Old Babylonian houses at Nippur (i.e., area TB, House I, room 197; McCown and Haines 1967, p. 59, pl. 40A) and Halawa (area A, room 136, level II; Yaseen 1995, p. 9, pl. 6).

Five of the smaller rooms on the northern and southern sides of the house opening to the courtyard were also re-excavated during the recent seasons. The installations placed inside these rooms during the first occupation phase indicate their function as service units. Room 96 at the southern corner of the courtyard was partially paved with burnt bricks and contained two *tannur*-ovens and a wide platform, probably a working facility. The adjacent chamber 98 had no installations but a lot of pottery fragments, and due to its position behind the “kitchen” 96 it seems to have been a storage room. In room 110, which was accessible from the southeastern corner of the courtyard, two big round ovens of 1.06 meter and 1.10 meter diameter respectively were built on its original floor level (Miglus et al. 2011, p. 158, fig. 36); fragments of a large storage vessel were found in the fill above. Three other vessels of this kind and a lot of fragments of smaller jars were recovered in situ in room 102. The adjoining room BA 2468 on the north side of the courtyard contained many pottery fragments, and in its oldest floor remains of three smaller vessels were embedded. Finally, two graves were found in the house, a vaulted brick tomb with two skeletons beneath the courtyard containing pottery from the Ur III/early Isin-Larsa period, and a child burial in a pottery vessel covered by the mud floor of room 98 (both excavated during the 2013 season).

¹ The first plan of the building was published by Al-Husaini 1962, pp. 153–54, pls. 1–2, plan 4; further additions and details in Miglus et al. 2011, pp. 156–57, figs. 34–35; Miglus et al. 2013, pp. 53–55, figs. 16–17.

House or Temple?

No similar building structures are known from the surrounding of Bakr Awa or from north-eastern Mesopotamia. There are, however, comparable examples from the south, both in religious and domestic architecture. The original excavators interpreted the MBA Building as a temple because of its form and size, and the presence of an altar in the main hall of the building. Nonetheless, the lack of features and objects distinctive of Mesopotamian temples (Miglus 2011–13, pp. 531–54) as well as its remarkable structural resemblance to residences leads us to suggest that the building was the residence of an official or a wealthier citizen of Bakr Awa (Heinrich 1982, pp. 178, 196; Miglus 1999, pp. 49–50).

Comparable Pattern of the Official Architecture in Third- and Second-Millennium Mesopotamia

As mentioned above, the former excavators interpreted the building as a temple. Indeed, in the third millennium B.C. there were similarly planned temples, the best examples being the Sin temples at Khafajah or the Šara temple at Tell Agrab (Delougaz and Lloyd 1942, pls. 2–12, 26–27) from the Jamdat Nasr and Early Dynastic (ED) periods (Miglus 2011–13, pp. 535–36). Their core consisted of a courtyard, a broad antecella, and shrine connected by a “bent-axis.” At the short wall opposite the entrance, the image of the deity (statue or symbol) was placed on a pedestal (fig. 10.3). In the center of the cella offering tables in various forms have usually been found.

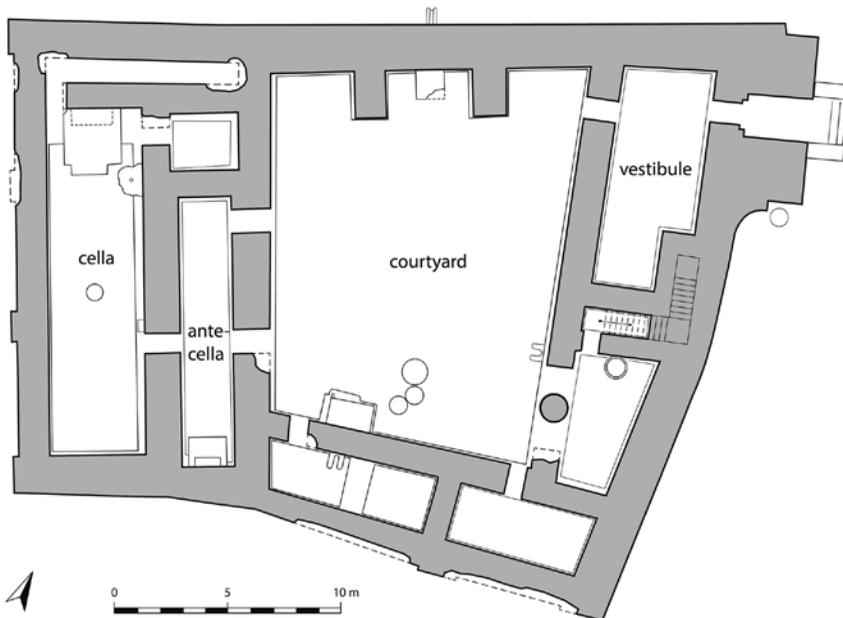


Figure 10.3. Sin temple at Khafajah, level VIII. Early Dynastic II period (Delougaz and Lloyd 1942, pl. 10; redrawn by A. Pauly 2012)

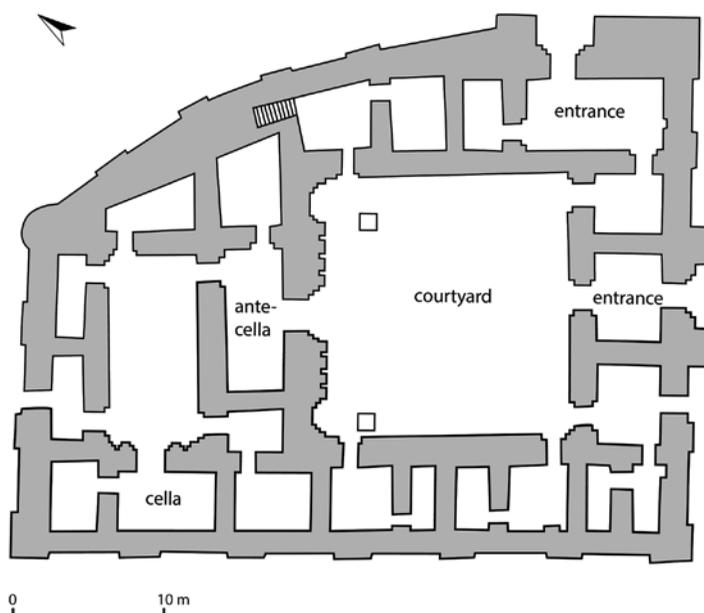


Figure 10.4. Temple at Ishan Mazyad. Old Babylonian period
(Mahdi 1986, figure on p. 66; redrawn by A. Pauly 2012)

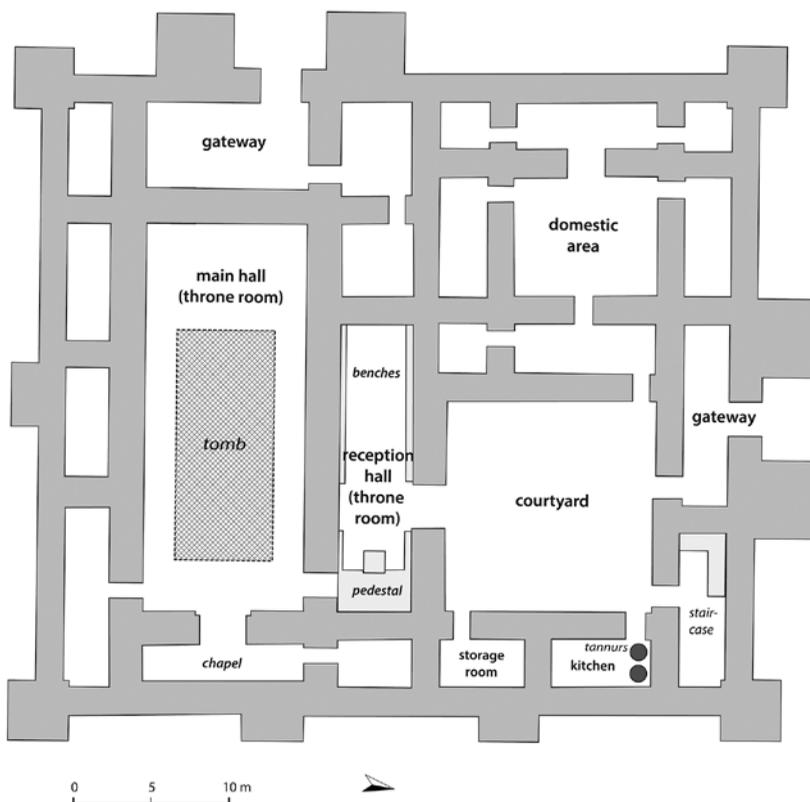


Figure 10.5. Palace A at Tuttul/Tell Bi'a. Old Babylonian period
(Miglus and Strommenger 2007, appendix 3-4; redrawn by A. Pauly 2013)

During the second half of the third millennium the general pattern of religious architecture in southern Mesopotamia changed. The so-called Babylonian temple with the broad antechamber and shrine connected with doors lying on the “central axis” of the building became popular (Miglus 2011–13, pp. 539–42). But temples of the ED plan were still built as is evident from the structures at Tutub/Khafajah mound D (Hill, Jacobsen, and Delougaz 1990, fig. 31) and Ishan Mazyad (Mahdi 1986). The temple excavated at Ishan Mazyad (fig. 10.4) in northern Babylonia and dating to the Isin-Larsa period is a clear example of a structure that on the one hand attests to the survival of ED traditions, and on the other bears striking similarity to contemporary domestic architecture. Its open court was surrounded by single rows of rooms. A broad shallow room was situated on its northwestern side, resembling the cellae of the typical Babylonian temple from the second and first millennia B.C.; however, that was some kind of a reception room giving access only to a big hall which was connected with a small sanctuary on its short wall.

Nevertheless, at the end of the ED period and during the reign of the Akkadian dynasty this building type appeared also in the secular architecture in the Diyala region. The Northern Palace at Ešnunna/Tell Asmar, and probably also the so-called Akkadian Foundation at Tutub/Khafajah mound A (Delougaz, Hill, and Lloyd 1967, pls. 20, 36–37), were built according to this pattern. At the beginning of the second millennium B.C. this type became standard in palatial architecture as well. Most of the Amorite palaces in Mesopotamia were likewise planned. The best examples are the big royal palace at Larsa (Heinrich 1984, pp. 61–63, fig. 37), three palaces in Ešnunna — the “Palace of the Rulers,” the “Southern Building,” and the “Residence of Azuzum” (Frankfort, Lloyd, and Jacobsen 1940; Delougaz, Hill, and Lloyd 1967, pl. 45) — the core part of the royal palace at Mari (Parrot 1958), and “Palace A” at Tuttul/Tell Bi‘a (Miglus and Strommenger 2007). Especially, the functional arrangement of the latter is easily explained (fig. 10.5). The entrance located to the north led to the courtyard, while a domestic wing was located on the west side of the main court. On the eastern side there was an economic area unit which consisted of a kitchen, a storage room and a staircase, which was used also as a magazine. The broad room facing the court in the south was apparently a throne room or an audience chamber. Behind it lay a great hall used for festivities and probably for religious ceremonies related to the dynastic cult, with tomb remains found beneath it. Closely connected with the hall was a narrow chapel on the east side, similar to the small cella at the great hall of the Zimri-Lim palace at Mari, which can also be explained in the context of ancestor worship (Miglus 2003–05, p. 239).

Comparable Pattern of the Domestic Architecture at the Beginning of the Second Millennium B.C. in Babylonia and the Lower Diyala Region

This architectural and functional design of the principal Mesopotamian palaces influenced the affluent neighborhoods of the Babylonian cities in the Isin-Larsa and Old Babylonian periods. Private courtyard houses with a similar plan were built at Ur, Larsa, and Sippar, but they are unknown in northern Mesopotamia (Miglus 1999, pp. 79–86). In the lower Diyala region, on the northeastern periphery of Babylonia, only a few private buildings were constructed according to this pattern. Six such houses excavated at Šaduppûm/Tell Harmal (Bürger and Miglus forthcoming) represent a small percentage of the residential area of this

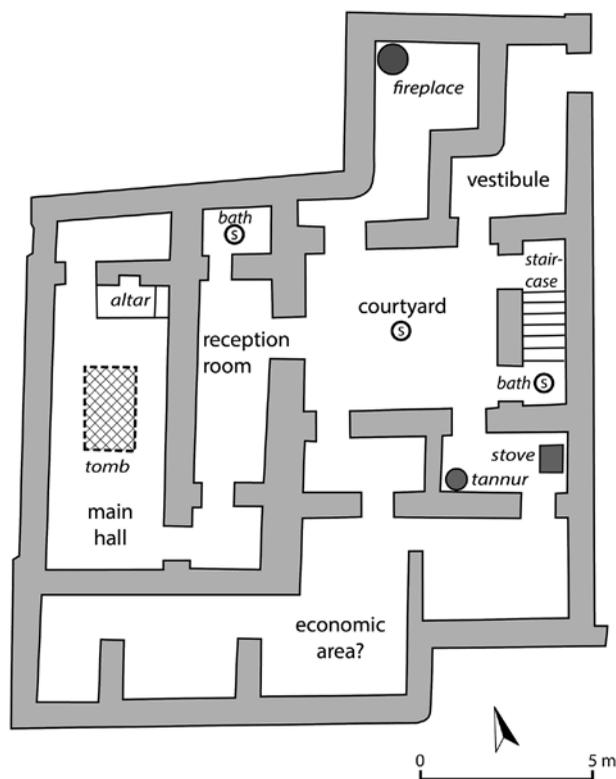


Figure 10.6. Private house at Ur, AH site, 3 Straight St. Old Babylonian period (Woolley and Mallowan 1976, pl. 124; redrawn by P. A. Miglus 2013)

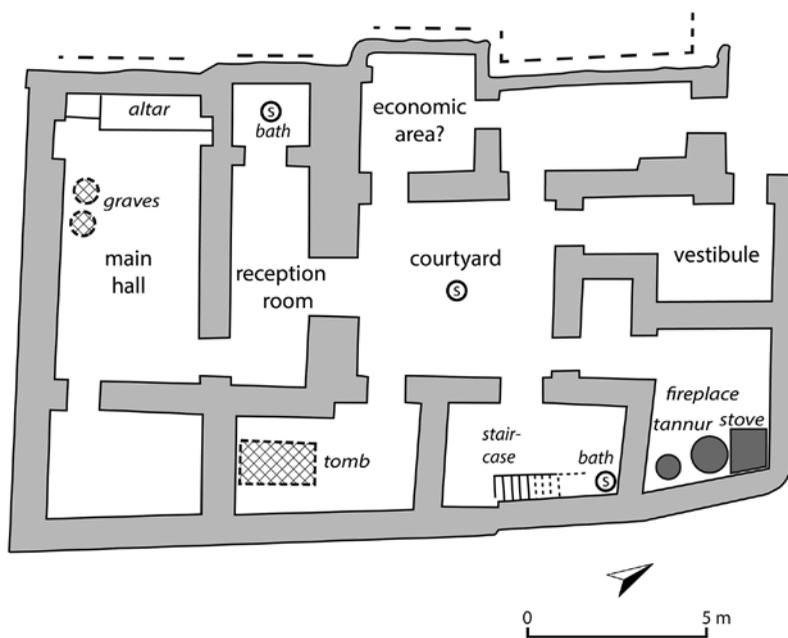


Figure 10.7. Private house at Ur, AH site, 1 Boundary St. Old Babylonian period (Woolley and Mallowan 1976, pl. 124; redrawn by P. A. Miglus 2013)

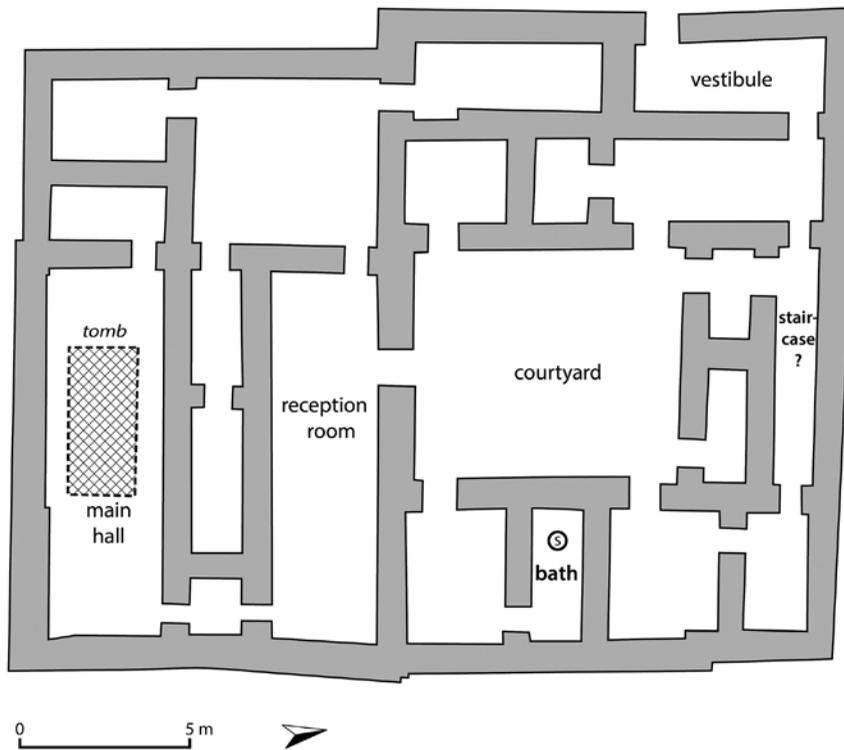


Figure 10.8. Residence B59 at Larsa. Old Babylonian period
(Calvet 2003, fig. 27; redrawn by P. A. Miglus 2013)

town. Their common part was the core consisting of a central court and two big halls similar to the contemporary palaces. The functional division of these structures was uniform (figs. 10.6–8). The open court was in most cases surrounded by single rows of rooms. Their typical features are staircases, baths with burnt bricks pavements and terra-cotta drains, and kitchens with stoves, ovens, and fireplaces. Their main halls always contained pedestals and/or altars located at a corner of the room, unlike the cult pedestals in temples which were installed mostly on the central axis of the cella. Under the floors of the main halls there were graves and tombs of burnt bricks. The presence of these latter installations indicates that the rooms could have been used for religious ceremonies concerning dead family members, probably funerary rituals and related offerings later.

What is Different at Bakr Awa? Installations and Small Finds from the MBA Building

The arrangement of the two large main rooms and the economic function of the smaller rooms around the court in the MBA Building at Bakr Awa were similar to the Babylonian private houses and residences at the beginning of the second millennium B.C. But what was different at the house in Bakr Awa? Apart from pottery, only a few small objects were found in the MBA Building. Moreover, due to the erosion and the heavy looting in this excavation area, it is difficult to obtain a clear image of what was going on in this household by means

of micro-archaeological traces. There are, however, some features showing differences concerning the use and functions of the building:

- No bath, no drains, and no staircase were recognized in the MBA Building.
- The pedestal (or altar) in the main hall was not located in the corner but about 0.6 meters away. The combination of this installation with the hearth in the main hall has parallels in the Hamrin region (Halawa).
- No burials were found under the main hall (“altar room”), although they could have been expected there (as in “domestic chapels” at Ur, and largest rooms in the residences at Larsa). The tomb was recovered deep under the courtyard, which is a very unusual location in comparison to the Babylonian burial tradition.
- Finally, there were no terra-cotta figurines or terra-cotta plaques in the MBA horizon at Bakr Awa, despite the fact that these are some of the most common finds in Mesopotamian dwellings of this period.

All these circumstances indicate a different worldview and tradition of the Bakr Awa inhabitants from that in Babylonia. Otherwise, the building at Bakr Awa was a completely new structure; it appeared suddenly, and was not the product of any local architectural tradition. All of the preceding structures, exposed in four building levels from the Akkadian and post-Akkadian periods, had stone foundations, including a small shrine located beneath the big hall, which shows similarities with contemporary structures at Tepe Gawra. The MBA Building had been completely built of mudbricks following the southern architectural tradition, and it was inhabited during a short time — probably no more than one or two generations — after which it was covered by differently planned smaller building units containing rather modest burials.

Understanding the Architecture in the Periphery: Historical Approach to the Problem

The turn of the third to the second millennium B.C. seems to have been a prosperous time for the city of Bakr Awa. Its material culture is generally of Mesopotamian origin. Most of the objects, especially weapons and pins from the graves, display close affinities to middle and northern Mesopotamian types. Pottery fits into the wide range of Middle Bronze Age ceramic shapes, showing a resemblance with Hamrin types, retaining a nonetheless distinctive local character. It is therefore surprising that the domestic architecture on the site is of southern style, showing strong influence from the southern Mesopotamian core. However, the erection of the MBA Building does not seem to be the result of building activities or orders of any central authority from the south. The available radiocarbon data indicates that the MBA Building must have been used at around 1950 B.C., a time when the Ur III state’s political control over the Eastern Tigris region had declined or even collapsed (depending on the short or middle chronology).

During the late third and early second millennium B.C. two political units are attested in the Shahrizor Plain, near the upper Diyala River, the kingdoms of Lullubum and Simurru. They played an important role in this region for about five hundred years (Klengel 1987–90; Frayne 2009–11; Altaweel et al. 2012, pp. 9–11). Their names appear in the year names and



Figure 10.9. Rock relief of Iddi-Sin from Bitwata (after Shaffer, Wasserman, and Seidl 2003, fig. 2)

war reports of the Akkadian and Ur III rulers who conducted successful military operations in the northeastern regions on the foothills of Zagros Mountains. The best-known visual evidence of these campaigns is the victory monument of Naram-Sîn, showing the Akkadian king triumphant against a ruler of Lullubum. However, Akkadian and Ur III domination in this region was apparently brief, and Simurrum and Lullubum remained most of the time independent. Very little is known of the political history of Simurrum, but at least in around 2000 B.C. Bakr Awa must have been temporarily part of this kingdom. Textual evidence from Ešnunna provides information on the political activities of Iddi-Sin and his son ANzabazuna, rulers of Simurrum who were contemporaries with the Ešnunna kings Šu-iliya and Nur-aḫum, as well as Ibbi-Sin of Ur and Išbi-Erra of Isin. Iddi-Sin has left his own inscriptions found in the Raniya region and at the valley of Zewiya, not far from the modern city of Sulaimaniya.²

According to the Mesopotamian kings, the mountain tribes living in the piedmonts of Zagros were strangers. But even though their kingdoms can be thought of as belonging to the “periphery,” their rulers wrote inscriptions in Akkadian and used traditional forms, expressions, images and symbols of power belonging to the repertoire of Mesopotamian kingship in an attempt to equate themselves to the Mesopotamian kings. The best examples are the rock

² Al-Fouadi 1978; Frayne 1990: 4.19.1.1–4; Ahmad 1997; Shaffer, Wasserman, and Seidl 2003; Altaweel et al. 2012, p. 11; Mühl 2013, pp. 147–48.



Figure 10.10. Rock relief at Sar-e Pol-e Zohab, no. 1 (photo by P. A. Miglus, 2010)

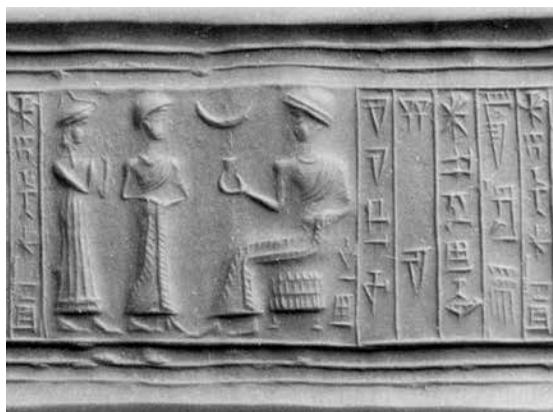


Figure 10.11. Servant seal of Iddi-Sin (Shaffer, Wasserman, and Seidl 2003, fig. 5)



Figure 10.12. Servant seal of ANzabazuna (Collon 1982, no. 451; reproduced by permission of the Trustees of the British Museum)

reliefs of Iddi-Sin at Bitwata in the Raniya Plain (fig. 10.9) (Shaffer, Wasserman and Seidl 2003, pp. 3–25, figs. 1–2) and the rock reliefs at Sar-e Pol-e Zohab no. 1 of Iddi-Sin or ANZabazuna (fig. 10.10; Hrouda 1976, pp. 4–6, pls. 1–4, 6; Frayne 1990, 4.19.1.1001), and no. 2 of ANubanini of Lullubum (Hrouda 1976, pp. 7–11, pls. 5–6; Frayne 1990, E4.18.1.1; Nasrabadi 2004). The non-inscribed rock reliefs nos. 3 and 4 at Sar-e Pol-e Zohab (Hrouda 1976, pp. 11–13, pls. 7–8) were apparently made during the same period. Stylistically and iconographically they are comparable to the Bitwata relief (Shaffer, Wasserman, and Seidl 2003, pp. 49–51), and can be also attributed to the rulers of Simurrum; yet their difference to the relief of ANubanini and that of the unknown prince of Shaikhan (Postgate and Roaf 1997) is striking. Regardless, the content of all these rock reliefs is similar: they show the figure of the triumphant king according to the Akkadian and Old Babylonian tradition. Other images that express the same effort to follow the Mesopotamian tradition are found on the seals of the servants of Iddi-Sîn and ANZabazuna (Shaffer, Wasserman, and Seidl 2003, pp. 32–35, figs. 4–5; Collon 1982, no. 451; Frayne 1990, E4.19.2.2001) depicting the typical audience scenes of the Ur III and Isin-Larsa periods (figs. 10.11–12). Finally, Iddi-Sin’s (and probably his son and successor’s) use of the divine determinative in front of his name indicates his efforts to appropriate the idea of divine kingship of the Ur III rulers.

The architectural features of the MBA Building at Bakr Awa demonstrate a similar attempt of reception and adoption of Babylonian patterns. They reveal the aspiration of the rulers of Simurrum to enhance the ideological ties with the kingdoms to the south. However, I presume that in this case the adoption was limited to the formal features.

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Hybrid Households: Institutional Affiliations and Household Identity in the Town of Wah-sut (South Abydos)

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“As an object of study, the building becomes a point of spatial articulation for the intersection of multiple forces of economy, society, and culture.” (Lawrence and Low 1990, p. 492)

“Bureaucracy, although characteristically concerned with minutiae, cumulatively deals with large sections of society and to some degree shapes it.” (Kemp 2006, p. 193)

Houses, Social Houses, and Household Identities

Archaeological studies of households often center on what households *are* (e.g., composition and structure), what households *do* (e.g., functions, activities, economy, and agency), or what households *mean* (e.g., cultural, ritual, metaphorical, and religious meanings) (Wilk and Ashmore 1988, pp. 1–27; Lawrence and Low 1990; Tringham 1995, 2001; Hendon 1996, 2004; Allison 2001; Robin 2003; Parker and Foster 2012). These lines of inquiry are viable because the existence, activities, and conceptions of households as meaningful social groups produce material records that are subject to archaeological recovery and study. In ancient times these aspects of households contributed to the construction of social identities, not only for household members but also for household groups collectively. Likewise, they can assist now in the analytical reconstruction of the same. The following discussion applies one framework for conceptualizing and interpreting materialized facets of household identities in the archaeological record, namely the anthropological concept of the social house.

Egyptian archaeologists are prone to acknowledging with some regret that most of the extensively excavated and well-known ancient Egyptian settlements are relatively formal,

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talks and insightful, off-podium discussions; to participants Nadine Moeller, Adelheid Otto, Kate Spence, David Schloen, and Elizabeth Stone for discussions and comments that highlighted areas of this work in need of further clarification; and to Jane A. Hill, Melinda Nelson-Hurst, and Rachel Aronin for reviewing and commenting on preliminary drafts of this article. Any shortcomings that remain are, of course, those of the author.

state-planned, and special-purpose establishments, leaving “regular” towns and villages as more poorly represented gaps in the knowledge base.¹ Although there is some truth to this perspective, it seems more practical to develop approaches that offer novel insights into these planned sites in their own rights while the database of known settlements grows through new and continuing household-oriented field projects. Toward that end, the archaeological case study presented here is that of an elite house at South Abydos, Egypt, occupied in the later part of ancient Egypt’s Middle Kingdom (2040–1640 B.C.; Middle Bronze IIA–B). This house, known as Building E (fig. 11.1), was part of a state-sponsored settlement established by the king as part of a royal mortuary foundation. It is of special interest as a point of intersection between domestic and institutional spheres. Here it is addressed analytically as a manifestation of one or more “hybrid households,” domestically oriented, house-based groups that were situated in – and integrated into – overtly institutionalized settings, making them places of both residence and official activities.² Under these circumstances the house is a venue where individual roles and identities defined by local and national institutional



Figure 11.1. 2004 and 1999 exposures of the South Abydos Settlement Excavation E (SASEE) Site, including Building (House) E and small portions of neighboring houses

¹ This situation is the result of several factors. Most of the ancient Egyptian population concentrated in the more hospitable, arable areas of the Nile Valley and Delta. Until relatively recent times subsequent cultural development was similarly located, destroying earlier settlements or preventing access to potential archaeological sites. Millennia of alluvial deposition, gradual migration of the Nile River, and canalization also have claimed their share of sites. High water tables especially in the Delta are logistical obstacles even for known settlement sites. How-

ever, special-use settlements of ancient Egypt often served populations either remote from the floodplain or along its margins, areas that are more likely to be accessible to archaeological work now. Thus, a selection bias has favored more extensive investigation of particular kinds of sites. For perspectives on the prevalence of planned and special-use settlements, see Bietak 1979; Jeffreys 2006; Kemp 2006.

² The choice of the term “hybrid” is convenient and illustrative, but nonetheless requires some clarification. Its use herein is not intended in the sense of

affiliations were insinuated into relationships among people and property on a day-to-day basis, thus contributing to overall household dynamics and identities. The following pages explore how the mediation of such institutionally ascribed identities in the household sphere add nuance to modern comprehension of house buildings that otherwise seem virtually identical when approached via other lines of inquiry.

To first put the general notion of household identity in very casual terms, one may easily envision ancient Egyptians speaking of “the house of so-and-so,” with the understanding that they were referring to more than just a residential building. Likewise, a head-of-household who referred to “my house” could mean something different still. Just as surely as there was overlap between each speaker’s connotations, there were also differences. However, their intended meanings refer to one or more of three things: place(s), property, and/or people. This confluence influenced the development of a research framework based on the concept of the social house. Anthropologist Claude Lévi-Strauss first explored the core ideas behind this concept, starting with an observed cross-cultural tendency of native terminologies for both *house* and *household* to encompass various permutations of people, property, and residential buildings (Lévi-Strauss 1982, 1987, 1991). Whereas anthropologists understood native terminology for “houses” to mean buildings, Lévi-Strauss recognized that underlying meanings referred to “the actual bearers of rights and duties” (Lévi-Strauss 1982, p. 151). The archetypes for this conception were the noble houses of medieval Europe, which he regarded as the clearest representations of a much more widespread, culturally diverse phenomenon (Lévi-Strauss 1982, 1987, 1991).³ For Lévi-Strauss, a “house” is:

a corporate body [*personne morale*/moral person] holding an estate made up of both material and immaterial wealth, which perpetuates itself through the transmission of its name, its goods, and its titles down a real or imaginary [descent] line, considered legitimate as long as this continuity can express itself in the language of kinship [descent] or affinity [alliance] and [or], most often, of both. (composite translation by Gillespie 2000b, p. 27; adapting from Lévi-Strauss 1982, p. 152; idem 1987, p. 174)

For cultures in which this type of organization appeared he coined the label of “house societies.” To reduce confusion over the lexical ranges of *house* and *household* (Hammel 1984; Wilk

cultural hybridity, notions of which have been discussed in archaeology and anthropology for some time (e.g., Burke 2009; Stockhammer 2012a). The value of concepts of cultural hybridity and hybridization to archaeology has been called into question due to potential associations that the biological, essentialist basis of such metaphorical terminology can bring to interpretive perspectives (Stockhammer 2012b). As a descriptor, “hybrid” in hybrid household is more straightforwardly (and less pejoratively) metaphorical, implying merely a mixture of two entities in the generation of something new with recognizable attributes of both. Furthermore it is a functional metaphor, stressing the intersection of two broad categories of social contexts — domestic and official — that are frequently treated as separate lines of discussion. Wah-sut was essentially a “com-

pany town” that was demonstrably tied to, and part of, a state-directed institution (fig. 11.11 and below). Building E also was a residential building that housed one or more families (Picardo 2006 and forthcoming). To characterize structures like Building E simply as houses in which a range of varied activities took place, including non-domestic ones, fails to account for the special nature of its situation. To assess the archaeology of such a site without special consideration of the conspicuous integration of house and institution risks missing multiple interpretive possibilities germane to household functions and identities. The concept of hybrid households aims to provide terminology appropriate to analysis of this phenomenon.

³ Not inconsequently, the prevailing English definition of household also originates from the same feudal model (Guyer 1997, p. 245).

1991b), many scholars have more recently preferred the term *social house* for separating the Lévi-Straussian “house” from other connotations (Beck 2007a).

Vocabulary aside, the social house concept has been applied productively over the past fifteen years as a heuristic frame for archaeological study (e.g., Gillespie 2000c; Joyce and Gillespie 2000; Chesson 2003; Beck 2007a; Kahn and Kirch 2013). The collective persona of the social house — as a metaphorical “moral person” — arises from its legal/jural legitimacy, and thus self-standing identity, in society: “the house has legal autonomy and a moral personality, it possesses rights and is subject to obligations, and it is defined by its roles and relationships to other moral persons within the larger society” (Gillespie 2007, p. 33). This explication of the social house doubles here as a working definition of *household*.⁴ A guiding premise of the social house concept is the assumption that maintenance and transmission of household property are paramount concerns that carry meaningful implications:

[Shared property] can be said to materialize the social group. [Social] Houses define and socially reproduce themselves by the actions involved with the preservation of their joint property, as a form of material reproduction that objectifies their existence as a group and serves to configure their status vis-à-vis other houses with the larger society. (Gillespie 2000a, p. 2)

Most often a physical building or buildings — houses — comprise a core component of household property. Yet materialization of the group is not a function just of concrete property such as physical residence, land, means of production and subsistence, etc.

Households also are organized around, defined by, and reinforced by intangibles such as titles, (sur)names, ascribed status, special prerogatives, religious beliefs, rituals, shared history/origins, and other forms of symbolic capital. Through regular, day-to-day practices, such ideological or symbolic attributes of households sometimes produced material correlates that were also intrinsic expressions of social house identity (Carsten and Hugh-Jones 1995; DeMarrais, Castillo, and Earle 1996; McKinnon 2000; Joyce and Gillespie 2000; Joyce 2007). The continuity of the social house, then, depends upon more than the reproduction of just its human membership through successive generations, but also on the transmission of material and immaterial household wealth along with (or in spite of) the group’s members (Carsten and Hugh-Jones 1995, p. 7; Gillespie 2000a, 2000b):

[Social] Houses exist only insofar as they are perpetuated by successive generations of legitimate heirs, as culturally construed: if heirs should cease to exist, then so would the house, as such, cease to exist, though pieces of the estate may pass into the estates of other houses. As long as a living house membership actively keeps the names, titles, honors, and narratives bound to a particular material estate (even should the material itself be lost or dismembered) then the house will persist as a moral person. This ongoing transfer — not of an estate from one generation of heirs to the next but of personal identity from house members to the house — is reflexive, in that as people confer a persona upon the house, so too does the house situate the personas of its different members within a collective and ideally perpetual existence. (Beck 2007b, p. 13)

⁴ The term *household* has been notoriously problematic in anthropological study for decades (Bender 1967; Wilk 1991b; Hendon 1996). However, more re-

cently its lexical multidimensionality has come to be regarded more positively, even as an asset (Parker and Foster 2012).

Among the ultimate objectives are social permanence and the advancement — or, at the very least, maintenance — of the household estate. For this to occur, the identity of the collective social unit must survive in a manner that is legitimate both internally and in wider social milieus, whether unaltered or in step with changes around it.

Consistent with Lévi-Strauss' view that the social house is a specific type of social structure, on par with lineage and clan, the household's ability to persist is dependent on its capacity to recruit new members when required. This was accomplished by expressing their unifying ideology in terms of family or alliance relationships, even if via fictional or metaphorical kinship. This perspective permits a general understanding of household social dynamics as a system of membership (Blanton 1994, pp. 19–20). It is not necessarily a closed system, as inclusion can be independent of real kinship ties. Strategies for recruiting, retaining, and replacing members may be simultaneous, numerous, and varied. Legitimation of the membership may stem from many possible genealogical, economic, religious, juridical, or coercive factors. Rules of membership can change to accommodate changing circumstances as long as the conditions are valid to the group and its wider society.⁵

For archaeologists, the grounding of *the household* in concrete assets and detectable expressions of identities pinpoints material reference points that, for interpretive purposes, are not limited temporally by the lifespan of any individual, generation, or a single configuration of group members. Rather, the archaeological record is understood as containing the residues of the sum total of the strategies and relationships that once aimed to sustain one or more households, until they ultimately failed in the attempt or changed beyond recognition as the same entity (Gillespie 2000a, pp. 9–11). Obviously, because of differential archaeological preservation of different kinds of materials, the processes and outcomes of some strategies show up in the record with greater clarity than others. This perspective accommodates the diachrony that is inherent to many archaeological assemblages (Gillespie 2000a).

Messages that objects convey about their producers, consumers, possessors, guarantors, monopolizers, etc. are context-sensitive and culturally specific. Social and spatial circumstances informed their original meanings and subsequent evolutions through processes such as possession, proper or improper use, manipulation, restriction, transfer, discard, etc. Likewise, social interactions for which objects are referents were subject to similar contextual influences. Since social houses are defined and distinguished through their orientation vis-à-vis a material and nonmaterial estate comprised of property and prerogatives, there is significant interplay between objects and social interactions, on one hand, and household identities, on the other hand. This relationship is dynamic, undergoing constant negotiation and review. It is also reflexive, each side of the relationship being mutually productive of and responsive to contextual changes on the opposite side. Legitimation of facets of household identity comes from two corresponding directions: from within the household group and from without, from internal membership and from broader society, respectively. For archaeological interpretation it is proposed here that there are two corresponding modalities of household identity that objects and interactions convey: *introverted* and *extroverted*. Introverted identities are directed inwardly, reinforcing internal cohesion among household members and the foundations of their relationships. The relevance of these factors may or

⁵ This malleability is one aspect of the adaptive responsiveness of households that has been highlighted (and sometimes overemphasized) by sev-

eral approaches to household study through several decades (e.g., Laslett 1969; Netting 1974, 1979, pp. 39–54; Wilk and Rathje 1982; Wilk 1991a).

may not extend beyond the walls of the house building, the household group or subsets thereof, or outside of other culturally defined parameters. Extroverted identities project outwardly from the group, a public face relating the social house and its members to broader social roles and institutions and establishing its place in that wider arena relative to others. There can, of course, be overlap between these two modes of expression. Any number of factors, those visible and those undetectable in the archaeological record, influenced both modalities of identity. Most importantly for archaeology, detectable manifestations of either type may act as proxies for some of the invisible strategies and capacities by which social houses sustained legitimacy and, in doing so, achieved longevity both as coherent groups and as viable *personnes morales* in society.

Middle Kingdom Egypt and South Abydos

Lévi-Strauss sets few conditions for house societies. They may be anywhere on the spectrum of social stratification, from egalitarian to hierarchical to totalitarian (MacDonald 1987; Gillespie 2000b, pp. 42–44). The only expectation is that many relationships still function on the basis of kinship, but with economic and political interests external to the social house beginning to intercede in social action, even if not yet completely superseding genealogical ties (Carsten and Hugh-Jones 1995, p. 9). Indeed, ancient Egyptian sources of Middle Kingdom date implicate households of such varied composition, including not only members related by biological ties but non-relations as well, some of whom are designated by kinship terms (Franke 1983; Willems 1983; Moreno García 2013b). Social houses are most emergent and most visible when a society has undergone, or is experiencing, dramatic social change (Carsten and Hugh-Jones 1995, p. 10; Waterson 1995, p. 33), a criterion for which late Middle Kingdom Egypt qualifies very well. The Middle Kingdom was a prosperous time of territorial gains, expanded economic and religious prerogatives for non-elite society, and the emergence of a more visible, sustainable “middle class” and/or sub-elite segment(s) of society (Quirke 1991; Andrassy 1998; Baines and Yoffee 1998; Richards 2005; Grajetzki 2006; Müller, this volume). Substantial administrative reforms added new departments to the central state apparatus and dramatically expanded the number, range, and specificity of official administrative titles (Hayes 1953; Berlev 1978; Quirke 1990, 2004b; Grajetzki 2013). At the height of these changes in the late Middle Kingdom, especially under King Senwosret III (1878–1841 B.C.), this expanded structure may have effectively linked a larger proportion of the populace than ever before to the royal capital. A hallmark of this new situation was markedly intensified attention to accounting practices and administrative measures for tracking accountability, including paper (papyrus) documentation and use of impressed mud sealings for securing containers and doors to monitor those responsible for them.⁶

Planned, state-sponsored settlements have assumed special significance in attempts to understand Middle Kingdom society, collectively becoming a cornerstone for assessments of urbanism and social structures of this period. Some historical reconstructions see the hand of the late Middle Kingdom state micromanaging political and economic positions

⁶ The impetus for this style of administration at the top levels of government is evident from the visibility of main authority of the royal treasury branch,

the “Overseer of Sealed Things” (*imy-r ḥtmt*), i.e., “Treasurer” (Grajetzki 2001, 2013; Quirke 2004b).

in the provinces in order to curb and absorb the power of regional potentates (e.g., Hayes 1953; Willems 1988; Franke 1991), especially as of the reign of Senwosret III. Others regard a similar process merely as part of more gradual, numerous, and wider societal shifts that started well before Senwosret (e.g., Callender 2000; Richards 2005; Grajetzki 2006; Willems 2008, 2013). A preponderance of planned settlements in the archaeological record has been presented as the architectural manifestation of pervasive state policy directed down to the most basic, that is, household, level of society (Kemp 2006; see also Willems 2013).⁷ This model views elite households in state-planned towns as consciously constructed agents of a national regulatory system. The underlying rationale was to promote a largely bipartite socioeconomic structure — one of wealthy elites and poor dependents — as favored by the governing class. Highly regulated control over subsistence infrastructure purportedly was a cornerstone of this agenda. The exemplar for this model is the “pyramid town” of Senwosret II (1897–1878 B.C.) at Lahun, which is also the type site for Middle Kingdom urbanism (Petrie 1890, 1891; Petrie, Brunton, and Murray 1923; David 1996; Quirke 2005). Large-capacity granary blocks in some of the town’s nine large “mansions” have been characterized as the defining features of elite-controlled, redistributive centers for the town’s population (Kemp 1986, 2006). Non-elite citizens based in smaller houses each purportedly would have been affiliated with one of the mansions and dependent upon it minimally for grain rations as part of its extended household.

Ongoing discourse is beginning to map a more complex scenario, one that perhaps initially involved state policies of strategic inclusion (Allen 1996) and, later, selective removal of regional power bases amid an already changing administrative system (Willems 2008, 2013). Differences of opinion on this matter mostly surround the extent of the state’s reach rather than what evidence is available and what the ultimate outcomes were. For example, one proponent of a model of active state maneuvering has judged the notion of an orchestrated royal policy to fashion an extremely pervasive “prescriptive society” through planned communities and hyper-regulation (Kemp 2006, pp. 211–44) as “sinister” and, practically speaking, beyond state capabilities (Franke 2001, p. 395). The potential to complement these inherently top-down perspectives with an opposite, bottom-up viewpoint has been hindered especially by the limitations of early Egyptian archaeology. The discovery and excavation of many of the best-preserved settlements having been in the late nineteenth and early twentieth centuries, techniques of retrieval and documentation only rarely captured details that allow interpretations of finer resolution than settlement-level to inform nuanced profiles of constituent houses and households.⁸ This paucity of data often has encouraged the use of relative homogeneity of house types and rankings of house sizes as primary bases for major conclusions. Even as inferences about orthogonal, planned domestic architecture have come under increased scrutiny (Kemp 2000; Spence 2004; Moeller 2009–10), several basic uncertainties remain. For instance, it is rarely clear who, specifically, lived in the large houses that were perhaps so integral to the state agenda. The reasonable, albeit tacit assumption

⁷ This is not to suggest that less formally and un-planned settlements of major significance are unknown for this period. See, for example, the developmental histories of Middle Kingdom occupations at Elephantine (von Pilgrim 1996a, 1996b) and Tell el-Dab‘a (Bietak 2010; Müller 2011).

⁸ There are, of course, studies that work within these limitations to produce valuable results, e.g., Meskell 1998, 1999; Samuel 1999; Lehner 2002, 2004, 2009; Adams 2005, 2007; Stevens 2006; Koltsida 2007; Kemp and Stevens 2010; Spence 2010; Tavares 2011; Kemp 2012.

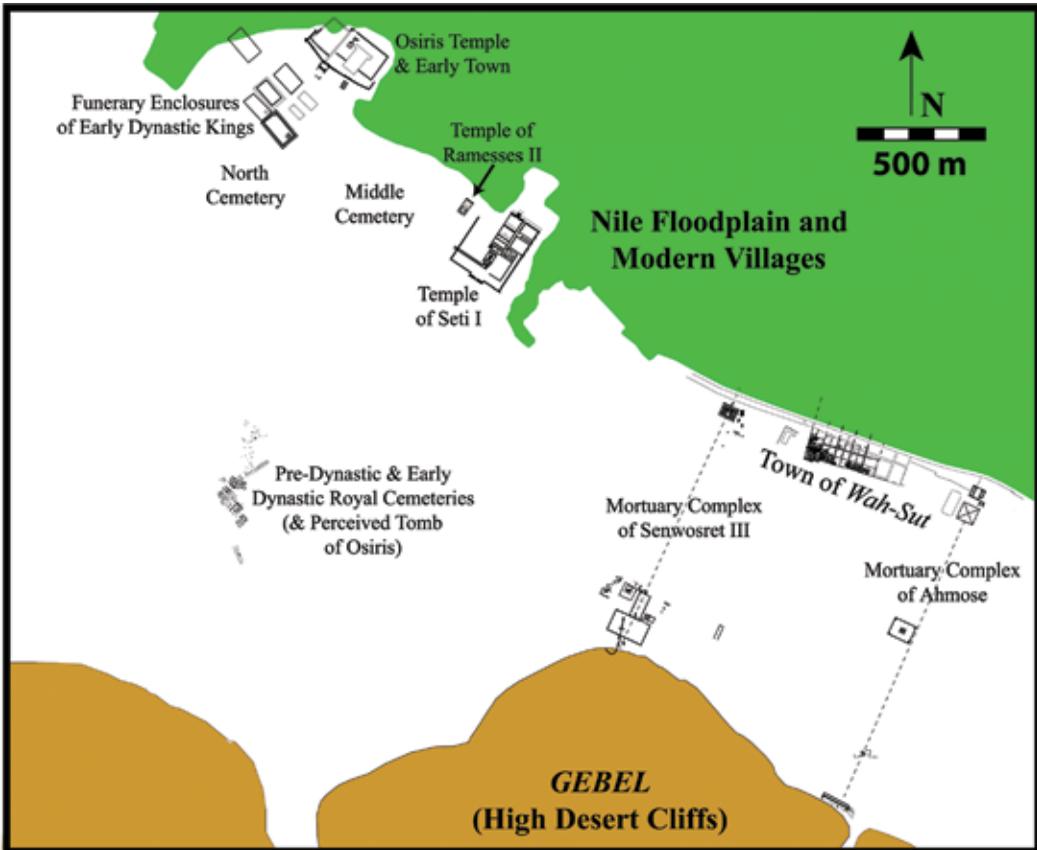


Figure 11.2. Map of Abydos with major monumental remains and archaeological areas indicated

that elite officials were the primary residents follows from the institutional nature of such settlements and large house sizes. Commonly, though, the human element of such households remains poorly characterized beyond that point.

The ancient Egyptian town of Wah-sut at South Abydos is an ideal case study for pursuing a bottom-up line of inquiry that targets its constituent “hybrid households.” Wah-sut offers an opportunity to understand more specifically the dynamics of these households individually, relative to each other, and vis-à-vis local and state-level institutions. Wah-sut is the closest formal and functional parallel to Lahun, and, having been established likely within about fifty years of each other, the towns are near contemporaries. Quite relevantly, and as mentioned above, the founder of Wah-sut, Senwosret III, implemented some of the most comprehensive administrative initiatives of the Middle Kingdom. A highly localized picture from Senwosret’s town at South Abydos thus provides a comparative and complementary perspective against which to gauge more globally oriented models where signs of state agenda should be most visible.

Abydos (fig. 11.2) is a large (ca. 8 sq. km) archaeological site in southern Egypt that has yielded remains from virtually every major period of ancient Egyptian history (O’Connor 2009). Through much of the pharaonic period, Abydos — *Abdju* (ꜣbdw, ) to the ancient Egyptians — was an important regional center. During predynastic times, the Abydene region experienced growth as one of at least three so-called proto-kingdoms that preceded the

unification of the entire country under singular rule (Kemp 2006). The earliest settlement and cemetery remains at Abydos date to this period. After the consolidation of Egypt as a territorial state around 3100 B.C. and the establishment of a national capital at Memphis near the apex of the Nile Delta, Abydos' importance likely stemmed at least partially from its relationship with Thinis, the eventual capital of the Eighth Nome (administrative district) of Upper Egypt, for which it may have served as a principle necropolis (Gomaá 1986; Martin-Pardey 1976; Patch 1991). During segments of the Predynastic (4500–2960 B.C.) and Early Dynastic (2960–2649 B.C.) periods, the southwestern zone of Abydos proper, known as Umm el-Gaab, was chosen as the site for Egypt's earliest royal cemeteries. Evidence of the early local town's association with a temple of the ancestral Abydene god Khentyamentiu (literally "Foremost of Westerners") dates to this period (Petrie 1902, 1903). With the maturation of the state bureaucracy, the royal necropoleis moved northward to the Memphite region. Abydos' importance as a religious center persisted through the Old Kingdom (2649–2134 B.C.), during the later years of which it became associated with the increasingly popular, royally significant god Osiris, who gradually became syncretized with Khentyamentiu. The Old Kingdom temple of (Osiris-)Khentyamentiu at Abydos benefitted from royal patronage and tax exemptions, while the expansive Middle Cemetery became a focal point for elite burials that included prominent members of the royal administration (Kemp 1968; O'Connor 1992; Brovarski 1994a, 1994b; Richards 2005).

Ancient Egyptian religious belief portrayed Osiris as a deceased king from fictional proto-historical times. By the Middle Kingdom his emergence as a primary mortuary deity and king of the underworld/afterlife peaked (Spiegel 1973; Griffiths 1980, 2001; Leitz 2002–03, vol. 2). Tradition placed his tomb at Abydos, specifically Umm el-Gaab in the tomb of King Djer of the First Dynasty (Leahy 1977; Dodson 1997–98).⁹ Yearly festivals commemorated Osiris with a procession and ritual-theatrical reenactment of episodes of the god's mythic narrative, beginning at his temple and ending at his supposed tomb (Gillam 2005; Schäfer 1904). Abydos became a preeminent destination of religious pilgrimage, with visitors wishing to witness and participate in these Osirian mysteries. Individuals, families, and groups of colleagues deposited votive objects and erected small monuments in the "cenotaph zone," an area near the precinct of the Osiris-Khentyamentiu temple at North Abydos (Simpson 1974; O'Connor 1985a; Leahy 1989). As proxies for their donors, these monuments ideally were accompanied by arrangements to receive shares of cultic offerings during the annual celebrations.

Senwosret III, the fifth of eight kings in the family line of Egypt's Twelfth Dynasty, appears to have been the first to break from tradition by situating his activities about 2.5 kilometers across the landscape at South Abydos. Senwosret III made the uncommon gesture of commissioning mortuary monuments at two distant locations (Arnold 2007): a traditional pyramid complex at Dashur (Arnold and Oppenheim 1995; Arnold 2002) in the (by then) traditional Memphite capital region, plus a subterranean tomb at South Abydos (Currelly 1904b; Wegner 2009). He established a funerary estate to support his mortuary cult at Abydos. It operated through a tripartite complex of three main architectural components (fig. 11.3). In addition to the tomb itself, this new foundation included a detached mortuary temple and a town. The temple was oriented on the same axis as the aforementioned tomb and situated

⁹ The name Umm el-Gaab, or "Mother of Pots" in Arabic, derives from the dense deposits of votive pottery remains that litter, and often cover, the desert

surface of this sector of Abydos, the results of centuries of concentrated votive activity directed toward Osiris' supposed burial place.

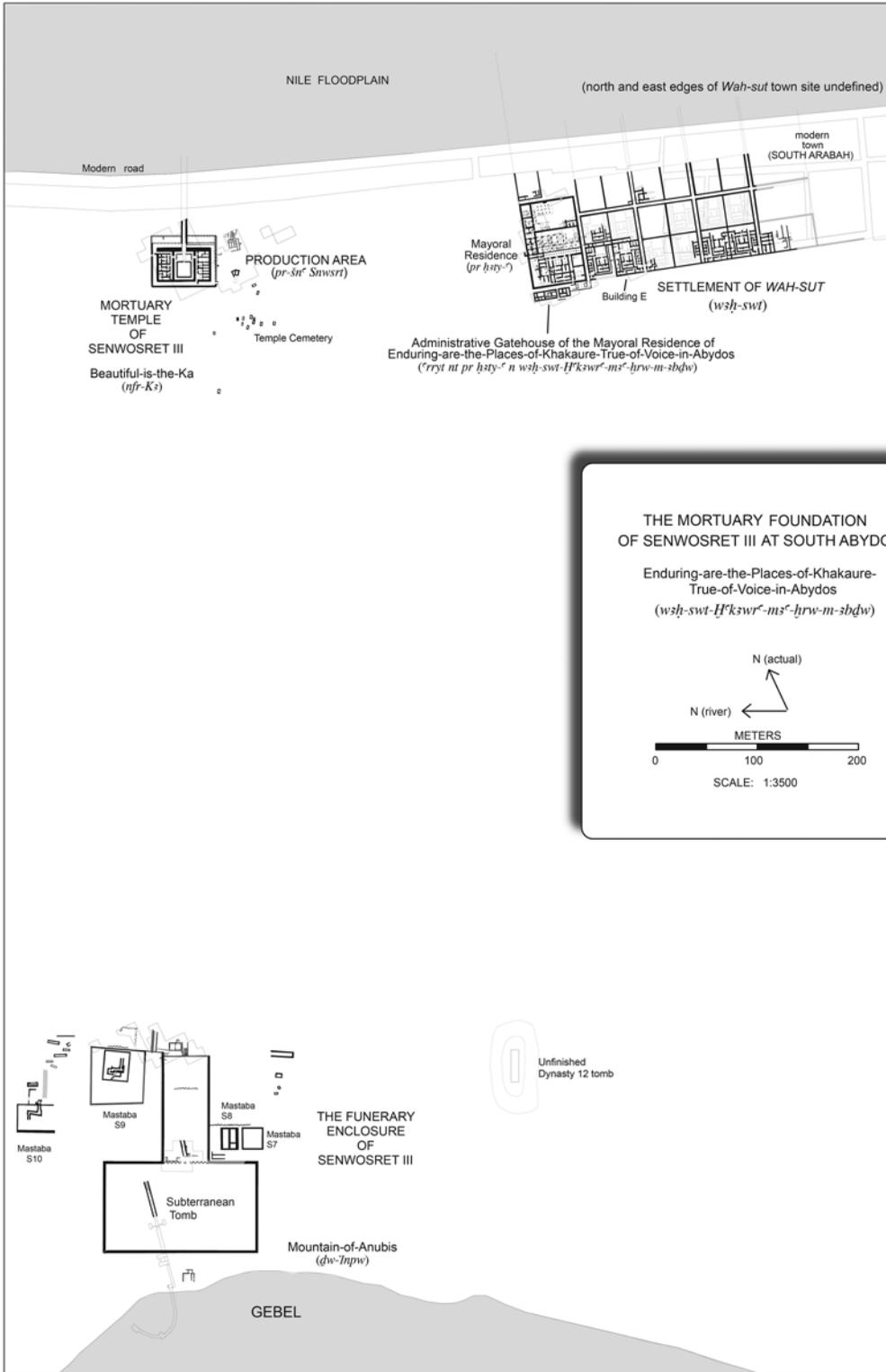


Figure 11.3. Map of South Abydos with remains relating to the mortuary foundation of King Senwosret III

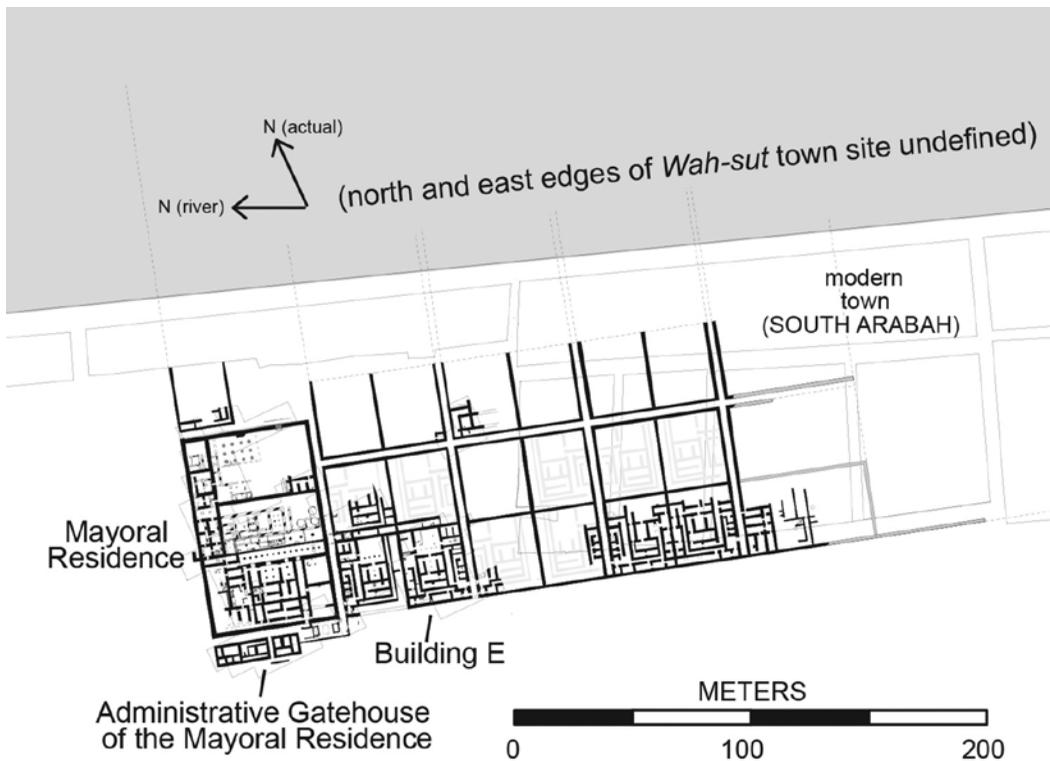


Figure 11.4. The town of Wah-sut at South Abydos as known archaeologically

approximately 800 meters to the north-northeast. Located to the east of the temple along the edge of the cultivated floodplain, the new town accommodated the locally based personnel and infrastructure required to sustain the royal mortuary cult and associated productive activities in perpetuity.

The parameters of the current South Abydos archaeological concession align with the architectural features of the royal mortuary establishment.¹⁰ The ancient name for the entire Senwosret III mortuary foundation as well as the town itself is Wah-sut-Khakaure-maa-kheru-m-Abdju (*W3h-swt-H^ck3wr^c-m3^c-hrw-m-3bdw*; ) or “Enduring-are-the-Places-of-Khakaure-True-of-Voice-in-Abydos.” Hereafter this name is designated by the less cumbersome abbreviation Wah-sut (*W3h-swt*; ) a shortened form employed in ancient times as well.¹¹ Archaeological investigation has exposed an elite sector of the town

¹⁰ Field excavation at South Abydos proceeds under the auspices of the Pennsylvania–Yale–Institute of Fine Arts, New York University Expedition to Abydos, co-directed by William Kelly Simpson and David B. O’Connor. Josef Wegner of the University of Pennsylvania holds the archaeological concession that includes the area discussed in this paper, as granted generously by the Ministry of State for Antiquities of Egypt.

¹¹ The practice of dual naming of major institutions and the towns that supported them was somewhat

common from the Old Kingdom onward (Stadelmann 1983). Both full and abbreviated writings of the town and institutional name occur on sealing impressions retrieved from across the active work site at South Abydos. Extramural attestations of the toponym are few but noteworthy. The full writing appears on Ramesseum Onomasticon 211 (Gardiner 1947; Gomaá 1986, pp. 184–85), while the shortened form appears on Papyrus Brooklyn 35.1446, recto 28b, 62b (Hayes 1972, p. 32, pls. 3, 5).

(Currelly 1904a; Wegner 1998, 2000, 2001b, 2006; Picardo 2006 and forthcoming).¹² As known to date, Wah-sut (fig. 11.4) is a textbook Egyptian state-planned settlement of its time: rigidly orthogonal in plan, highly modular with repetitive use of similar house plans for houses of similar size, and constructed on the royal cubit (0.525 m) system of measurement. Excavated remains are part of a clearly elite sector occupying the southwest part of an incompletely defined town. A massive (52 × 82 m) mayoral house dominates the southwest corner, while much smaller yet nonetheless large (28 × 32 m), elite houses line Wah-sut's southern wall,

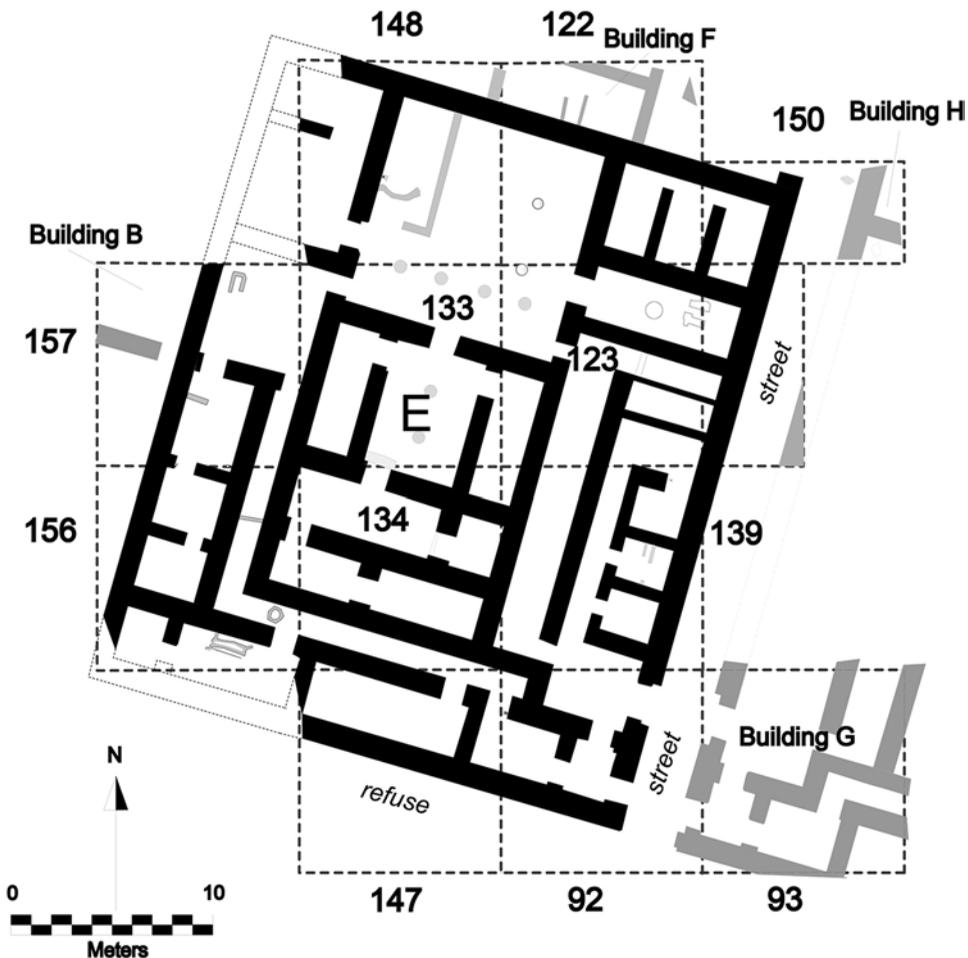


Figure 11.5. Plan of Building E site showing excavations squares (“operations”), neighboring house designations, and spatial surroundings from the 1999 (operations 92–93) and 2004 (operations 122–23, 133–34, 139, 147–48, 150, 156–57) field seasons

¹² In the absence of definitive signs of an attached workers’ sector of the town, it is technically premature to contend without reservation that the town proper housed workmen (possibly with their

families) charged with the construction of the king’s tomb and the temple monument, though the likelihood is quite strong that residents of lower socio-economic status were accommodated.

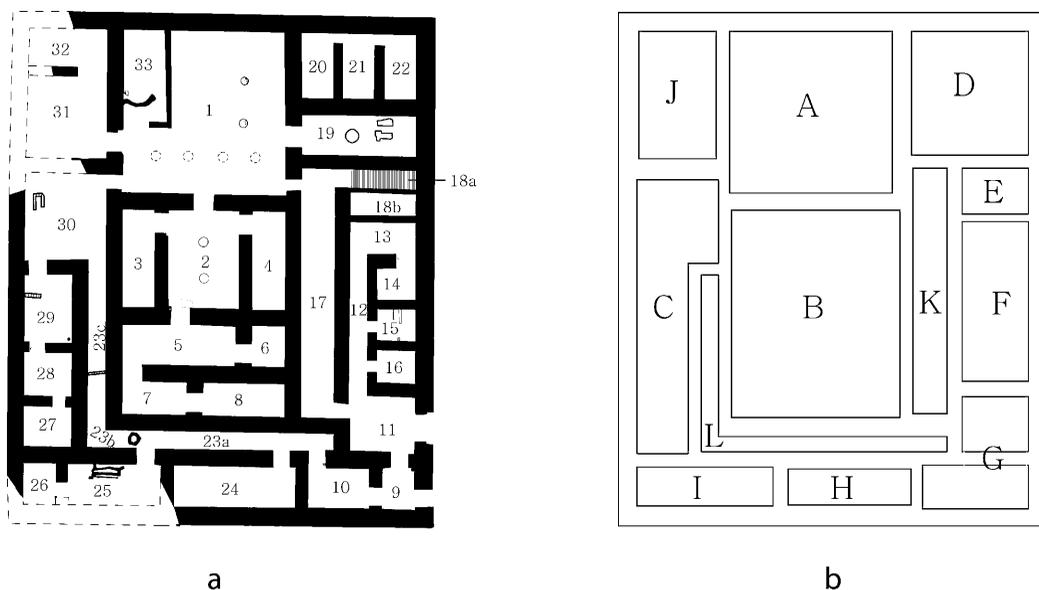


Figure 11.6. (a) Room and (b) component designations for spatial subdivisions of Building E

arranged in four-house blocks with nearly identical ground plans.¹³ The clearest occupational period of this residential sector is from the town's foundation under Senwosret III to the end of the Twelfth Dynasty (three regents, including a regnant queen) and part of the Thirteenth Dynasty (ending 1640 B.C., inclusively) (Wegner 1998, 2001b; Picardo forthcoming).¹⁴

Building E, the most completely excavated of Wah-sut's second-tier houses to date, is the focus of this study. The majority of the Building E site was excavated in 2004 under the direction of the author as part of doctoral thesis research. As a sub-project of larger South Abydos research program, this work was undertaken as the South Abydos Settlement Excavation E (SASEE) Project.¹⁵ Ten excavation squares of 100 square meters, along with an exploratory unit excavated in a 1999 field season by Dawn McCormack under the direction of Josef Wegner, have been combined to expose Building E's interior except for the extreme

¹³ The plans of houses on opposite sides of major streets are mirror images of each other so that primary entry is always from the thoroughfare.

¹⁴ Of royal names attested by artifactual remains from the Building E excavation site, those of latest date are Thirteenth Dynasty (1783 to ca. 1640 B.C.) kings Sobekhotep III(?) and Merneferre Ay; however, the archaeological contexts of these finds are quite disturbed. From more reliable contexts the most recent royal name is that of Senwosret III's successor and last formidable ruler of the Twelfth Dynasty, Amenemhat III (1844–1797 B.C.).

¹⁵ The author graciously thanks Josef Wegner for permitting and supporting the work of the SASEE 2004 project within his archaeological concession (see above, n. 10), for years of guidance, and, along

with Vanessa E. Smith, generous sharing of resources in the field. Essential funding support for the field season was provided by a U.S. Department of State, Bureau of Educational & Cultural Affairs Fellowship (administered by the American Research Center in Egypt) and the Louis J. Kolb Foundation. The intrepid SASEE 2004 team consisted of: excavators Jane A. Hill and Melinda Nelson-Hurst, ceramicists Ashraf Senussi and Kate Liszka, text and small objects specialists Joshua Roberson and Rachel Rodabaugh, faunal analyst Stine Rossel, artist Krisztián Vértés, and registrar Bryan Kramer. For their congenial oversight and assistance on behalf of the Ministry of State for Antiquities of Egypt, the entire project thanks Inspectors Mohammed Abu el-Yazid and Gamal Kamel Abd-el Mageed.

northwest and southwest corners (fig. 11.5). Not accounting for doorways, small screen walls, and fixed features such as column and vessel emplacements, the active interior spatial area of Building E is approximately 545 square meters and includes thirty-three discrete rooms and corridors (fig. 11.6a).

Although ideally spatial analysis of artifact distributions would permit highly specific inferences about uses of discrete, interior spaces, Building E is one of several areas of the Wah-sut town site that have suffered from modern disturbances which must be taken into account. For example, Building E's proximity to local cultivation made it susceptible to farmers who dig to retrieve ancient mudbrick. The alluvial silt from which bricks were made has long been valued as a nutrient-rich additive for modern agricultural fields. Past extraction of mudbrick has left extensive pitting and trenching in Building E's surviving architecture. Analysis of artifact findspots must bear this fact in mind and include provisions for it. Fortunately, although trenching is disruptive to archaeological context, it tends to be methodical, and therefore somewhat predictable as a site formation process.¹⁶ Vertical displacement of artifacts likely was affected much more significantly than horizontal. Especially with wall trenches, the main uncertainty of horizontal displacement is whether debris around a wall is composed of discard from one side, both sides, and/or above the wall.

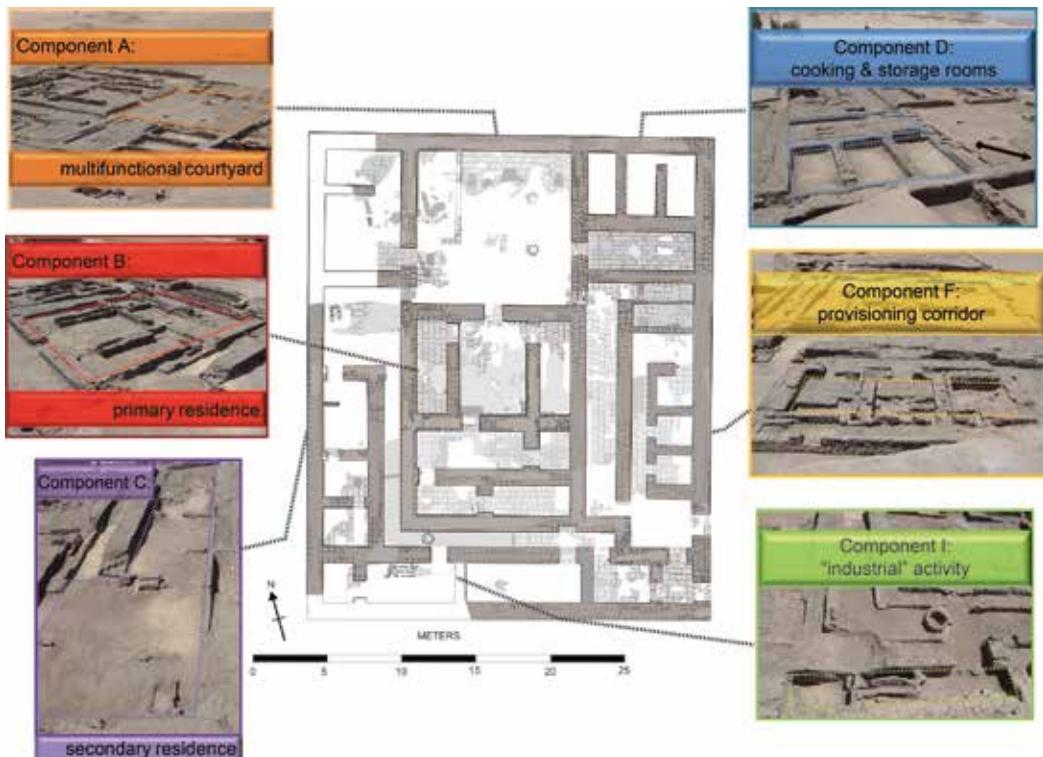


Figure 11.7. Drawn plan of Building E remains with photographic views of some areas of activity as interpreted from the archaeological record

¹⁶ Mudbrick walls are favored targets because they yield optimal retrieval of soil matrix within a given

horizontal extent. Once brick courses extend below ground level, trenching is the preferred method of

The general stability of some horizontal distributional patterns has borne out across the town site and elsewhere at South Abydos, with intact living floors, secondary refuse deposits, and diffuse distributions all well represented despite similar disruptions as those encountered in Building E (Wegner 2001a, pp. 100–03; 2004; Wegner and Abu el-Yazid 2006; Wegner 2007a, 2007b, 2010; Picardo forthcoming). Realistically, though, the lesser aspects of preservation must be acknowledged, and their effects factored into conclusions. First, the archaeological picture of Building E is most appropriately approached as a palimpsest of segments of the building's occupational history. Secondly, analysis of findspots also considers a spatial scale larger than individual rooms.¹⁷ One type of component spatial analysis, chosen by David O'Connor to evaluate the elite mansions of Lahun because of its suitability to the modular quality of such planned architecture, is applicable to Building E for the same reasons. Essentially a variant of access analysis, this method defines a component as "a discrete unit, several chambers internally connected by doorways and passages, but linked to the elite house as a whole by a single doorway, typically opening onto a main corridor or internal courtyard" (O'Connor 1997, p. 391). With the inclusion of corridors as formal, if transitional spaces, Building E's layout includes twelve components (labeled A–L in fig. 11.6b). At this level of analysis evaluation of fixed and non-fixed features, small finds, and architecture brings some areas of activity into focus (fig. 11.7).¹⁸

With circumstances of the late Middle Kingdom in mind, Building E may be approached as a central locus of a social house, and, along with its immediate neighbors, as a representative cross section of the Wah-sut community. Its archaeological record includes materializations of both introverted and extroverted modalities of household identity. In part a family residence, there appears to have been an internal sense of generational continuity, as five sub-floor baby burials attest (Picardo 2006 and forthcoming). Household studies have discussed the potential for residential burial to link people with their pasts within living spaces, regarding it as a potent mechanism of household integration and continuity (Kuijt 2001; Borić 2007; Adams and King 2011). Additionally, several finds likely promoted internal household identity and cohesion through their use by some or all household members in shared religious and cultic practices. This material is covered at length elsewhere (Picardo forthcoming) and will also receive future treatment in a separate article. The remainder of this presentation will concentrate on some evidence of the extroverted identities of Social House E.

extraction. By leaving outer wall faces intact, in effect the diggers create retaining walls that prevent an abundance of sand from sliding into the remaining trough as they work downward through brick coursing. Similarly, stopping shy of the natural desert sand below wall foundations limits unwanted sand in the mix as well. More often than not, this approach leaves outer wall edges and the lowest brick course(s) intact. The author thanks Jennifer Lavris Makovics for insightful onsite discussions about this activity.

¹⁷ More spacious areas generally produce more robust artifactual datasets, which, in turn, improve the reliability of calculations by reducing the effects of

at least relatively minor artifact displacement by site disturbances like illicit trenching.

¹⁸ Because of differential preservation throughout the building, the balance of weight upon artifactual versus architectural analysis for identifying functional aspects of space is variable from one area to the next. Where artifact yield is sparse, heavier weight must fall upon known architectural comparanda, and vice versa. Detailing the specific situations of each house component is beyond the scope and space of this article, but occupies a substantial portion of Picardo forthcoming (see also Picardo 2006).

Sealings, Sealing Practices, and Perpetuated Identity of Household E

This paper's emphasis on institutional affiliations does not imply anything about the relative importance of internal versus external factors in shaping household identities or the archaeological signatures that social houses produce. Rather, it is one demonstration of the value of a house society framework for addressing fundamental issues of Middle Kingdom studies, especially interpretations of planned settlements. Since strategies for the perpetuation of social houses included the negotiation of affiliations with external groups and institutions, some elements of extroverted identity should be readily apparent in a bureaucratically active, state-invested settlement like Wah-sut in which the private, residential sector was imbedded physically and functionally within a state-run foundation. Placing institutional affiliations under a microscope, so to speak, offers new prospects for accessing the situation

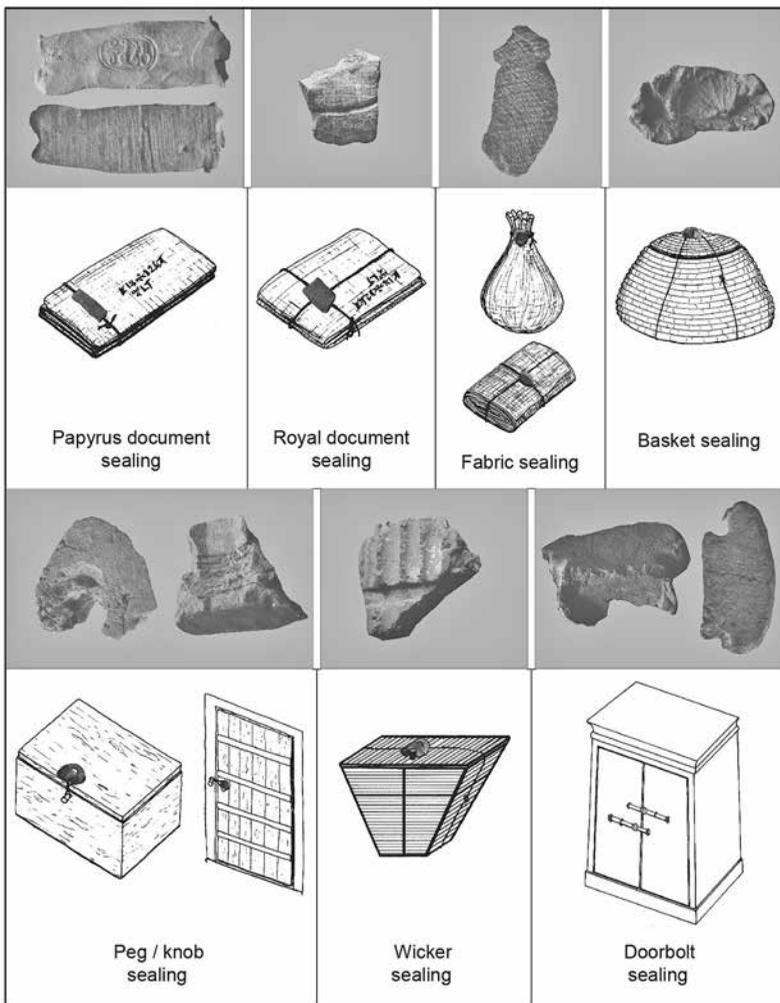


Figure 11.8. Sealing back types that give some indication of the objects to which sealings were affixed (image courtesy of Josef Wegner)

of individual house(hold)s/householders within a largely homogenous architectural environment. One cannot understate the importance of determining variations in the social composition of households that occupied houses alike in both size and layout. It is far more difficult to address the social structures that governed the functioning of state, settlement, and household without first accessing the social operators involved at each level. Doing so is a necessary step toward attaining a vivid, bottom-up perspective to complement existing, mainly monolithic models of societal organization that rely on settlement and house-level evidence primarily from more distant vantage points.

Wherever a bureaucracy or other well-developed hierarchies influence behaviors, the social valuation of titles is more likely to spill over from the mainstreams of official pursuits into day-to-day life. Titles will tend to become more visible materially and to stride the line between symbolic and material assets of an individual or group. The use of seals and sealings in the “company town” setting of Wah-sut presents a case in point. Ubiquitous at Middle Kingdom settlement sites, mud sealings are among the most frequently recovered archaeological testaments of bureaucratic processes. Sealing as a bureaucratic device was part of ancient Egyptian administrative practice from the earliest manifestations of the state (Williams 1977). Though various forms of seals were employed through history, by far the most common was the scarab-shaped seal, which experienced a marked rise in use by the upper elite around the early Middle Kingdom (Johnson 1977; Williams 1977). Concurrent with continued governmental reforms, by the late Middle Kingdom sealing was a mainstay of administrative and economic activity throughout the country that included sealers well below the highest official ranks.

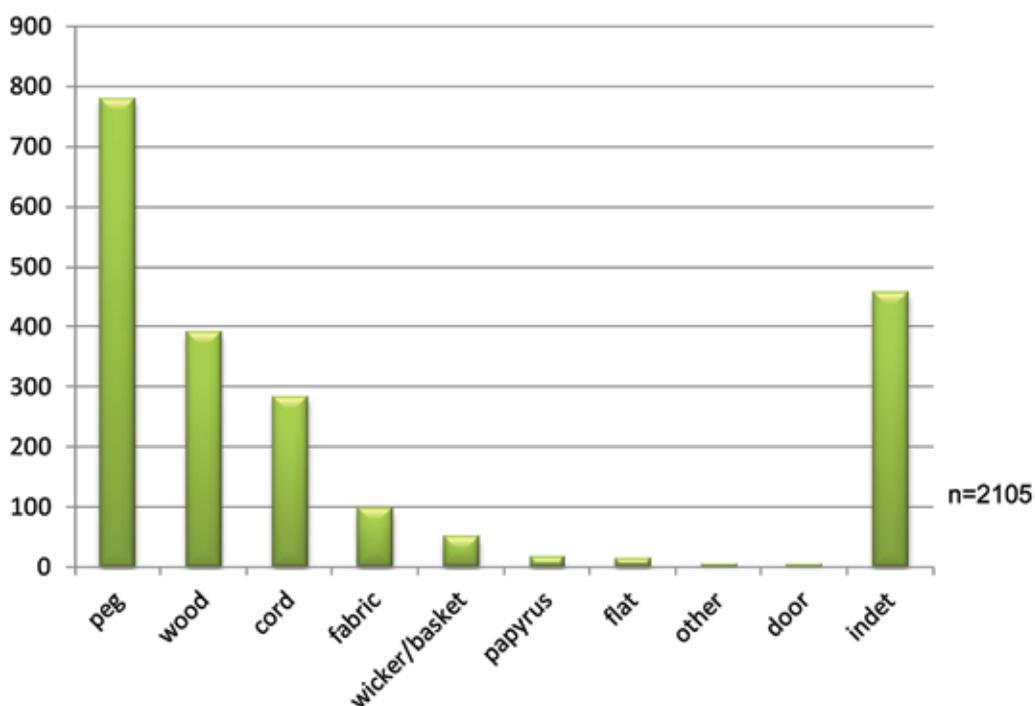


Figure 11.9. Counts of back types in the sealing corpus of Building E site excavations of 1999 and 2004

The act of using a seal's inscribed underside surface produced a sealing, a lump of mud with the imprint of that seal on the front side, and on its back, an impression of the object to which the mud was affixed, that is, the sealed item. Although George Reisner (1955) acknowledged the importance of studying back impressions long ago, concerted attention to their value for reconstructing activities has become standard only much more recently (e.g., von Pilgrim 1996a, pp. 234–41; Aruz 2000; Foster 2000; Wegner 2001a, 2007b; Moeller 2012). Sealings were applied to containers, such as boxes, lids of baskets, and openings of bags, to closure mechanisms of doors (pegs, knobs, or bolts), and to papyrus documents secured for delivery or filing (fig. 11.8). Because attachment impressions for peg/knob closures of boxes and doors are virtually identical, raw counts of these back types are somewhat ambiguous. However, for boxes as for doors, local application is highly likely (von Pilgrim 2001), and indeed much of the sealing activity at Wah-sut is likely of local origin in general (Wegner 2001a). As at many Middle Kingdom sites with archaeologically documented sealing activity, pegs are the most abundant form at the Building E site (fig. 11.9). Though the ratio of door sealings to box closures is not discernible, trends favor container sealings as a majority component; sealing deposition at the Building E site shows very little similarity with patterns encountered at Senwosret III's mortuary temple where frequent and repeated door sealing is more clearly visible in the remains (Wegner, Smith, and Rossel 2000; Wegner 2007b; also see discussion below for details).

The total sealing count from the 1999 and 2004 field seasons at the Building E site is 2,170. Exclusion of sealings from areas of other houses reduces the number to 2,105 which retain at least a partial back impression and 2,046 with extant seal imprint, however fragmentary. Impressed sealing designs are from three general categories of seals:

1. Institutional stamp seals are easily identifiable by a shield-shaped field, usually containing the name of an institution or, much less frequently, a specific high official, by name and/or title, who wielded sealing authority for the institution.

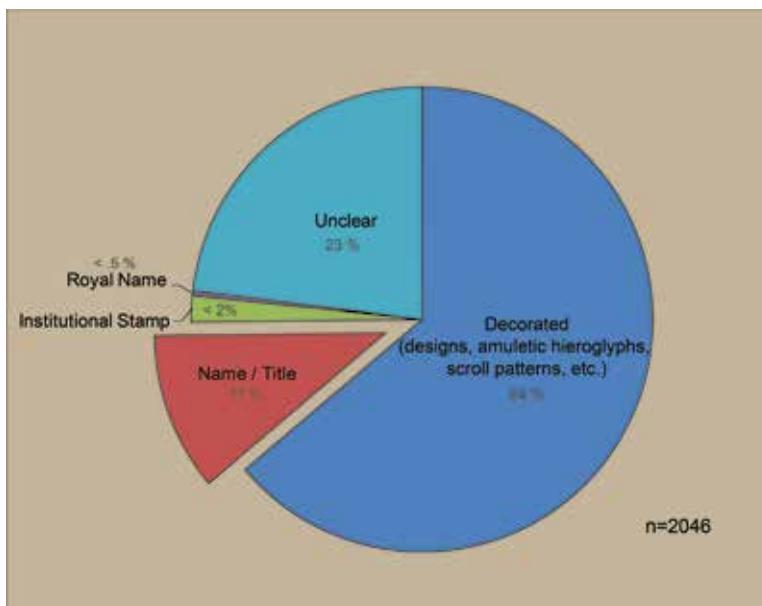


Figure 11.10. Proportions of sealings associated with Building E by seal imprint type

2. Private name/title scarab seals carry names of individuals and/or their titles in oval fields, the latter of which may be administrative, thus indicative of authority and/or responsibility; or honorific, thus conveying relative status but technically lacking explicit official duties or authority; or non-administrative professional, thus indicating a professional role outside the official administrative structure.
3. Non-literal scarab seals include any of several kinds of decorative motifs in oval fields, including abstract designs and borders, figural representations, botanical motifs, and hieroglyphs used for their iconic, as opposed to linguistic value. The essence of this category is that such seals do not have writing intended to be read as words, names, or titles.

Sealings considered for this study are those found within the horizontal boundaries of Building E, the partially excavated street to its immediate east, and an incompletely excavated refuse area immediately outside its southern wall (which doubles as part of the southern town perimeter wall; see fig. 11.5).

Figure 11.10 presents the relative proportions of sealings by seal type for Building E. The 11 percent of the corpus that consists of name/title sealings is the primary data of this study. Name/title sealings tend to receive the most detailed study, publication, and commentary because of the specificity of information that their imprints contain.¹⁹ They document individuals by two specific identifiers: personal names and titles that can provide indexes of official roles and responsibilities, placement in hierarchies, or status by other measures. This information has been consulted especially in efforts to reconstruct administrative systems for several prominent Middle Kingdom sites (e.g., von Pilgrim 1996a; Wegner 2001a, 2007b; Manzo and Pirelli 2006; Moeller 2012). Analyses of seals and sealings also have been integral to the study of Middle Kingdom Egyptian fortress establishments in Nubia (Foster 2001; Williams 1999), both individually and as a coordinated network extending from Egypt proper to beyond the Second Nile Cataract (Smith 1990, esp. p. 202, tabulation of institutions at several forts; Gratien 1994). Datable seals and sealings can act as chronological anchors and assist in clarifying royal successions (Martin 1971; Ward and Tufnell 1978–84; O'Connor 1985b; Ben-Tor, Allen, and Allen 1999; Ben-Tor 2007; Bietak 2004; Moeller and Marouard 2011).

It can be easy to underestimate the value of non-literal design sealings, if only because they appear so non-specific in comparison to name and title impressions. Indeed, very recent work is endeavoring to better clarify the uses of non-literal seals (Bagh 2004; Moeller 2012; Penacho 2013). One possibility is that they were functional equivalents to name/title sealings:

In dealing with the administrative implications of sealings it is a basic premise that even a stamp seal or scarab bearing decorative patterns denotes an individual person. Otherwise impressing a seal would have been without any information about the responsibility and sealings would not allow any control on the security of doors or containers. However, in the context of a local sealing system it made no difference for the meaning of a sealing whether it was inscribed in order to be directly identified by the proper name of its owner or by distinctive pattern only used by one person. In fact, according to Egyptian practice some names were so popular and

¹⁹ Both at individual sites and when considering seals and sealings widely, it is common for name/title sealings to comprise a much smaller component of

assemblages than non-literal sealings (Martin 1971; von Pilgrim 2001).

widespread in specific towns, that it would have been difficult to distinguish low ranking owners of a seal from others only by their names. An ornamental pattern, however, guaranteed an unmistakable identification of the seal owner. The enormous variety of geometric patterns was controlled and somewhere recorded. Since these seals were only meant to be used within a specific area or even in one institution only, it could not have been too difficult to relate them to their owners. A strong clue for the individual meaning of these illiteral seals is the common practice of countersealing [for which, see discussion below]. A sealing with impressions of two different seals as an evidence of double control is only sensible if the sealers are identifiable. (von Pilgrim 2001, p. 169)

Yet, non-literal designs can be viable only up to a certain breadth of activity and number of participants. If, in cases like those mentioned above by von Pilgrim, the arena of sealing activity is a single institution, the system might be restricted enough to accommodate individual sealers without recourse to names and/or titles. Excavation at South Abydos has so far produced well over two hundred non-literal sealing designs.²⁰ Even though this is surely only a partial tally of the number originally in use at Wah-sut, one can only speculate whether

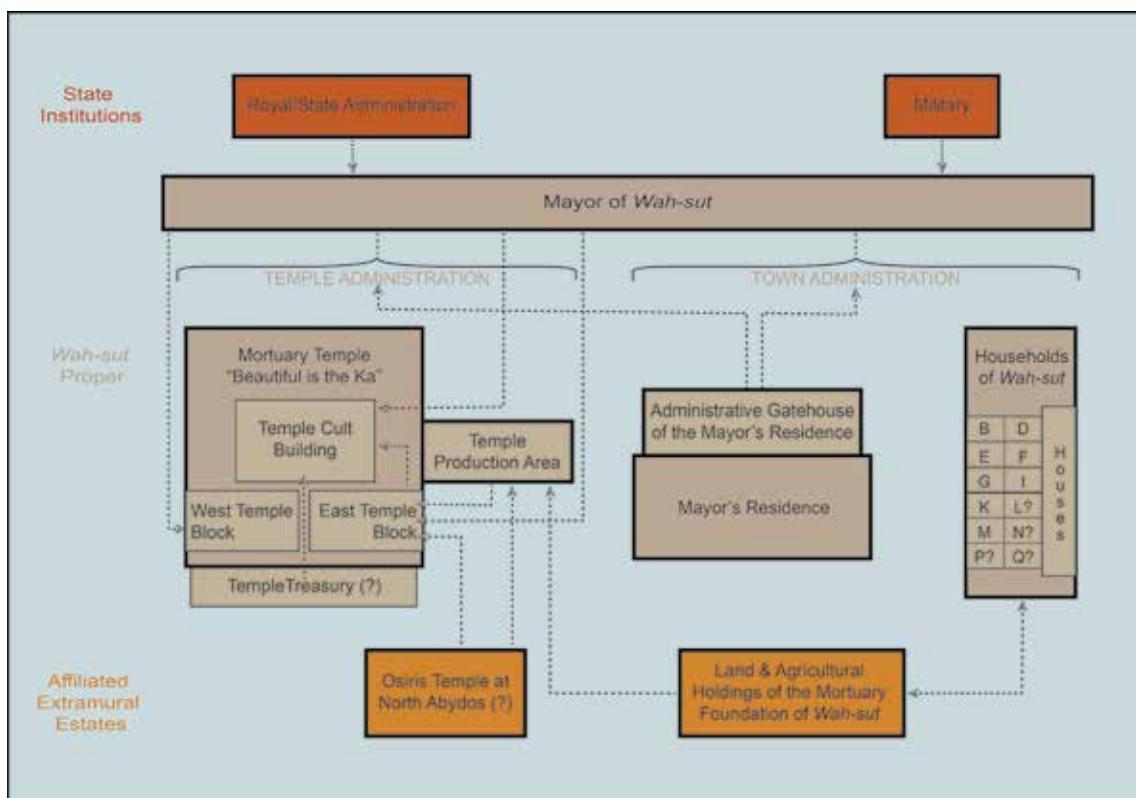


Figure 11.11. Model of the administrative organization of the mortuary foundation of Wah-sut-khakaure-maa-kheru-at-Abydos at South Abydos (based on Wegner 2007b, 2001a)

²⁰ Many fragments are too small to match confidently with known, full versions of many designs types,

hence the conservative quantity listed here. The actual total is certainly higher.

the original total might have challenged the practicality of using design seals as unique identifiers. However, even in the most geographically isolated institutional settings like the Nubian fortresses, the existence of so-called look-alike imprints (Reisner 1955; Weingarten 1990) — the same or very similar designs produced by different seals — is inconsistent with a system that requires designs to be easily distinguished from each other unless one assumes that they were not used contemporaneously.

Although Wah-sut's institutions were localized at South Abydos, it would be misleading to characterize the administrative landscape of Senwosret III's Wah-sut foundation as constricted or simple. Using the shield-shaped stamp sealings along with name/title impressions, Josef Wegner (2001a; 2007b, pp. 317–61; Wegner, Smith, and Rossel 2000) has reconstructed the primary interactions of the known institutions (fig. 11.11). These include the royal tomb (embalming facility and/or necropolis as a whole), the mortuary temple cult, the temple production area, storage facilities, the mayoral house, the mayor's Administrative Gatehouse, and, in fact, the person of the mayor himself, along with a few other individual civic or religious officials (none appearing in Building E's corpus) who acted as singular authorities on behalf of institutional bodies. The epicenter of authority over the Wah-sut mortuary foundation and the town was the House of the Mayor (*pr-h3ty-9*). In both title and in practice, town mayors exercised highest authority over both civil matters and, usually being vested with the title Overseer of Priests (*imy-r hmw-ntr*) or Temple Overseer (*imy-r hwt-ntr*), temple administration as well (Wegner 2007b). The latter role conferred not just religious status, but also brought opportunities for economic and social gain (Willems 2013; Moreno García 2005). Accounting and distribution of goods appear to have been largely centralized in the Administrative Gatehouse of the House of the Mayor (*rryt n pr-h3ty-9*) of Wah-sut, both for the town individually and as a conduit for moving materials between temple and town (fig. 11.11). More precise dynamics remain to be fleshed out with continued study.²¹

There are significant gaps in knowledge about the range of possible sealing workflows. It can be ambiguous whether findspots represent places of application, removal, or disposal, if any of these. Thus it is often unclear if circumstances represent use context, storage/archival space, refuse deposit, or something else entirely. Likewise, sometimes it cannot be ascertained if some sealings may identify sources while others indicate recipients. Undoubtedly, movements of sealed object differed, some sealings having been affixed, for example, for transport, for long-term containment, or for regularized receiving-disbursal turnaround. Rarely considered is whether some goods were sealed more than once, or even numerous times, in cases of longer durations, multiple transfers, or long-distance movement. More generally, it is often unknown what constituted a full “cycle” of sealing activity, or even how many variant practices occurred simultaneously, whether in tandem or in parallel. A major point of disagreement is whether sealing systems of the Middle Kingdom functioned more for purposes of accounting, with a protracted cycle of archiving and periodic account-keeping for storage and distribution facilities (Smith 1990, 1998, 2001, 2004), or instead more for purposes of accountability — that is, to record the presence of responsible parties — with very regular changeover, frequent summary tabulations, and correspondingly regular discard (Wegner 2001a, pp. 97–100; von Pilgrim 2001, pp. 163–68; Gratien 2001).

²¹ It is notable how starkly this centrally consolidated administrative configuration differs from the more disbursed, shared control of commodities proposed

for the elite sector in the Lahun settlement (Kemp 2006, pp. 211–21, and see discussion above).

There is enough variation in archaeological sealing assemblages from site to site to conclude that a monolithic national sealing system, if one existed, operated alongside localized protocols. For example, limited evidence suggests that some administrative streams included collection and retention of broken sealings after primary use possibly for taking bulk counts or for validation of figures by later audit (Leclant and Clerc 1993, p. 230; Smith 1998, 2001, 2004; von Pilgrim 2001, pp. 163–64), but Wegner (2001a) has demonstrated convincingly that this was not a prominent practice at South Abydos. The most recognizable institutional sealing practice exhibits further idiosyncrasies. Countersealing, also known as over stamping, is a multi-step application by which the same mass of sealing mud receives stamps of more than one seal. The most common sequence is that of, first, stamping by an institutional seal followed by one or more (counter-)impressions from a non-institutional stamp, superimposed upon the primary impression and often applied in multiples to cover a large portion of the surface area. The practice is well attested at Middle Kingdom Nubian fortress sites, where it occurs much more frequently than at settlements within Egypt proper (Smith 2004). At the forts counter-stamps included both personal name/title and non-literal stamps (Reisner 1955, p. 28; Smith 1990; Foster 2000, p. 175). The record of South Abydos to date has yielded examples of the same practice, but in very low frequencies in the remains of Building E, only three very fragmentary exemplars. Multi-stamped sealings, which carry more than one impression of the same seal, are more common. The Building E site produced fifty twice-stamped and seven triple-stamped sealings.²² Clearly, many transactions involved sealing without requiring a counter-stamp to be valid.

Perhaps the only certainty, then, is that a sealing assemblage from a site, or even from a single building, comprises only a fraction of those originally in circulation, not a systemic inventory. The several factors that guided the application, removal, and disposal of sealings also yield substantial variability in their archaeological distributions. Highly diffuse patterns of name/title sealing distribution are common at Egyptian sites, characterized by seemingly scattered assemblages with high incidence of unique impressions, many of which are only singularly or very sparsely represented. There are disagreements about how best to interpret such patterns. By analogy with practices documented for the Aegean, they may be the respective signatures of different kinds of storage (Ferioli and Fiandra 1990; Smith 1990, 1991, 2001). Distribution storage involved high turnover, frequent input and outflow of content, as with rations or staple goods, and thus high frequency application (and, for doors, breaking) of sealings. The signal of this workflow is intensive sealing accumulation, with high frequency of the same impressions, sometimes relatively restricted in the variety of impressions encountered. By contrast, conservation storage, used for wealth or non-staple goods with limited or infrequent distribution, is consistent with non-intensive deposition, correlating archaeologically with low frequencies of individual sealings but larger repertoires of unique impressions. It is common to find just one or two examples of most impressions. This is frequently the case for the Building E site at South Abydos.

Yet the utility of sealing did not apply to storage and distribution alone. More generally, the most significant determinants of sealing frequency were duration of the sealer's presence, the intensity of the sealer's involvement in a kind of sealing activity, and the pace

²² Back types of these sealings include peg (23), wood (16), cord (4), fabric (5), papyrus (1), door (2), and indeterminate (6).

and/or iterative period of sealing required by a particular task (Smith 1990, p. 206; Wegner 2001a). Stewart Tyson Smith (1990, p. 209) proposes that high officials, who themselves sealed relatively infrequently, were the main (though not exclusive) possessors of name and title seals, but customarily delegated the task of sealing to subordinate functionaries. Differential occurrence of sealing impressions is thus a function of differential responsibilities of sealers who recorded the flow of goods in and out of storage facilities. Somewhat similarly, von Pilgrim (2001) argues that frequent sealers were more permanent staff, while those sealers who appear less frequently undertook their duties on periodic, rotational basis. Rather than reflecting movement of commodities, though, the use of seals instead tracked who was on duty during a specific span of time and thus privy to secured spaces and goods. Wegner (2001a) interprets sealing as a mechanism to mitigate against irregularities in an established administrative system, such that sealing frequency is a function of repeated performance of duties by individuals with narrowly defined responsibilities. As such, concentrations of sealings proffer direct means for locating areas of official activity. This premise bears out at Abydos, where the large area and architecturally disbursed institutional configuration bring larger distributional patterns into view:

Personal titles at South Abydos include a range of civil, religious and military titles, as well [as] domestic administrative titles and designations of professions. The occurrence of titles of different types differs markedly between town and temple. Although certain personal seal impressions occur in both sites, the majority of personal scarab impressions occur with specific distribution patterns within town or temple but not both. (Wegner 2001a, pp. 100–01)

These studies attempt to explain administrative sealing practices by presuming them to have been more or less consistent, rigidly defined protocols within large, structured institutions. However, Building E — and presumably other houses like it — did not have the status of free-standing, official institution as the mayoral house so explicitly did through its Administrative Gatehouse (see above and figure 11.11). No evidence indicates rotational residency (as was the rule in the early use of Nubian fortresses), so duration of stay would have been sustained. Nonetheless, the distribution of sealings is mostly non-intensive rather than concentrated. Another angle is perhaps needed, one that looks beyond the workings of major institutional bodies as the sole driving forces behind sealing activity. Wegner essentially pinpointed the next level of analysis: “within the town a range of domestic administrative titles may articulate with the separate houses as distinct economic entities under the wider umbrella of town administration” (Wegner 2001a, p. 103). It is contended here that these “economic entities” are the social houses of Wah-sut.

There has been much scholarly discussion recently on the significance of informal networks and interpersonal relationships that operated outside the boundaries of official state bureaucracy but which were nonetheless intrinsic to Egypt’s socioeconomic fabric (e.g., Franke 2006; Eyre 2011; Moreno García 2013a, 2013b). Broadly speaking, ancient Egyptian social structure is understood to have included (quasi-)feudal and patrimonial elements and social contracts involving land rights, but which functioned primarily within, or in close alignment with a wider, redistributive economy that was, more or less, a state monopoly (see Warden 2013 for a comprehensive review and discussion). Technically, all lands may have belonged to the crown, and the state concerned itself with municipal borders and tax assessments tied to agricultural yields. In theory, career advancement was due reward for adept service and achievement. In practice, however, interactions founded upon less formalized, interpersonal

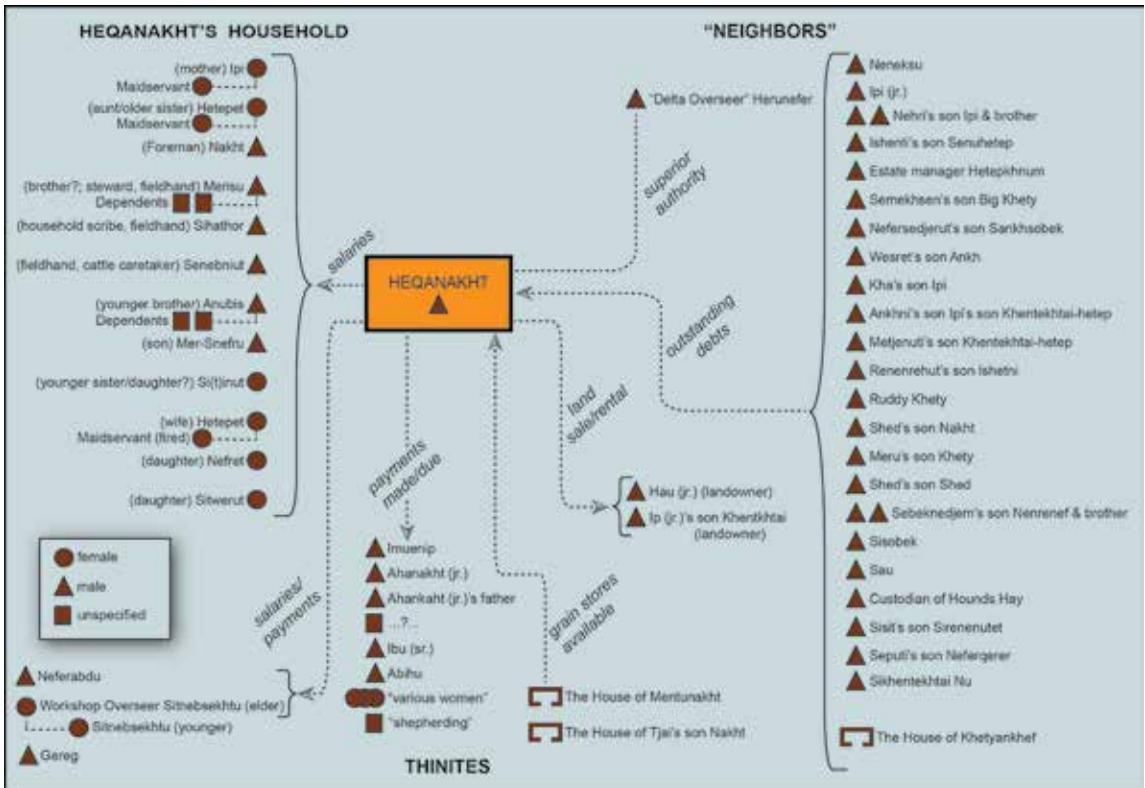


Figure 11.12. Model of the economic relationships implicated by the letters and accounts of Heqanakht (based on Allen 2002)

relationships involving many possible factors played major parts in fundamental aspects of ancient Egyptian life:

Patronage, informal networks of influence, factions, corruptions, and favoritism “oiled” the everyday functioning of power in pre-industrial states, to the point that all these elements could simultaneously complete, counterbalance, and menace the authority of the central power. But, on the other hand, they also procured the kings additional tools, aside from the “official” channels, to exert power, to mediate among (and manipulate) factions, to (re)create the ruling elite, and to penetrate into geographical areas or activity sectors resistant to external interference. (Moreno García 2013b, pp. 1030–31)

The roles of both formal and informal dynamics have been noted in such basic arenas of ancient Egyptian life as irrigation management (Lehner 2000), agriculture (Eyre 1994, 1997; Moreno García 2001, 2005), and other interactions involving goods and services (Warden 2013).

The textual record preserves glimpses of how complex such networks could become, even when emanating from individuals. Figures 11.12–13 illustrate two examples, both surviving from the early Middle Kingdom reign of King Senwosret I (70–100 years prior to Senwosret III), before the burgeoning use of sealing reached its peak. In the first example, a series of

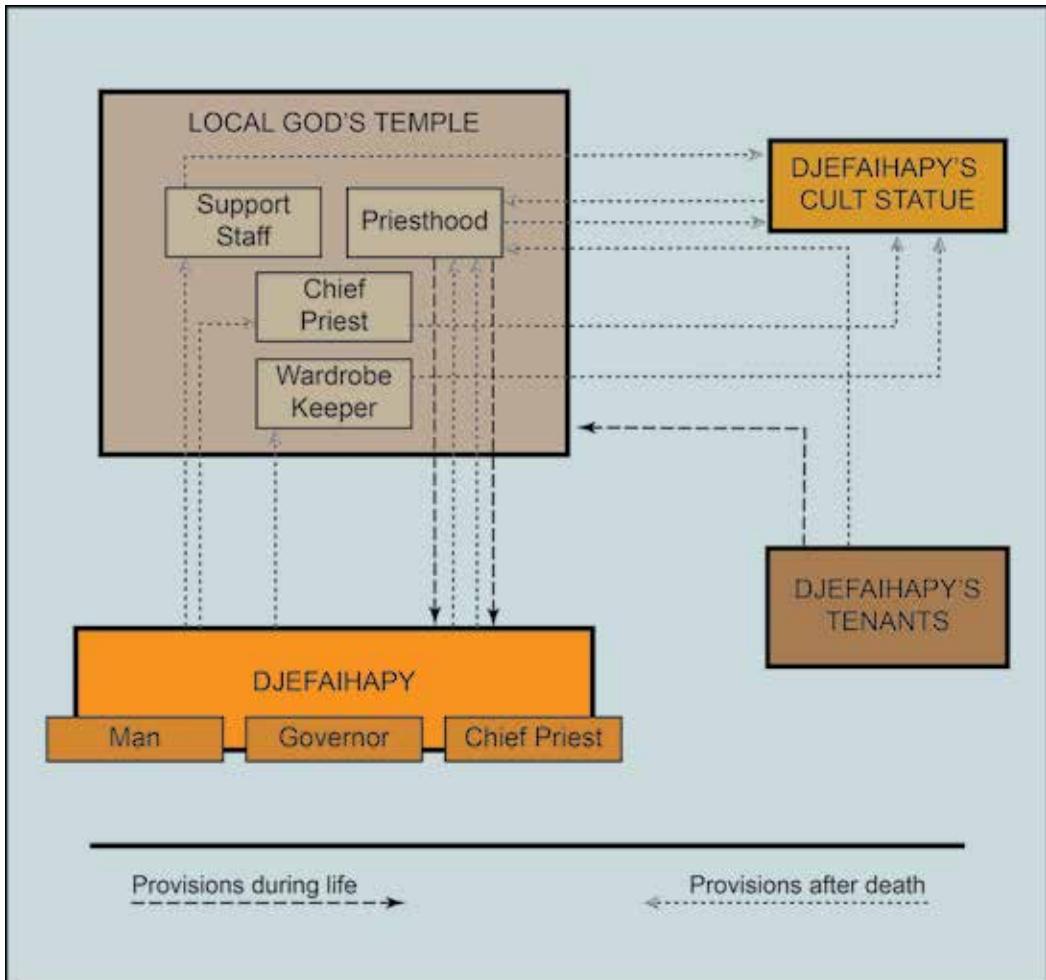


Figure 11.13. Service and exchange relationships provided by the mortuary contacts of Djefaihapy (based on Spalinger 1985)

letters and accounts provide a representative, firsthand view of household management by the “moderately well-to-do” middle-class funerary priest, Heqanakht (Allen 2002, quote from p. 142).²³ His dealings offer a sense of the composition, dynamics, and configuration of a household and its orientation around land and property, which is to say, the social house

²³ Heqanakht’s household was composed of at least seven family members plus several household servants and functionaries, some of whom had dependents of their own. Heqanakht’s concerns focus on the management of fields both at home and farther afield, rebuffing his sons’ complaints about their rations, payments to household workers, tabulation of surplus versus debt for staple grains, bread, cattle, and wood, and also budgeting for taxes and future overhead planting costs. These concerns brought

Heqanakht into several extra-household spheres that involved his neighbors and several other people of the Thinite Nome. He also maintained accounts written on papyrus, one of which was found with an intact sealing stamped with the single hieroglyphic sign for “seal(er)” without a personal name. See figure 11.12 for a visual representation of Heqanakht’s spheres of interaction as implicated in his documents.

of Heqanakht. Notably, his extended sphere includes three other “houses”: the House of Mentunakht, the House of Tjai’s son Nakht, and the House of Khetyankhef, with which he expresses relationships of obligation in the exact same manner as with individual persons — as the “actual bearers of rights and duties” — based on their relative standing and the rights and obligations understood between them (Lévi-Strauss 1987, p. 151). In the second example, the tomb-chapel walls of provincial governor Djefaihapi I of Asyut record formal contracts outlining a complex array of obligations through which household relationships and property intersected with activities of the local temple (Spalinger 1985), offering a likely parallel for the circumstances of some high officials at Wah-sut.²⁴ Most notably, the contracts carefully distinguish between the appropriate dispensation of Djefaihapi’s estate by each of his roles, separating personal property from holdings he possessed by virtue of his official positions.

Although some of the extremely numerous transactions implicated by these two examples may have sooner or later been included in the summary accounts of official bureaus, many likely did not. Even if so, tabulation first took the form of private, probably informal household accounts. In the best of cases, these private records would have resembled documents generated by Heqanakht or some of the provisions that Djefaihapy published for posterity. Sealing as a device to confirm transactions and log contractual terms would be as important economically and legally for private or household arrangements as for a large administrative institution, adding a measure of accountability and perhaps quantification if circumstances required, but not necessarily part of mainstream administrative record-keeping. In the highly “bureaucratized” world of a state-sponsored foundation like Wah-sut, the distinction between professional versus private exchanges and agreements may have been blurred to a greater degree than in earlier times, making sealing more common. As it became more ubiquitous because required by some institutional operations tied to larger-order state organization, sealing likely became normative for many other kinds of transactions than state mechanisms tracked with absolute regularity. In earlier historical periods or in non-institutionalized towns, many singular sealing events not involving institutional parties likely were not treated similarly. Private sealing of numerous informal economic activities may have been undertaken through similarly informal recording practices that were subject to less direct oversight. Once it is understood that a substantial amount of sealing likely was employed for activities beyond only “official” storage and distribution and work “on the clock,” it is difficult to adhere to any stricture that presumes every sealing must be linked *directly* to institutional protocol. In fact, many instances were likely several degrees removed.

However, since individuals belonged to households when acting in any capacity, any application of a seal was, to greater or lesser extents, reflective of one or more households irrespective of whether its use was for official or private purposes. Whereas archaeologically recovered seals and sealings are used most to reconstruct the institutional components of economic and administrative systems, when the same objects associate spatially with houses, relationships intimated by institutional affiliations convey an important layer of information about the composition of the corresponding social house. Since membership in Social House E would have been configured in part *vis-à-vis* the physical house, the activities of most

²⁴ Instructing a mortuary priest to adhere to his contracts’ stipulations for attending to his own statue cult, the governor arranges also for this endowment to be passed down to the priest’s son only on condi-

tion of continued service and, further, the guarantee that this property could not be divided among multiple descendants. See figure 11.13 for a visual representation of Djefaihapi’s contractual arrangements.

members would have intersected with Building E in some way, even if indirectly. As distributable objects, sealings are entry points for detailed study of titles and names in the Wah-sut community, both as socially relevant identity markers as well as key elements of extroverted household identity. The historical setting of the late Middle Kingdom merely amplifies the value of titles. Both functional administrative (or “regular”; Quirke 1986) titles and those of other professions or ranks were social identities of public import, the very same projections of identity that Egyptians inscribed on their own mortuary and votive monuments to be remembered (Simpson 1974; O’Connor 1985a; Leprohon 1978, 1993). They factored pivotally into the relative status of individuals and social houses, comprising one standard by which they gauged and were gauged by each other. Preservation of status and titles through time could become a facet of the estate, such that failure to pass through a generation the same, similar, or higher position may reflect fluctuating social house standing and command over an external collective identity and household estate.²⁵ Thus, detection of trends in names and titles in the sealing repertoire holds considerable potential for characterizing social houses that included them as defining holdings.



Figure 11.14. Scarab seal (find #032674) of the Storeroom Superintendent of the Chamber of Incoming Goods, Anen, Possessor of Veneration

²⁵ The apparent intentionality of late Middle Kingdom bureaucratic reforms might logically imply that conferral of official positions operated on the basis of merit and achievement (as contemporary textual sources regularly claim). Melinda Nelson-Hurst has demonstrated in a recent quantitative study (2011) that patterns of office and title transfer did not veer substantially from past trends — neither from earlier times into the Middle Kingdom nor from the early to the late Middle Kingdom. Although some high-ranking titles were no longer available to as many holders, titles still in use often remained within family (thus, by extension, household) lines. Position, status, and influence of one generation provided

opportunities for experience and advancement by the next, thus preserving and/or enhancing family status. The continuity of offices and titles was not, however, guaranteed, implying an ostensibly meritocratic environment with competitive elements, however susceptible to manipulation it sometimes could have been. Thus, maintaining “control” over an office or title within a primary family line was not a matter of retaining property in a strict sense, but rather a relative gauge of a household’s capability to socially reproduce the means and access to the status, performance, and wealth commensurate with the institutions and professions that supported it wholly or partially.

Table 11.1. List of readable name/title sealings from the Building E site at South Abydos

Institutional Affiliation	Title/Name	Transliteration	Count	Distribution (Building E Site)
ROYAL GOVERNMENT AND TREASURY OFFICIALS				
Royal Sealer, High Steward ...		<i>ḥtmty-bity imy-r pr wr...</i>	2	Room 21
Royal Sealer, Treasurer <i>Iyuseneb</i>		<i>ḥtmty-bity imy-r ḥtm(t) Ṛiw-snb</i>	2	Room 25; Component K/ Rooms 11–12
Estate Overseer, Accountant of Livestock...		<i>imy-r pr ḥsb iḥw...</i>	1	Room 8
Elder of the Portal <i>Neb(i)pu</i> (?), Justified		<i>smsw ḥ3yt Nb(.i)-pw(?) m3^c-ḥrw</i>	9**	Rooms 1, 4–5, 16, 19, 21
Royal [Sealer], Estate Overseer (?)...		<i>[ḥtmt]y-bity (imy-)r-pr(?)...</i>	1 (shield stamp)	Component F/K
Commissioner of the Great Court...		<i>z3b r Nḥn ḥwt-wrt...</i>	1	Component E/F (wall trench)
Royal Sealer, Sole Companion ... Treasurer <i>Su...</i>		<i>ḥtmty-bity smr-w^cty n...imy-r ḥtm(t) sw...</i>	1	Street
...Treasurer ... (?)		<i>...imy-r ḥtm(t)...</i>	1	Street
MILITARY OFFICIALS				
Commandant of Recruits <i>Khnum</i>		<i>ḥrp-nfrw Ḥnmw</i>	6***	Rooms 1, 22; Component E (wall trench)
Retainer <i>Ba</i> -(?)...		<i>šmsw B^c(?)...</i>	1	Component E
THE WAH-SUT FOUNDATION				
<i>Enduring-are-the-Places-of-Khakaure- [True-of-Voice]-in-Abydos</i>		<i>W3ḥ-swt Ḥ^ck3wr^c [m3^c-ḥrw] m 3bḏw</i>	2	Component G; back deposit
MAYORAL ADMINISTRATION / ADMINISTRATIVE GATEHOUSE				
Mayor, Gods-sealer, <i>Sehetepib</i>		<i>ḥ3ty-^c ḥtmty-nṯr Šḥtp-ib</i>	1	Rooms 11, 19
Mayor...w...nb...		<i>ḥ3ty-^c...w...nb...</i>	1	Rooms 27–28
Mayor/Governor, Overseer of Priests of Qaw el-Kebir, <i>Ibu</i> , Justified		<i>ḥ3ty-^c imy-r ḥm(w)-nṯr W3ḏt Ṛbw m3^c-ḥrw</i>	1	Room 16
Mayor...		<i>ḥ3ty-^c...</i>	1	Component G/street
Mayor...w...r...		<i>ḥ3ty-^c...w...r...</i>	1	Back deposit
Mayor, God's-sealer...		<i>ḥ3ty-^c ḥtmty-nṯr</i>	1*	—
Mayor, God's-sealer... son of ..., Justified [†]		<i>ḥ3ty-^c ḥtmty-nṯr...s3...m3^c-ḥrw</i>	1*	—
Mayor...		<i>ḥ3ty-^c...</i>	1*	—
Administrative Gatehouse of the House of the Mayor of <i>Enduring-are-the-Places-of-Khakaure-True-of-Voice-in-Abydos</i>		<i>ṛrryt nt pr ḥ3ty-^c W3ḥ-swt Ḥ^ck3wr^c m3^c-ḥrw m 3bḏw</i>	1* (shield stamp)	—

* Number of exemplars from archaeological contexts larger than a demarcated house component and, thus, not included in the "Distribution" column.

† Preservation of this seal's impression leaves open potential alternate readings by comparison with the larger South Abydos sealing, including *ḥ3ty-^c ḥtmty-nṯr wr-[mdw šm^cw]...m3^c-ḥrw*: Mayor, God's-sealer, Great One [of Tens of Upper Egypt]..., Justified; or less likely *s3 ḥ3ty-^c ḥtmty-nṯr...m3^c-ḥrw*: Son of the Mayor, God's-sealer..., Justified.

Table 11.1. List of readable name/title sealings from the Building E site at South Abydos (*cont.*)

Institutional Affiliation	Title/Name	Transliteration	Count	Distribution (Building E Site)
DOMESTIC ADMINISTRATION				
Storeroom Superintendent (f) <i>Ipi</i> , Possessor of Veneration		<i>iry.t ʿt ʿipy nb.(t) im3h</i>	30*	Rooms 8, 11, 24; Component 11/ street; back deposit
Estate/House Overseer... <i>Khnum</i>		<i>imy-r pr...Hnmw</i>	1	Room 8
Estate/House Overseer, <i>Sasobek</i>		<i>imy-r pr Sbk-s3</i>	1	Component B
...Estate/House Overseer, <i>Senwosret</i>		<i>... imy-r pr Snwsrt</i>	1	Back deposit
Estate/House Overseer...		<i>imy-r pr...</i>	1	Back deposit
TEMPLE CULT				
Purification Priest, <i>Heri</i> of Enduring-are-the-Places-of-Khakaure-True-of-Voice-in-Abydos		<i>wʿb Hri n W3h-swt Hʿk3wrʿ m3ʿ- hrw m 3bdw</i>	5**	Component H/Room 24; street
Temple Overseer...		<i>imy-r hwt-ntr...</i>	3*	Component H/Room 24
Phyle Supervisor...		<i>mty n s3...</i>	2	Back deposit
Temple Overseer...		<i>imy-r hwt-ntr...</i>	1	Back deposit
Temple Overseer...		<i>imy-r hwt-ntr...</i>	1*	—
TEMPLE SUPPORT				
Storeroom Superintendent of Incoming Goods, <i>Anen</i> , Possessor of Veneration		<i>iry-ʿt n hnkt ʿInn nb im3h</i>	1 (scarab seal)	Room 21
Storeroom [Superintendent] and Cupbearer <i>A[nen]</i> , Justified]		<i>[iry]-ʿt wdpw ʿI(nn m3ʿ-hrw)</i>	1*	—
STATUS / FILIATION				
...Son of (?) the Mayor, <i>Iuseneb</i>		<i>...s3 h3ty-ʿ ʿIw-snb</i>	2*	Room 24
Lady of the House <i>Ipet</i> (?)...		<i>nb.t-pr ʿIpt</i> (?)...	2	Component G; street
Lady of the House <i>Neferhotep</i>		<i>nb.t-pr Nfr-htp</i>	2	Street
Daughter of the Mayor, <i>Iw</i> ...		<i>s3.t h3ty-ʿ ʿIw...</i>	1*	—

All major local and national institutions represented at South Abydos appear in the sealing repertoire from Building E and its immediate surroundings with the exception of the embalming facility/necropolis seal of Senwosret III (table 11.1). Present are sealings of royal government and treasury officials (Royal Sealers and Treasurers, Commissioner of the Great Court); the overall Wah-sut foundation; priestly and temple cult personnel (Purification Priests, Temple Overseer, Phyle Supervisor); temple support/production (Storeroom Superintendent and Cupbearer, Storeroom Superintendent of Incoming Goods); mayors (Mayors of Wah-Sut, external Mayor of the Tenth Nome); the Administrative Gatehouse of the House of the Mayor of Wah-Sut; the military (Commandant of Recruits, Retainer); and domestic administrators (Lady of the House, Storeroom Superintendent [female and male], Estate Overseers);

and status titles of filiation (Daughter of the Mayor, Son of the Mayor). The number of institutions shrinks when considering only the impressions with strong spatial associations with Building E itself (table 11.1). Notably, the Administrative Gatehouse of the mayoral house is absent from this sealing subset, a surprising fact that may support the notion that Building E's sealing record testifies to some — and possibly many — private transactions.²⁶

Two individuals link directly to Senwosret III's mortuary temple through occurrence of their sealings in the temple's east block refuse deposit: the *Wab*-priest Heri, of Wah-sut-Khakaure-maa-kheru-m-Abju (*W^b Ḥri n W³h-swt-Ḥ^ck³wr^c-m³^c-ḥrw-m-³b^dw*) and the Storeroom Superintendent and Cup-bearer, Anen, Justified (*'Iry-^ct wdpw 'Inn m³^c ḥrw*) (Wegner 2007b, pp. 346–47, 54–57). The temple's east block was a receiving area for incoming temple goods, a storage area of temple cult offerings, and a staging area for regular cultic activities, possibly to be identified as the Sealed-Storehouse-of-Incoming-Goods-and-Divine-Offerings-of-Khakaure (*ḥtm inw ḥtpw-nṯr n Ḥ^ck³wr^c*) (Wegner 2007b, pp. 102–03; Wegner, Smith, and Rossel 2000, pp. 104–05). Of immense interest in this regard is one of two faience scarab seals (fig. 11.14) from Building E, that of the Storeroom Superintendent of the Chamber of Incoming Goods, Anen, Possessor of Veneration (*iry-^ct n ḥnkt 'Inn nb im³ḥw*). The occurrence of a scarab seal is a particularly strong indicator of this individual's presence in, and association with, Building E. If these instances of similar administrative titling (Storeroom Superintendent) and name (Anen) insinuate a trend, it is all the more notable that the sealing found in highest frequency both in and around Building E is that of the (female) Storeroom Superintendent, Ipi, Possessor of Veneration (*iry.t-^ct 'Ipi nb.(t) im³ḥw*). Although her title, left unqualified, may limit her jurisdiction to domestic administration, it is in general an exceedingly rare title in the feminine gender and the only feminine title so far known from all of South Abydos that conveys legitimate administrative authority. The profession of Storeroom Superintendent, with apparent affiliation with the local royal mortuary temple, thus presents itself in multiple forms as a strong candidate for a component of Social House E's intangible holdings.

Recurrence of names is another pattern of which to be aware, one which Lévi-Strauss himself stressed as useful in detecting social houses.²⁷ Just as spoken dialects and material cultural attributes can exhibit regional differentiation, personal naming has been shown to be a potential indicator of geographic origins, including at South Abydos (e.g., Wegner 2010; Ilin-Tomich 2012). The same may be the case for households on a localized level. Personal names can contribute to both introverted and extroverted household identities. Maintaining the association of one or more names with a household estate is a meaningful internal expression of continuity and stability of group membership. Distribution of names via seals and sealings, however, is an extroverted process that pairs names with socially significant identity markers. One pattern appears in sealings from the central areas of Building E, that is, excluding storage rooms and perimeter areas where contexts are more prone to have mixed with external refuse deposits during past site disturbance. Three individuals stand

²⁶ Whether this reflects a nuance in the role of the Gatehouse in the town as a whole, or rather is just a by-product of differential preservation, is a matter of speculation. Given the setting of Building E, the latter option must remain a probable explanation.

²⁷ "... the origin of medieval houses remains obscure, since, until the eleventh century, each individual was known by a single name. Indeed, simple and non-

recurring names would explain little or nothing; but ancient names are sometimes derived from those ascendants. And, it cannot be excluded that relationships do exist between the various observable modalities of such a procedure and certain variations of the social structure — a good theme for future collaboration between linguists, anthropologists, and historians" (Lévi-Strauss 1982, p. 174).

out: the aforementioned Ipi, the Estate/House Overseer, Khnum-[?] (*imy-r pr Hnm-*), and the Commandant of Recruits, Khnum (*hrp nfrw Hnm*) (Wegner 2007b, pp. 346, 50, 54–59). Theophorous names (personal names formed as compounds with the names of deities) were common throughout Egypt in all periods (Ranke 1935–52; Lüddeckens 1985; Vittman 2013). However, names built on the name of the god Khnum are not otherwise well attested at South Abydos, nor does Khnum have Abydene connections. There are only two other instances from South Abydos of a name compounded with Khnum: the Storeroom Superintendent of the Chamber of Provisions, Khnum-nefer (*'Iry-ṯ n ṯpw Hnm-nfr*), who is associated with the West Block of the royal mortuary temple; and Officer of the Crew of the Ruler, Khnum(mes)y (*nh n tt hk3 Hnm(ms)y* [?]), another member of the military.

Egyptology is a discipline of texts as much as of archaeology, and individuals often appear in the record with some degree of clarity. However, when approaching the archaeology of Building E in terms of a house society framework, the ancient Egyptians who are known by name and title are less important individually than collectively for what they can reveal about enduring household identities. When it is demonstrated that such durability localizes with a single house structure and its material holdings, prospects for characterizing individual social houses are very good. As Susan Gillespie has noted: “All [social] houses are not the same. No two [social] houses will incorporate exactly the same estate; each will have its own names, heirlooms, ritual privileges, and material property that serve to differentiate [social] houses and form a basis for ranking them. [Social] Houses are also differentiated in the context of their interactions with each other” (2000a, p. 9). At Wah-sut, seals and sealings are materializations of individual identities, actualized through social and economic interactions that certainly included bureaucratic processes and likely personal transactions as well. The formalized structure of this “company town” itself provides one reliable index of the contexts of such interactions, since household groups had to fit into the social and administrative fabric of this locality in order to be viable.

With hundreds of names and titles in circulation at South Abydos, the articulation of a narrow selection within one house building over all other (excavated) spaces is striking, and the trends in naming and titling presented above provide grounds for detecting core elements of social house identities specific to Building E. The archaeological signature of Building E favors the existence of social houses that can be labeled as a House of Anen and a House of Khnum-. The institutional affiliations of these social houses emphasize offering and cultic storage at the royal mortuary temple and roles in the military, respectively. A House of Ipi emerges as a possibility as well, if only because of the namesake’s disproportionately high occurrence in the sealing repertoire. However, the vagueness of Ipi’s title of Storeroom Superintendent lends itself equally well to other scenarios, such as aligning with the House of Anen’s tendency towards storage-related professions.

As the most archaeologically visible households, those of Anen and Khnum- likely were based in Building E. The order of their occupancies is uncertain, as is whether they account for the house’s entire occupational lifespan. Damage to the site hinders precise sequencing. Residencies by these two households may have been simultaneous or, respectively, before/after at least one phase of renovation altered access patterns through the house and changed the uses of some spaces (Picardo forthcoming). Renovations were common in such settlements, suggesting that occupancy may have conferred either effective ownership or at least license to diverge from standardized space configurations (Richards 2005). A protracted scenario is more probable for Building E, since its archaeological assemblage in total does

not support a single-phase reading (Picardo forthcoming). Insofar as Egyptian state-planned settlements are understood currently, the first residents presumably were assigned their homes along with their professional appointments to the royal mortuary foundation. Since support for the Senwosret III mortuary temple was the major impetus for establishing the town, it is perhaps logical to suspect that Building E was allotted first to temple or foundation administrators such as have been grouped here as prospective members of a House of Anen. The military is not represented as pronouncedly as most other institutions among sealings from South Abydos (Wegner 2001a and 2007b). A few suppositions could follow from this disparity. For example, perhaps only a light military presence was thought to be necessary, or possibly the military stationed there during only portions of the town's existence.

Thus, Building E witnessed a shift in the social houses that oriented themselves within and around it. This development prompted corresponding changes in extroverted household identity, from one that counted temple storage titles (i.e., House of Anen) among its defining attributes to one associated more overtly with military professions (i.e., House of Khnum-), or vice versa. It is difficult to pinpoint the mechanisms involved in such change. Reasons for social house changeover may have been as straightforward as, for example, the sale of a house, transfer to a new family line with controlling interests, or reassignment to a new household. If state or local officials retained authority to orchestrate lodging arrangements, dual-household occupancy is not out of the question. The appearance of Khnum-names with storage and military titles could be consistent with a gradual transition in the predominating institutional affiliations of the core household member(s), for instance, through extension or merging of households. Since it cannot be expected that every titled member of a social house held the identifying title(s) of the main household group, a larger data set would be needed to trace this kind of transition adequately. Of course, many other factors may have prompted change, such as fluctuations of state investment in Wah-sut, local and regional politics, and the success/failure of each household to manage its own private holdings and status.

Characterizing social houses is more than just an exercise in culling the probable main occupants of a house building from a larger list of attested names. It provides an informative basis for comparing and contrasting houses of similar size and layout via a social measure that is understood to be an important determinant of relative status. It is also the foundation of a truly bottom-up interpretive perspective and an indispensable component of composing a micro-historical narrative for the house in question. For ancient Egyptian state-planned settlements, this methodology accesses a significant new layer of information in the social archaeology of houses and institutions. Further validation of the house society framework proposed here — with distinction between introverted versus extroverted household identities — should be straightforward. Its application to the archaeological records of other houses should gradually map the local institutional landscape onto the town itself, with institutional affiliations and names localizing with houses to define extroverted household identities. This method is as revealing during its incremental process as in its long-term outcomes, as it promises to continually reveal interconnections among institutions, officials, and households in the continued study of Senwosret III's Wah-sut mortuary complex, specifically, and of ancient Egyptian social and administrative practices more generally.

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Living in Households, Constructing Identities: Ethnicity, Boundaries, and Empire in Iron II Tell en-Nasbeh

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This study investigates aspects of the construction and maintenance of identity of the inhabitants of household compounds in late Iron Age Tell en-Nasbeh. The site is a fortified village in its Iron II phase, traditionally dated ca. 1000–586 B.C., located approximately 12 kilometers northwest of Jerusalem in the central Hill Country of the southern Levant (fig. 12.1). Nearby tombs, contemporary to the households but located extramurally, will also be examined as material aspects of family identity.

In earlier household archaeological studies conducted on the Iron II phase at the site, I have researched ceramics and small finds in their original architectural contexts that revealed aspects of daily life in this large village (Brody 2009b, 2011). Were the pillared houses at Nasbeh the residences of nuclear or extended families? Data presented allowed me to define a particular five-building compound as the home of three nuclear families whose houses were physically linked. Shared resources of these three nuclear families, revealed through household archaeology, suggest that this compound housed one extended family. But how did this extended family, and others at the settlement, construct varied characteristics of its identity? Can material culture from the site be used to help reveal aspects of the ethnicity — one element of identity — of the inhabitants of Nasbeh?

In general, studies of the archaeology of the southern Levant make assumptions about ethnic, or group, identities based primarily on textual data framed by culture history interpretive approaches (Mazar 1990; Dever 2001; Stern 2001). For the period of the Iron II these texts are found in limited contemporary epigraphic sources and in the Hebrew Bible, a curated anthology of sacred writings. Tell en-Nasbeh of the late Iron Age is usually identified as the biblical settlement of Mizpah in the region of Benjamin, located on the northern border of the patrimonial Kingdom of Judah (Brody 2009a). It might be assumed that the inhabitants of the Nasbeh household compounds self-identified as Israelite, or more specifically as Judean, at a supra-tribal, or national level. But what is the view from the material culture of the households and tombs from the site?

It must be foregrounded that I view ethnicity as a social construct of group identity (Malešević 2004; Jenkins 2008; Southwood 2012, pp. 19–72). Ethnic identity is not primordial or essential. As a component of social identity it is flexible, situational, and may change and develop over time (Hakenbeck 2007, 2011). Ethnicity is not genetic, although groups may identify by kinship ties that are hereditary, linked by marriage, and non-hereditary (usually termed “fictitious”). Elements of ethnicity, that is, the variety of identifiers that help to define individuals as “in-group” or “out-group,” and how these aspects are defined both by the



Figure 12.1. Map of Tell en-Nasbeh in southern Levantine regional context (image by Aaron Brody)

group itself and by outside groups, vary between groups, and may differ between different geographic regions and through different historic periods.

Interpreting ethnicity from the material record is challenging, even in periods with written evidence (Emberling 1997; Jones 1997; Franklin and Fesler 1999; Faust 2000, 2012; Gosselain 2000; Smith 2003; Lucy 2005; Hakenbeck 2007, 2011; Curta 2011; McInerney 2014). It is often difficult to figure out group sentiment among living cultures, which may cohere through nationalistic, professional, religious, status, geographic, or kinship linkages, to name a few (Southwood 2012, pp. 19–72). How may questions of ethnicity for extinct cultures be

approached, especially when five of the six often cited elements of ethnicity leave little to no archeological traces? These elements, originally set out by Hutchinson and Smith (1996, p. 6), include:

1. A common proper name, to identify and express the “essence” of the community.
2. A myth of common ancestry, a myth rather than a fact, one that includes the idea of a common origin in time and place and that gives an *ethnie* a sense of fictive kinship.
3. Shared historical memories, or better, shared memories of a common past or pasts, including heroes, events, and their commemoration.
4. One or more elements of common culture, which need not be specified but normally include religion, custom, or language.
5. A link with a homeland, not necessarily its physical occupation by the *ethnie*, only its symbolic attachment to the ancestral land, as with diaspora peoples.
6. A sense of solidarity on the part of at least some sections of the *ethnie*’s population.

Of these categories, only elements of number 4 may be “read” from archaeological remains, although it may be possible to occasionally approach aspects from other categories through interpreting iconography of ancient cultures or material culture related to social memory.

Not to be completely defeatist, it seems best to approach questions of the archaeology of ethnicity through multiple lines of evidence, especially with the aid of textual sources where available (Emberling 1997; Franklin and Fesler 1999; Smith 2003; Lucy 2005; Hakenbeck 2007, 2011; Curta 2011). Accordingly, in this study I will investigate modes of diet, ritual, language, dress, and habitation as markers for constructing aspects of the identity, including ethnicity, of the Iron II inhabitants of Tell en-Nasbeh. As the region was under imperial control throughout the Iron IIB–IIC periods, the effects of empire on local identity construction will also be explored, along with notions of boundaries as important loci of intensification of ethnic self-awareness (Southwood 2012, pp. 29–31).

The Site in the Iron II Period and Its Likely Historic Identification

The site of Tell en-Nasbeh was excavated in five seasons between 1926 and 1935 by a team from Pacific School of Religion under the direction of William F. Badè (Badè 1934; McCown 1947). The tell is the most prominent ancient mound in the small geographic region of Benjamin, located 12 kilometers northwest of Jerusalem on the main trunk road that runs north–south through the central Hill Country (fig. 12.1). Over the length of the project, two-thirds of this almost 3-hectare site was unearthed (fig. 12.2). Neighboring tombs, discovered outside the bounds of the settlement, were also excavated.

The excavation and recording methods for the project were typical of the 1920s and 1930s. The understanding of stratigraphy was basic, and a locus was defined primarily as an architectural unit or feature with little consideration for layers within a locus, let alone disturbances from probable pits, etc. (Zorn 1993). Excavation was conducted at a rapid pace with relatively little recording occurring beyond architectural features and corresponding finds, as is excellently portrayed in Badè’s excavation manual, a revolutionary study for its time when field methods were hardly discussed (1934). My earlier studies (Brody 2009b, 2011)

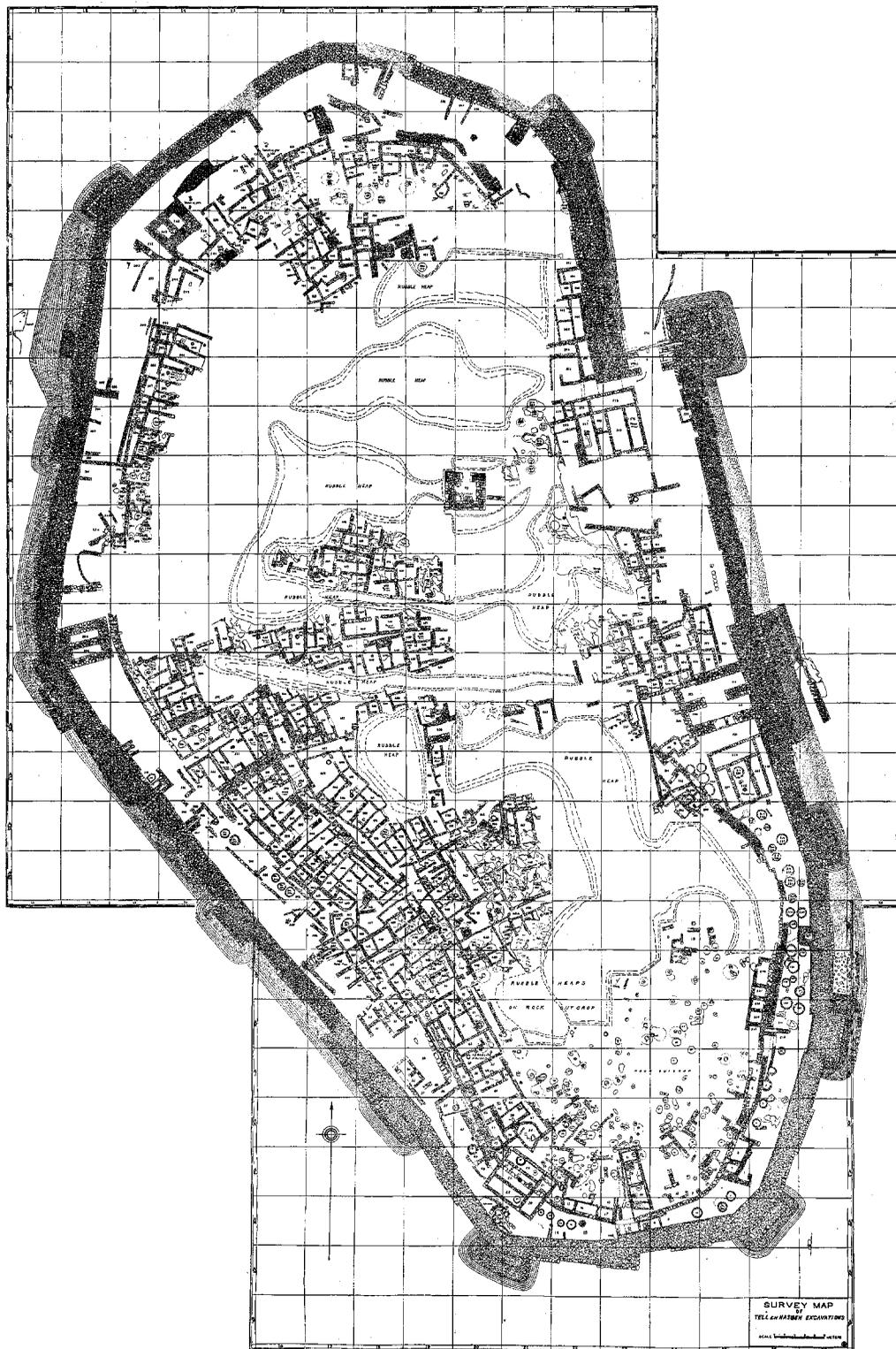


Figure 12.2. Tell en-Nasbeh site map, featuring architecture from the Iron II–Persian periods (after McCown 1947, courtesy of the Badè Museum, Pacific School of Religion)

have demonstrated the feasibility of conducting contextual analysis on the Nasbeh materials using the original excavation records, two final reports, and Jeffrey Zorn's vital reconstruction of the stratigraphy of the site (1993). The caveat must be stated that both excavation and documentation practices and standards were very different than they are today, so while detailed specifics are lost or were not considered in the first place, one may perform broad analyses from the room, household, compound, neighborhood, or even site level.

The primary research question behind the excavations in the 1920s–1930s was whether or not the archaeological site could be identified with the biblical city of Mizpah in Benjamin (McCown 1947). After five seasons of digging and uncovering two-thirds of Tell en-Nasbeh, this question cannot be definitively answered. However, it is a very good fit, at least in its Iron II and Babylonian-Persian-period phases (Brody 2009a). Historians have concluded that Mizpah should have an Iron II defensive wall and a sizable presence in the Babylonian-Persian period, which is nicely matched by the archaeological findings from Nasbeh. Concurrently, these two features are both missing from the main rival site for identification with Mizpah, Nebi Samwil. Excavations at Nebi Samwil have revealed a major phase in the Hellenistic period, which may indicate that it is the Mizpah mentioned in 2 Maccabees (Brody 2009a). Thus both sites may have been Mizpah of Benjamin, just in different historic periods.

Texts preserved in the Deuteronomic History and in the Book of Jeremiah indicate that Mizpah was a Judean settlement, at the northern border of the kingdom. King Asa of Judah fortified Mizpah in the ninth century B.C. in an effort to defend his kingdom from further attack from northern Israelites approaching along the main route through the central Hill Country (1 Kings 15:22). Later in the sixth century B.C., Mizpah becomes the refuge for Judeans fleeing the Babylonian destruction of Jerusalem, including the prophet Jeremiah (2 Kings 25:22–24; Jeremiah 40–41). Mizpah is the seat of the local governor of the Babylonian-controlled province of Judah, until that official is murdered by a rogue member of the Judean royal family under the patronage, and perhaps persuasion, of the king of the neighboring state of Ammon (2 Kings 25:25; Jeremiah 40:13–41:3). In the Persian period, Judeans from Mizpah aid Nehemiah in rebuilding the ruined walls of the city of Jerusalem (Nehemiah 3:7, 15–19). Thus, it may be suggested that at least a portion of the inhabitants of Mizpah in the time of the Divided Monarchy through the Persian period self-identified as Judean. I will investigate several aspects of the material culture of the Iron II phase, arguably the Mizpah of the period of the Divided Monarchy, to reveal varied facets of the construction of ethnicity among households at Nasbeh.

Elements of the Archaeology of Identity in Iron II Nasbeh

Diet as an Aspect of Ethnic Identity

What we eat and how we prepare food may be a refined aspect of group identity or ethnicity (Scott 2008; Twiss 2012). Unfortunately, the systematic collection of ecofacts was rare among excavations in the southern Levant in the 1920s and 1930s. Large examples of animal bones and some charred plant remains were recorded and preserved by the Nasbeh project; however, these are of little use for a refined analysis of dietary tastes and habits.

Cooking pots, cooking jugs, and baking trays were found in great number at the site (Wampler 1947). The cooking pots of the Iron IIC period in the southern Levant are especially useful as regional indicators, which may have a link to delineating territorial states and the

ethnic groups within those polities. The cooking pots from Nasbeh, or at least a vast majority of them, are of a form that is principally found in the territory of the Kingdom of Judah (fig. 12.3). Ironically, these cooking pots may not have been fabricated in Judah itself, however, their distribution is primarily within the polity (Stager, Master, and Schloen 2011, p. 87). This suggests a level of sophistication among potters based in one region who manufactured vessels of a specific type that were primarily exported to another region. As yet, no source testing has been conducted on samples from the Nasbeh cooking pots, so the location of their clay sources is not known. There are contemporary cooking pots that are typologically specific to the neighboring regions of Moab, Edom, and Philistia, and farther afield in Phoenicia and north Syria (Steiner 2009; Thareani 2010, p. 37; Stager, Master, and Schloen 2011, pp. 86–87, 99, 113–14). This may suggest some type of cultural or national self-awareness or boundaries based on the cuisine prepared in these cooking pots. Demonstrating this suggestion is well beyond the scope of this paper. However, gas chromatography testing on cooking pots throughout the southern Levant is beginning to provide glimpses into the types of foods prepared in these vessels; a multi-faceted approach has deepened our understanding of food

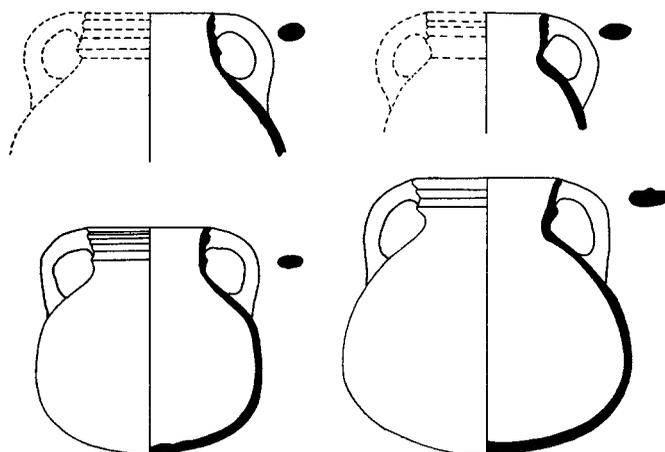


Figure 12.3. Iron IIC Judean cooking pots from Tell en-Nasbeh (after Wampler 1947, courtesy of the Badè Museum, Pacific School of Religion)

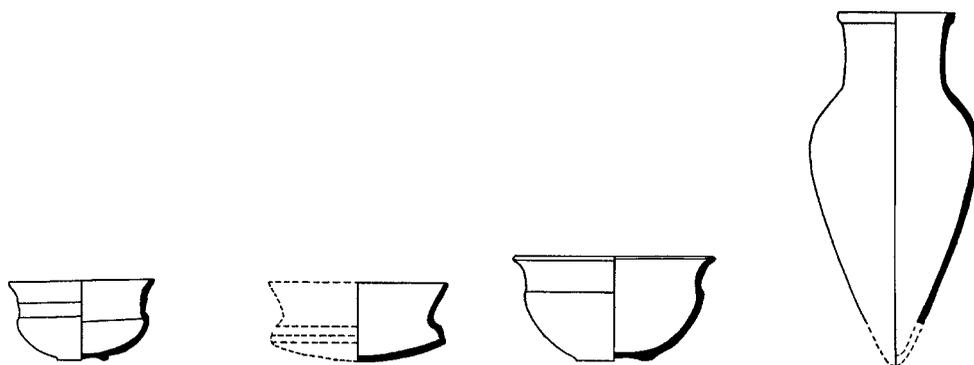


Figure 12.4. "Assyrianized" wares, bowls, and handleless jar from Tell en-Nasbeh (after Wampler 1947, courtesy of the Badè Museum, Pacific School of Religion)

preparation and domestic cooking in Judah; and in-depth research into Aegean-style cooking jugs from the early and late Iron Age has demonstrated a Philistine style of cooking that has influences outside of Philistia (Ben-Shlomo et al. 2008; Shafer-Elliott 2013; Larkum 2014).

Drinking habits at Nasbeh show the influence of empire. During the Iron IIB–IIC periods, the Kingdom of Judah was under the hegemony of the Assyrian empire. Very little direct evidence of Assyrian goods or presence in Judah is preserved (Stern 2001; Singer-Avitz 2007). However, several ceramic types, especially a variety of carinated bowls and handleless jars, are local imitations of Assyrian wares (fig. 12.4; Stern 2001, pp. 36–39; Engstrom 2004; Singer-Avitz 2007; Hunt 2012). These “Assyrianized” ceramics make up the fancy drinking sets of the late Iron Age in Judah (Hunt 2012). The elite in regal/ritual urban settings and in administrative centers may have been drinking from bronze bowls actually imported from Assyria, as well as from locally produced bronze and/or pottery copies. The Assyrianized local ceramics have a very broad distribution pattern throughout Judah and neighboring regions of the southern Levant. Whether the influence of empire on Nasbeh was direct, mediated through emulation of the Judean elite, or came from adopting neighboring Assyrianized ceramic traditions is not known (see varied opinions in Na’aman and Thareani-Sussely 2006; Singer-Avitz 2007; and Ben-Shlomo 2014). Localized elite emulation is more probable, although tracing the origins of influences on potters is challenging and is likely multi-faceted. Regardless, the Assyrianized wares show either the primary, secondary, or even tertiary effects of empire on the drinking customs of the residents of Nasbeh.

Ritual as an Aspect of Ethnic Identity

Ritual is another category where group allegiance and/or ethnicity may be detected archaeologically (Emberling 1997; Southwood 2012, pp. 60–62). While the fortified village of Iron II Nasbeh has revealed no remains of any formal religious buildings, individual houses and household compounds contained numerous ritual artifacts testifying to varied practices of Judean household religion (Brody 2009b, 2011). These specialized objects include female pillar figurines (fig. 12.5), animal figurines, horse-and-riders, model beds, rattles, incense altars, kernos rings, and amulets. Ritual aspects of stamp seals and scarabs may also be discerned, and it is probable that profane objects had ritual use or significance, such as lamps, iron knives, and beads found in ritualized contexts. While these types of ritual objects are fairly common throughout the broader area, stylistic differences occur largely within



Figure 12.5. Pillar figurine, Tell en-Nasbeh (courtesy of the Badè Museum, Pacific School of Religion)

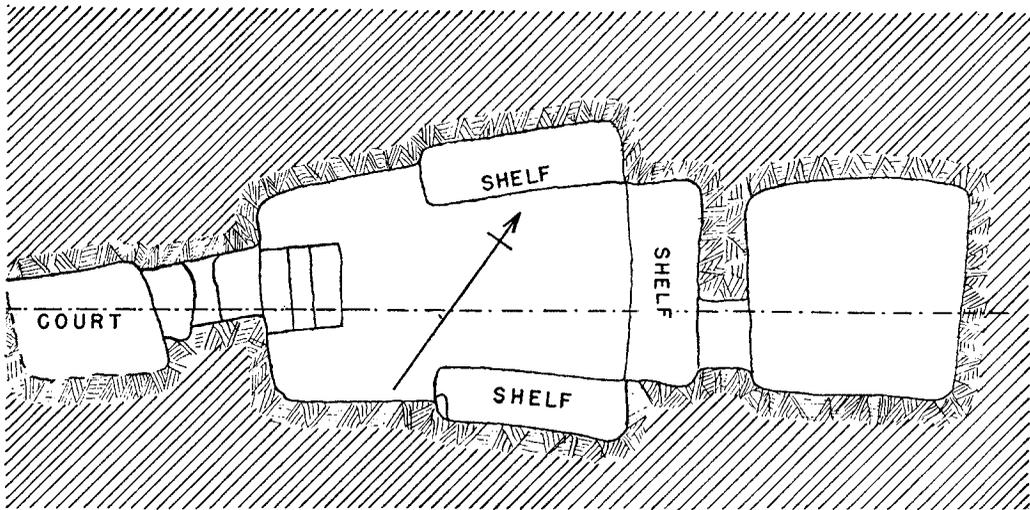


Figure 12.6. The Ja'azaniah seal, (a) impression and (b) drawing (courtesy of the Badè Museum, Pacific School of Religion)

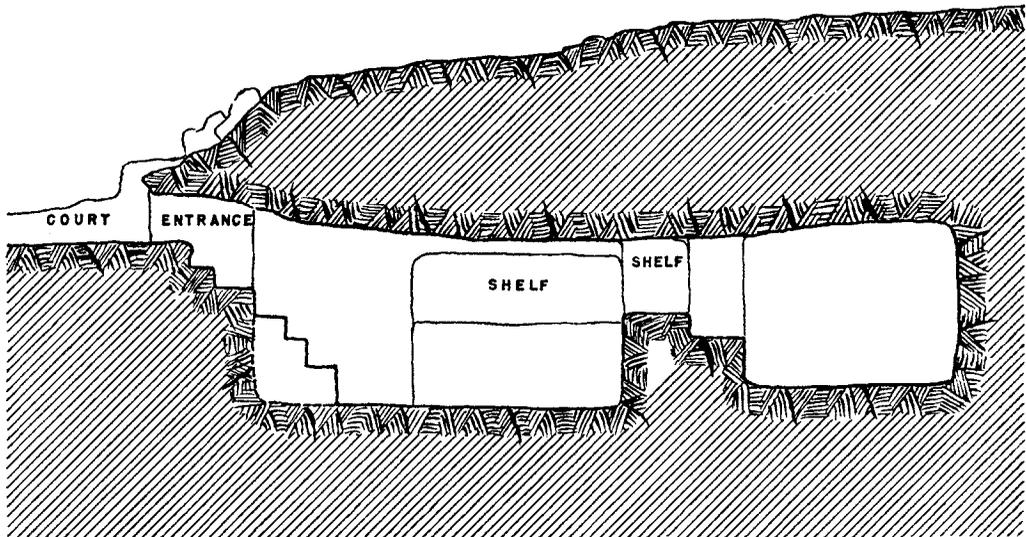
regional territories equated with ancient kingdoms. Scholars identify Judean pillar figurines both by style and regional distribution, and differentiate them from contemporary figurines from Transjordan, Philistia, Phoenicia, Cyprus, and north Syria (Kletter 1999, pp. 28–29; Moorey 2001).

One of the deities worshipped at Nasbeh was Yahweh, the premier national god of both the kingdoms of Judah and northern Israel. This is evident in the theophoric element *yahu*, an abbreviated form of Yahweh, found in the names of individuals whose seal or seal impression was discovered in the excavations at Nasbeh (fig. 12.6; McCown 1947, pp. 162–63). While not unique to Judah, the worship of Yahweh is not attested in neighboring polities other than northern Israel in the Iron II period and may be viewed as a sacred element that created an ethnic distinction from nearby culture groups.

Burial, the treatment of the dead, and commemorative ceremonies of the living is another aspect of the archaeology of ritual that may reflect ethnicity. For the late Iron Age in Judah, interment of the dead took place primarily in family tombs located outside of settlements. The local form has been given the ethnic moniker “Judean bench tomb” since this type of human-constructed cave-tomb is found primarily in the region of the Kingdom of Judah (fig. 12.7; Bloch-Smith 1992; Yezerski 1999, 2013; Fantalkin 2008; Faust and Bunimovitz 2008). Recently deceased ancestors were laid to rest on benches carved from the rock, their bones were collected after the flesh had deteriorated and were placed in a collective repository in the tomb. Artifacts and ecofacts from these tombs, such as bowls and jugs for food and drink, and animal bones, suggest that feasting was taking place within the burial chamber itself, presumably to honor the recent dead and perhaps to mark anniversaries of the death or celebrate general commemorations of departed ancestors. In many literal and symbolic ways, these tombs were extensions of the households at Nasbeh where the remains of former generations of the family were interred and affiliations between the living and the dead could continue.



PLAN



SECTION



Figure 12.7. Plan and section of a bench tomb, Tell en-Nasbeh (after McCown 1947, courtesy of the Badè Museum, Pacific School of Religion)

Language as an Aspect of Ethnic Identity

Language can be, although it is not always, a refined marker of ethnicity (Emberling 1997, pp. 303–04). Most of the writings of ancient Judah are preserved as codified, curated texts in the canon of the Hebrew Bible. This anthology of sacred writings shows a number of linguistic developments in Hebrew dating perhaps as early as the twelfth century B.C. until the latest

writings in the second century B.C. Besides changes over this millennium in syntax, vocabulary, and even the meanings of words, there is some evidence for dialectic differences in the Hebrew of Judah in comparison with the Hebrew of the northern Kingdom of Israel (Garr 1985). A few of these differences include the Judean use of *yahu*, as opposed to the northern Israelite use of *yw* as abbreviations of the personal name of god, Yahweh, and the different sibilants made famous in the passage in Judges 12:6 (Hendel 1996). Not many inscriptions were found in the excavations of Tell en-Nasbeh, but at least two have the Judean Hebrew theophoric element *-yahu* (fig. 12.6; McCown 1947, pp. 162–63). This epigraphic evidence suggests that the Hebrew spoken in the Iron II phase at Nasbeh was the Judean dialect.

Dress as an Aspect of Identity

The clothing that one wears may convey meanings of identity (Eicher 1995; Owen-Crocker 2011). Garments may be particular to an age or stage in life; reflect gender construction; convey ethnic solidarity; have colors, symbols, or other qualities that are considered apotropaic; reveal status, profession, or even religious affiliation or initiation. No substantial cloth fragments, and very few other organics, were preserved from Iron II Tell en-Nasbeh. However, the bronze safety pins, or fibulae, that held clothing together were found in relatively large numbers, especially in the tombs from the site (fig. 12.8; McCown 1947). The decorations on

fibulae vary, and different types show varied temporal and spatial distribution across Cyprus, the Levant, and the greater Near East (Stronach 1959; Pedde 2000). In the Iron IIB the use of fibulae seems to spread from Syria-Palestine east into Mesopotamia. In the Iron IIC the distribution of fibulae mirrors the extent of the Assyrian empire and its influence. The style and circulation of fibulae may be read as a marker of the reciprocity of the tastes and styles of the Iron IIB provinces on the heartland of empire, and of empire on the local inhabitants of Judah and Tell en-Nasbeh in the Iron IIC period.

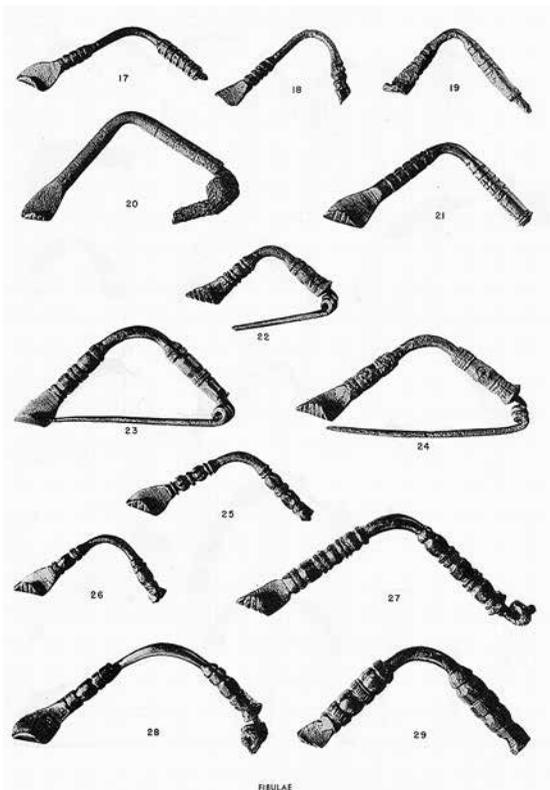


Figure 12.8. Bronze fibulae from Tell en-Nasbeh (after McCown 1947, courtesy of the Badè Museum, Pacific School of Religion)

Architectural Features as Aspects of Identity

The houses in which the families of Nasbeh and their dependents lived encoded aspects of cultural information (King 2006). The basic house type, the pillared house typically consisting of three-room and four-room exemplars (fig. 12.9), has an Iron II distribution pattern across the regions that comprised the northern Israelite and Judean kingdoms. Examples are also found in late Iron Age

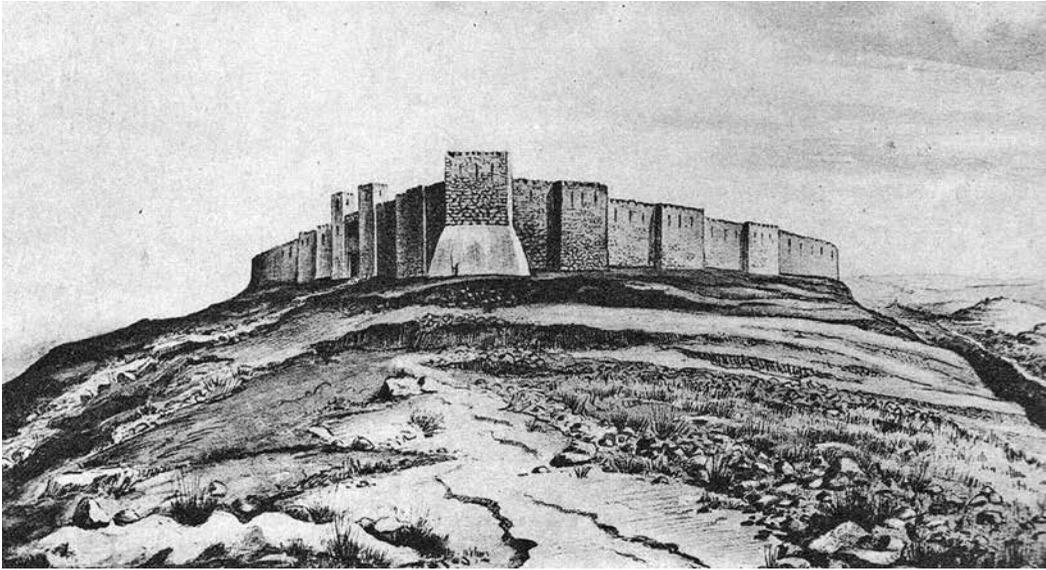


Figure 12.10. Artist's reconstruction of Iron II city wall at Tell en-Nasbeh (after McCown 1947, courtesy of the Badè Museum, Pacific School of Religion)

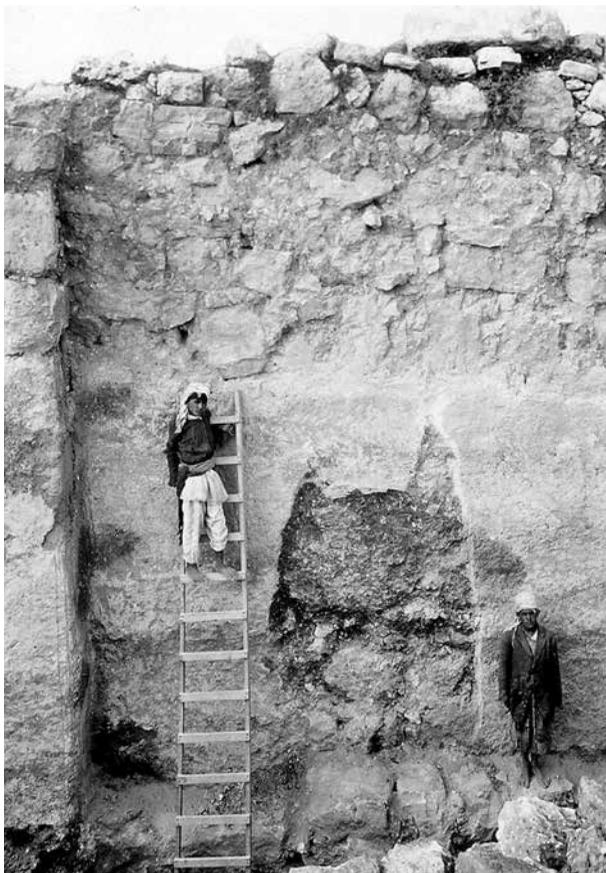


Figure 12.11. Section of the excavated Iron II city wall at Tell en-Nasbeh (courtesy of the Badè Museum, Pacific School of Religion)

relations among villagers on either side of this northern divide between the kingdoms of Judah and northern Israel is not well understood; however, one may interpret the massive wall as reinforcing a psychological and ethnic boundary among Nasbeh's households.

Conclusions

While the interpretation of ethnicity from material culture may be highly contentious, with the aid of both emic and etic textual sources, archaeological evidence for group identity may be posited. Ethnic interpretation is further complicated by the different levels of group identity typically found among segmentary societies, like that of ancient Judah. Members of households likely identified themselves in different ways depending on with whom they were interacting and where this interaction took place, a type of situational identity (Hakenbeck 2007, 2011; Southwood 2012, pp. 26–29). Individuals from Nasbeh may have identified themselves by their father's, or sometime their mother's, house (*bêt 'āb, bêt 'em*); clan (*mišpāḥah*); tribe (*šebet, maṭṭeh*); and nation (*'am*). Thus our own view of what it meant to self-identify as Judean needs to incorporate more flexibility, contextualization, and nuance.

Certain elements of the material culture from the households at Tell en-Nasbeh created and reinforced the inhabitants' identities as Judeans. These include cooking pots as markers of diet; Judean pillar figurines, Yahwistic names, and bench tombs as indicators of ritual and religion; epigraphic finds that reflect the Judean dialect of Hebrew; and pillared houses and household compounds that delineate the physical space that bounded and linked kinship groups. Ethnic identity was reinforced literally and symbolically by the Iron II wall around the settlement, which provided a social boundary for those living at Nasbeh while also providing a physical boundary marker for the northern region of Judah. The complex effects of empire may be interpreted from locally made Assyrianized drinking sets and from the fibulae that reflect the reciprocal effects on clothing that empire had on its territories and the provinces had on the imperial homeland. The identities of the inhabitants of late Iron Age Tell en-Nasbeh were constructed and maintained in the numerous pillared houses that make up the settlement, household identities that were highly local and situational, yet reveal the impacts of the patrimonial state of Judah and the wider empire of Assyria.

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Micro-archaeological Perspectives on the Philistine Household throughout the Iron Age and Their Implications

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Introduction

The study of the Philistines and their fascinating culture has been going on for close to 150 years, since the very early years of modern archaeological research in the Holy Land (e.g., Welch 1900; Macalister 1914; Dothan 1982; Killebrew and Lehmann 2013). Over this long period, leaps and strides have been made in our understanding of this culture, its origins, development, and ultimate demise. The present author has had the opportunity to contribute to these discussions, as in the last seventeen years, I have had the honor of directing the excavations at one of the major Philistine sites — Tell eṣ-Ṣafi/Gath (e.g., Maeir 2012a, 2012b; figs. 13.1–2).

When research on the Philistines commenced during the infancy of Near Eastern archaeology, field methods, analytic perspectives and other investigative facets were not yet developed. Using the cutting-edge research methodologies that are currently available opens up new vistas and directions, as well as understandings and interpretations, in the study of this culture.

One of the facets which we have benefited from in our research at Tell eṣ-Ṣafi/Gath in the last few years is a close collaboration with a large team of scientists from various fields. These specialists have joined us in the field, creating a unique inter- and multi-disciplinary research environment, perhaps unparalleled in current archaeological research. Professor Stephen Weiner of the Kimmel Center for Archaeological Science at the Weizmann Institute of Science in Rehovot, Israel, has spearheaded a team which over the last decade, has created and refined a field protocol (see Weiner 2010) in which “micro-archaeologists” from various fields (chemistry, physics, materials science, biology, geoscience, etc.) work together in the

* I would like to thank the staff and team members of the Ackerman Family Bar-Ilan University Expedition to Gath throughout the years for their dedicated work in excavating, analyzing, and interpreting the finds from Tell eṣ-Ṣafi/Gath. In particular, I am grateful to Professor Stephen Weiner of the Weizmann Institute for spearheading the implementation of the micro-archaeology program at the excavations. In addition, thanks to the area and square supervisors in charge of the various excavation areas discussed

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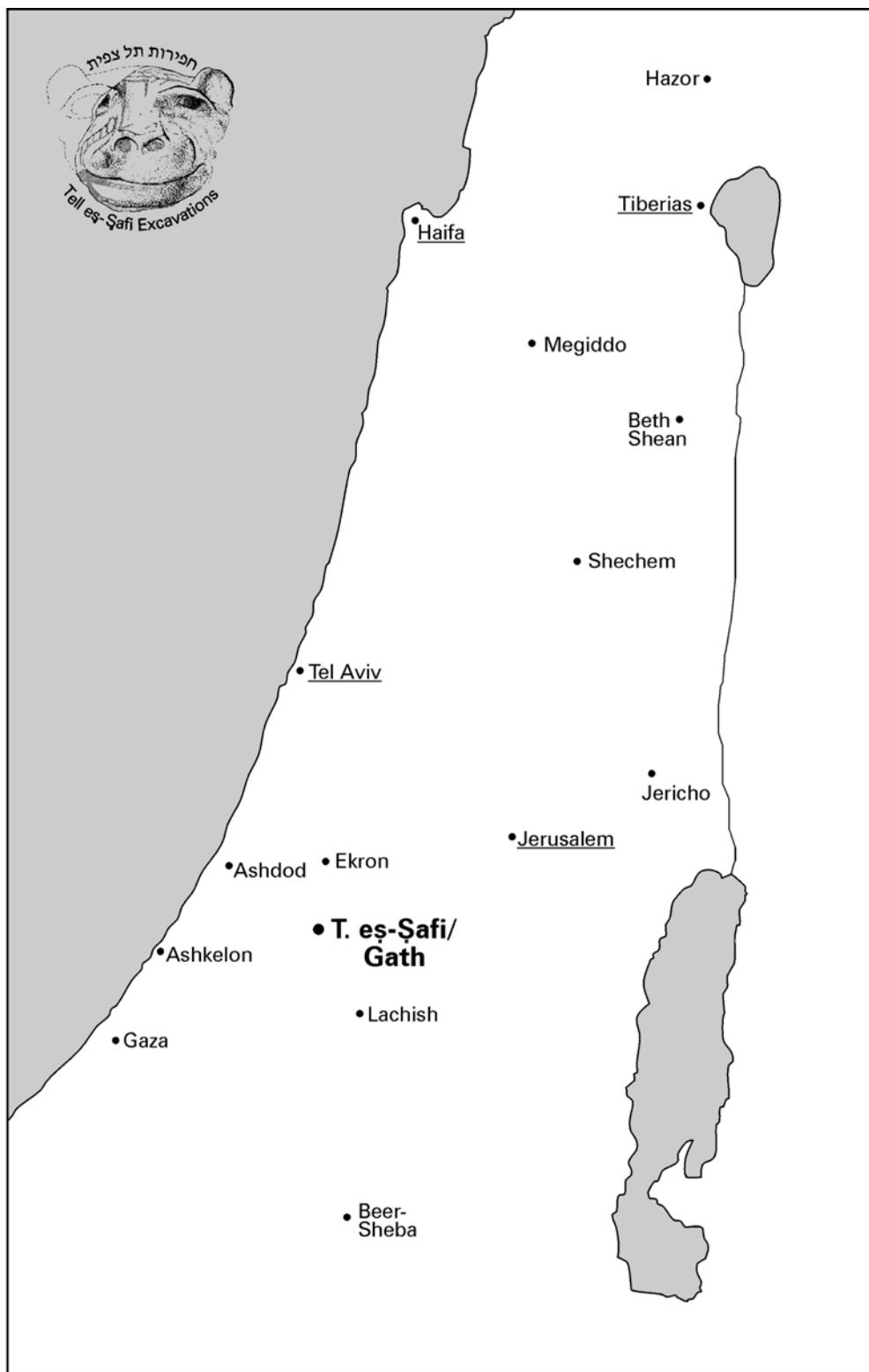


Figure 13.1. General map of the southern Levant with the location of Tell eṣ-Ṣafi/Gath and other major sites (map by J. Rosenberg)

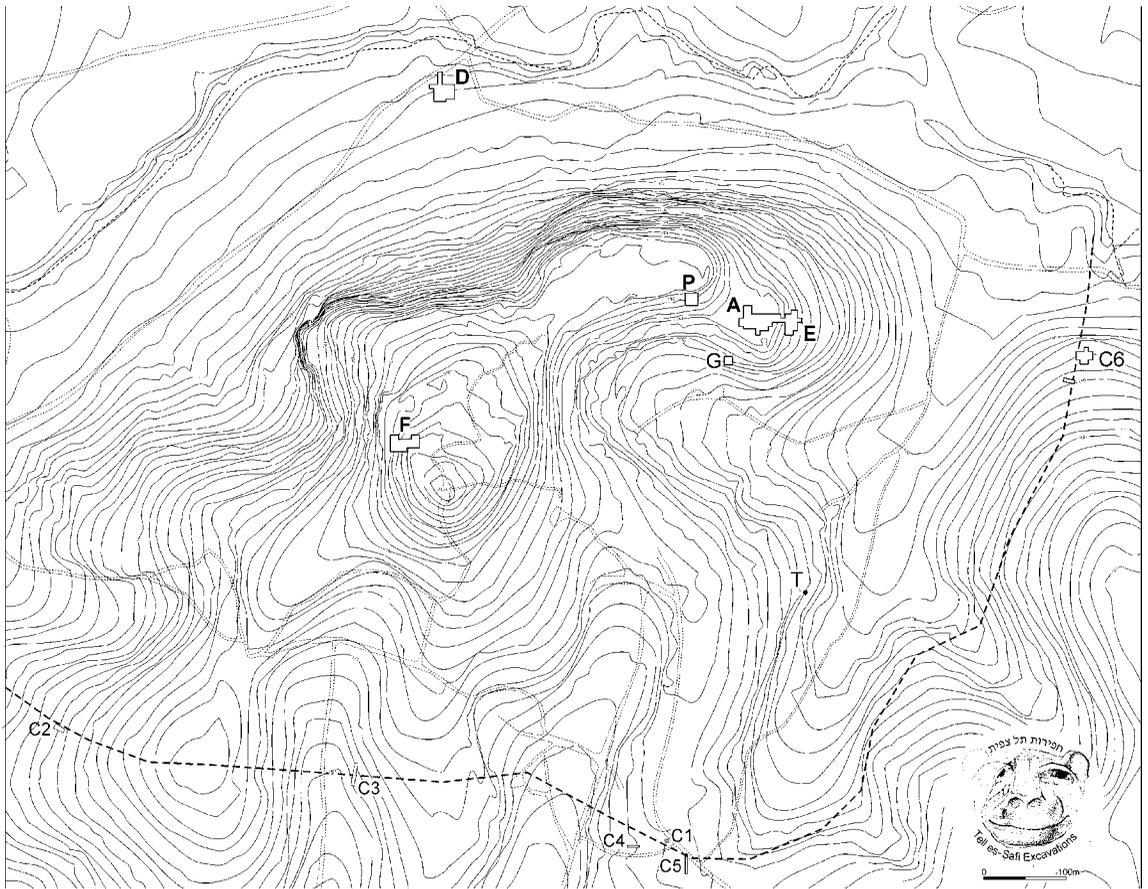


Figure 13.2. Plan of Tell eš-Šafi/Gath with excavation areas indicated

field during the excavation season, side by side and in close collaboration and cooperation with the so-called plain vanilla archaeologists — fully participating in the daily excavations. Aside from the wide range of expertise which these specialists bring to the field, in-the-field laboratories are set up (fig. 13.3) that enable select on-the-spot analyses of various types of sediments, finds, and materials. This creates a unique collaborative atmosphere, where researchers of diverse backgrounds and perspectives jointly study the finds and contexts as they are discovered, each contributing to the understanding of the work as a whole. This enables not only a better understanding of the finds and their contexts, but also the ability to make on-the-spot “tactical” decisions on the methods of excavation, sampling, documentation, and analysis of specific contexts. Thus, as opposed to what very often occurs in archaeological excavations, at Tell eš-Šafi, finds that need to be analyzed by specialists are not removed by a non-specialist and then delivered after the excavation to the specialists’ labs. Rather, the specialist him-/herself participates in the retrieval of the find, often using very specific protocols, ensuring that the finds are sampled in the most appropriate manner to retrieve information that might be relevant for the specific analyses from the environment of the finds. This way, already in the field, the maximum amount of information is retrieved so that the post-excavation analyses of the finds will be as complete as possible.



Figure 13.3. Clive Trueman working in the on-site micro-archaeology laboratory in Area A. Notice the FTIR spectrometer on the table

This has important implications for several reasons. First of all, it enables the retrieval and analyses of finds that in many other cases would not even be noticed. Second, as the specific finds are excavated by the specific specialist, there is a higher probability that the maximum amount of data, which will enable robust interpretation, will be available. Third, an interdisciplinary team working on the finds in the field ensures that we do not limit ourselves to narrow analyses and/or interpretations, but incorporate a wide range of scientific viewpoints into our interpretative understanding. And finally, the very fact that new classes of finds and contexts are excavated, sampled, and analyzed opens up new windows on understanding many new issues — in our case relating to the daily life of the Philistines.

In this short paper I would like to illustrate how this in-the-field interdisciplinary work has enabled us to have a better understanding of various facets of the daily life in Philistine Gath, mostly on the household level. I will do this based on several case studies on specific topics which have been published separately, and will then demonstrate how they contribute to a more nuanced understanding of the Philistines and their culture.

Case Studies

Early Philistine Metallurgy

Up until quite recently, very little was known about Philistine metallurgical technology. Based on a reading of the biblical text I Samuel 13:19, it is often suggested that the Philistines had superior expertise, and even a monopoly, in the use of metal technology and production

during the early Iron Age. But in fact, very little physical evidence for actual Philistine metallurgical abilities — and very few actual objects (see, e.g., Dothan 2002; and see Shalev 1988 for an object which, although originally thought to be Philistine, is of a different period) — were known from early Iron Age Philistia.

Recently we have been able to provide some concrete data regarding the metallurgy of the Philistines in the early Iron Age (for an extensive discussion, see Eliyahu-Behar et al. 2012). During the 2010 season of excavations at Tell eš-Šafi/Gath, in Area A (located on the eastern side of the site; fig. 13.2), in the immediate vicinity of an early Iron Age temple, evidence of metallurgical-related activities were found (fig. 13.4). This context with evidence of both iron and bronze production dating to early tenth century B.C. had two pit-like features, each considerably different from one another in color, texture, and content. Each pit was used for an activity related to iron production, as seen by the hammerscales, slag prills, and slag that were found in and around them. In addition, a crucible was found on top of one of the pits. Interestingly, analysis of the crucible slag showed that it was used for bronze metallurgy. Within the pits, tuyères of specific types associated with both bronze and iron production were also found. The presence of bronze and iron industries at the same location is to be noted, as well as the location near the temple — perhaps associated with the small-scale production of metal objects for use in the temple-related cult. While cult-related production is known from various ancient Near Eastern sites (e.g., Stager and Wolff 1981; Mierse 2012, pp. 231–33), the archaeological context at Tell eš-Šafi/Gath provides evidence for this practice in Philistine culture as well. Needless to say, the scarcity of evidence of metal production in the Levantine early Iron Age makes this find quite important.



Figure 13.4. View of the eastern side of Area A with (1) the early Iron Age metallurgical location just to the north of (2) the early Iron Age temple with column bases in its center

It should be stressed that the discovery of this unique context may be very much due to the on-site presence of an interdisciplinary team. Cynthia Shafer-Elliott, the square supervisor, noticed a slight change in the texture and color of the sediments in the area and immediately called over the micro-archaeology team, which straightaway started sampling the sediments. The unique character of the sediments and finds from this context was seen, and a much more meticulous and high-resolution excavation, specifically metallurgically oriented, was commenced in this area. By and large, due to the limited size of this context (less than 2 × 2 m and only 10 cm deep), “standard” excavation procedures might very well have removed the evidence before their importance was noted, leaving the unique objects but none of the associated sediments with their important data. In fact, it may very well be that other such contexts have been excavated in the past at other early Iron Age sites in Philistia and elsewhere, but were not noticed by the excavators.

Hydraulic Plaster

While the metallurgical context discussed above is related to an apparently public cultic building, to the east of the temple, within Area A, various domestic contexts were excavated that date to different stages of the Iron Age I, IIA, and IIB (ca. 1150–700 B.C.). In the apparent courtyard of a house dating to more or less the same time frame as the metallurgical context, ca. 1000 B.C., a plaster feature was discovered (fig. 13.5), which at first was interpreted as a “standard” plaster floor. On-site analysis using Fourier Transform Infrared Spectrometry (FTIR) told another story. As detailed in Regev et al. 2010, the plaster in this floor (in fact, two plaster layers, one above the other) is of a unique type, hitherto unreported from the



Figure 13.5. Two layers of early Iron Age hydraulic plaster from Area A

pre-Classical Levant (save from a much earlier example from Pre-Pottery Neolithic B Yiftahel; Goren and Goldberg 1991) — so-called hydraulic plaster. Such plasters, or mortars, with the special addition of silicate-containing minerals, are quite rare prior to the Roman period, when they were often used to enable the hardening of plaster, mortar, or cement in non-aerobic environments (such as under water). Plasters from other pre-Classical sites in the Levant have not been known to contain these additives. Following the on-site FTIR analyses, in-depth characterization of the plasters was conducted in the Kimmel Center laboratories using a wide battery of analytic tools, including FTIR, acid dissolution, X-ray fluorescence (XRF), X-ray powder diffractometry (pXRD), heating experiments, and scanning electron microscopy (SEM) coupled with energy dispersive spectroscopy (SEMEDS). These analyses demonstrated that special, non-local silicate-containing minerals were added to this plaster in order to produce these surfaces. As this is a very specific technology, it is most likely that these surfaces were deliberately produced for specific functions (which unfortunately could not be identified, despite the fact that there was evidence of organic materials on the surfaces), or at least reflect a very specific technological tradition — and were not the result of a fortuitous addition of local silicate minerals.

Most interestingly, while the production of hydraulic plasters is not known from the Bronze and Iron Age Levant, it is known from the Bronze Age Aegean cultures, from both the Minoan and the Mycenaean cultures (for references, see Regev et al. 2010, p. 3008). This being so, it may be that this plaster technology is yet another example of the non-local cultural facets that are found in the early Iron Age with the appearance of the Philistines culture, most likely brought by the foreign, non-Levantine population components of the early Philistines. While such non-local components were previously known, such as relating to pottery, architecture, cooking (see below), and other facets, the micro-archaeological perspective on these plaster floors has enabled us to reveal yet another, previously unknown foreign facet.

Hearths

The excavations at various sites in Philistia, such as Ashdod, Ekron, and Ashkelon, had previously revealed that in the early Iron Age, with the appearance of the various attributes of the Philistine culture, a new type of cooking/heating installation appears — the hearth. This installation, while known from earlier periods in the Levant, is not known from Late Bronze Age sites in Canaan, and in fact is not found in non-Philistine early Iron Age sites, where various types of clay ovens (*tabun/tanur*) were the norm. Rightfully so, this new feature was seen as one of the elements brought from outside of the Levant by foreign components among the early Philistines (for a summary of previous research, see Maeir and Hitchcock 2011). As Assaf Yasur-Landau (e.g., 2011) has noted, changes in domestic practices such as cooking, which are seen in the early Philistine culture, are evidence of the “deep change” which occurred with the appearance of the Philistines in the early Iron Age.

In the early Iron Age levels at Tell eš-Şafi/Gath, in various areas (mainly in Area A), quite a few rounded, pebble-lined hearths were discovered (fig. 13.6), fitting in very well with what was previously known from other Philistine sites. While initial study of these hearths demonstrated that, contrary to previous assumptions, the origins of these pebbled hearths are not to be found in the Aegean world but rather in Cyprus, very little was known about the use and function of these hearths. Some questions remain, such as: What were they used



Figure 13.6. Elisabetta Boaretto and Shira Gur-Arieh sampling one of the early Iron Age hearths from Area A

for? What fuel was used? At what temperatures were they heated? What types of vessels, if any, were placed on them, and how they were placed?

In an attempt to answer these questions, an interdisciplinary study of these hearths was initiated, combining careful excavation, on-site micro-archaeological sampling, ethno-archaeology, experimental archaeology, along with traditional stratigraphic/comparative studies. This research was conducted as part of the doctoral dissertation research of Shira Gur-Arieh. So far, several studies relating to this research have been published (Gur-Arieh et al. 2011, 2012, 2013) which have enabled us to have a better, but far from complete, understanding of the use and function of these hearths. To start with, it appears that vessels were not placed directly on the hearths but were placed either near or on the hearth periphery (Gur-Arieh et al. 2011). Secondly, it appears that these hearths were used both for heating/cooking with open fires and with embers (Gur-Arieh et al. 2012). And finally, in a study soon to be published, it is demonstrated that the types of fuels were quite variegated (for the method of identifying the fuels, see Gur-Arieh et al. 2013).

While there is still much to be learned about the Philistine hearths, the application of micro-archaeological methods in the analysis of these installations opens new vistas and methods of interpretation for the ongoing study of both this specific feature as well as other related aspects of Philistine culture. This is particularly important in relation to food production and consumption, which has been shown to be of critical importance in identifying and understanding, from the macro- and micro-perspectives, the new features that appear in early Iron Age Philistia, and in attempts to differentiate between the Philistines and other Levantine cultures (e.g., Maeir 2008; Maeir et al. 2013).

Destruction and Abandonment of Philistine Gath

From the beginning of the excavations at Tell eṣ-Ṣafi/Gath extensive evidence of a large-scale destruction level dating to the late ninth century B.C. was discovered in various areas. This destruction level has been associated by us with the conquest of Philistine Gath at the hands of Hazael, king of Aram Damascus, around 830 B.C., an event that is briefly alluded to in II Kings 12:17/18 (Maier 2004, 2012a, 2012b), and is connected to the monumental siege system surrounding the site (Maier, Ackermann, and Bruins 2006; Maier and Gur-Arieh 2011). Due to the widespread evidence of buildings that had been destroyed, in which a large amount of relatively well-preserved and undisturbed objects were found, for more than a decade it was assumed that the process of destruction and abandonment during and immediately after the conquest of the town was relatively brief. In other words, it appeared that the houses in the city had been deliberately burned down and immediately collapsed, burying within them the objects, and sometimes the inhabitants, of the city in a relatively brief amount of time. Although the insights noted below do not relate to the actual use-period in which these Philistine houses existed and were in use, but rather to the process of destruction and post-destruction abandonment, decay, and covering over, this can be seen as part of the “lifecycle” of these houses — that is if “death” is seen as a continuum of life.

This interpretation of the process of destruction and abandonment was challenged in the 2009 season of excavations, when a well-preserved section of this destruction level was



Figure 13.7. Stephen Weiner and Jill Katz taking samples for analysis from the Iron Age IIA destruction level in Area A

specifically excavated using micro-archaeological protocols (fig. 13.7).¹ The detailed analyses conducted on half of a 5 × 5-meter square produced surprising results (for full details, see Namdar et al. 2011).

Clear evidence of a major conflagration was found in this location, which preserved and consolidated various building components, enabling us to differentiate between the roof, the walls, and the floor materials of the building. This facilitated a reconstruction of anthropogenic and geogenic events which led to the formation and buildup of the ca. 80-centimeter-thick accumulation associated with the destruction and its aftermath. The lowest layer, which overlies the original floor surface, was a thin, charred ash sediment rich in organic material. Surprisingly, this ash was not evidence of a fire at this location, as the clays in this layer were not altered by heat and the ceramics found on the floor still preserved organic residues (organic molecules are usually not well preserved when exposed to high temperatures). Apparently, the ash on the floor was produced elsewhere and was redistributed to this location. Very often archaeologists assume that the presence of ash can be interpreted as evidence of a fire at that specific location, but it is important to keep in mind that, as in this case, the ash may in fact have been redeposited by the wind from another, nearby location. In other locations in the analyzed building, the analysis of the sediments showed clear heat-related alteration, there were surprisingly few signs of ash, and the associated ceramics did have preserved organic residues — once again indicating that a “macro-impression” based on the presence or absence of ash is not necessarily a trustworthy criterion to define areas of conflagration. We also learned that the process of collapse of the structure was not a quick event, but rather something that may have occurred over years or even decades. This was shown, for example, by the fact that windblown sediments containing ash were redeposited while part of the structure was still standing, and only subsequently did the walls and roof collapse.

These insights are very important for the understanding of the processes related to the destruction of the city by Hazael and its aftermath. While in the past it was assumed that the destruction of the city was total, and all the buildings and the objects within them were quickly buried (thus supposedly explaining the excellent preservation), the results described above indicate that at least in some cases the buildings may have been only partially destroyed, and the objects left on the floors of the structures were not buried immediately. It was only later, with the collapse of the buildings, that the objects were buried as well. This indicates that perhaps the entire population of the city, or at least the overall majority, did not survive the conquest, and very few if any came back after the destruction to salvage items from the destroyed houses.² This would indicate the enormity and severity of the destruction of Philistine Gath, and fits in well with its demise as a city of any significant political status after this event (Maeir 2004).

¹ The micro-archaeological team was directed by Stephen Weiner. Jill Katz was the archaeological supervisor of the relevant square in the excavations.

² Additional, as yet unpublished, evidence that supports this was found in the analyses of some of the

human skeletal remains found in the destruction, which indicates that skeletons were left exposed to the elements after the destruction and were not buried.

Summary

The integration of a micro- and macro-archaeological perspective in a large-scale archaeological excavation enables us to open up new vistas in our interpretation and understanding of such a complex, multi-period and multi-dimensional site. In addition to the very fact that extensive use of micro-archaeological tools and methods enables us to retrieve classes of data that were previously unattainable (such as with the hydraulic plaster), or at the very least, were not retrieved with sufficient attention paid to the contextual background of the sampling — as well as the actual methods of sampling (such as with the metallurgical remains), we can see that the integration of the macro- and micro-perspectives tangibly enriches our understanding of the past. Not only can the fresh joint perspectives correct previously unproven observations (such as with the understanding of the process of destruction), combining the insights can broaden our understanding of various issues (such as with the hearths). The fact that all these vistas come to play during the excavation enables this integration of methods to have an immediate effect on the excavation methods and analytic results — as opposed to much of what was done in the past, where the macro-archaeologists excavated, and only in the post-excavation analyses were the micro-perspectives taken into account.

More specifically, in regard to our understanding of the Philistines and their culture, and in particular the daily life of the Philistines, whether in cultic or domestic contexts, the integration of macro- and micro-perspectives enables us to see that the story of the Philistines and their very much “entangled” culture — the appearance, composition, influence, development, and ultimate demise — is a complex and multivalent picture (e.g., Maeir et al. 2013; Hitchcock and Maeir 2013). As it is becoming clearer that simplistic, one-dimensional explanations of the processes related to the Philistine culture are lacking (compare Faust and Lev-Tov 2011 to Maeir et al. 2013), it is clear that only fresh, multi- and interdisciplinary research, including the integration of macro- and micro-perspectives, can truly move the study of this fascinating culture forward.

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Property Title, Domestic Architecture, and Household Lifecycles in Egypt

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This paper argues that in the first millennium B.C., the Egyptian state and temples acting as its agents became increasingly involved with written documentation of property transfer agreements compared to the preceding third and second millennia B.C., improving property title documentation and making property appear to be a more secure and attractive investment. Consequently, increased investment in houses may have resulted in changes in their architecture. At the same time, the inheritance of increasingly valuable houses may have played a greater role in shaping household lifecycles.

Property Title Documentation

During the third and second millennia B.C., the Egyptian state and temples do not appear to have concerned themselves with documenting transfers of title to private property. Written records of property title transfers rarely record the names of officials or scribes who could have served as state or temple agents and who could have kept records of such transfers, except during the late Middle Kingdom. Instead, responsibility for documenting private property title transfers appears to have fallen to the contracting parties, who usually made oral agreements and relied on local witnesses to document them, who may or may not have made written reminders for their own reference. Consequently, written records of private house transfers are relatively rare from the third and second millennia B.C.

There is one house sale from the Old Kingdom, stela Cairo JdE 42787, probably from Giza, which lacks the name of a scribe but includes the names of four witnesses and was inscribed on a stone stela for public display (Menu 1998, pp. 274–78, Doc. no. 1). Two other Old Kingdom house sales, papyrus Gebelein I verso B and papyrus Gebelein VI, from an archive found in a box at Gebelein, lack the name of either a scribe or witnesses, and may be written reminders for the use of the witness in whose archive they were found (*ibid.*, pp. 281–83, Doc. nos. 4 and 5). The primacy of witnesses over written documentation is demonstrated in an Old Kingdom property title dispute recorded in a fragmentary papyrus from Elephantine, in which the judges reject a will unless three witnesses can be brought to confirm it (Sethe 1926).

There are two property transfers from the Middle Kingdom that mention houses, papyrus UC 32037 (*Kahun* VII 1) (Griffith 1898, pp. 29–31, pl. 11; Collier and Quirke 2004, pp. 100–01), translated below; and papyrus UC 32058 (*Kahun* I 1) (Griffith 1898, pp. 31–35, pls. 12–13; Collier and Quirke 2004, pp. 104–06, pl. 6). Neither names a scribe, but both mention three witnesses, and the second mentions a copy placed in the office of a state official, which suggests state documentation.

There are no house sales from the New Kingdom, in part because the state provided housing at the community of tomb-builders at Deir el-Medina, which is a major source of documentation from the New Kingdom. There are, however, many records of transfers or exchanges of other types of property at Deir el-Medina, including private storerooms. Most of these records name neither scribes nor witnesses and are probably private reminders rather than copies or drafts of records in an official state archive (contra Allam 1968; Donker van Heel and Haring 2003, pp. 18, 27–30). Indeed, such private reminders for contractors and witnesses argue that there were no official state archives containing records of transactions that could be consulted. The New Kingdom property title dispute recorded in the tomb-chapel of Mes at Saqqara cites no state records of property transfers, and even the evidence of tax records from the state treasury is rejected as false on the testimony of witnesses (Gardiner 1905).

Starting in the eighth century B.C., however, temples began documenting transfers of title to private property with Abnormal Hieratic and Demotic contracts, which recorded the names of the scribes who served as temple notaries as well as the names of the literate witnesses who ensured that the written contracts accurately reflected the oral agreements upon which they were based (Griffith 1909, vol. 3, pp. 9–14). Some have attributed this development to foreign influence (Eyre 2013, pp. 115–24), but it is more likely to have been a local reaction to the increased availability and use of silver as a medium of exchange in the first millennium B.C. Temples initially acquired this responsibility in part because they were institutional fixed points after the Egyptian state fragmented during the Third Intermediate Period. The state was subsequently reunified in the Saite period, and starting in the third century B.C. at the latest, transfers of title also had to be registered with the state, as well as or instead of by temple notaries, further increasing the written documentation of transactions (Muhs 2009, pp. 247–49; Muhs 2010, pp. 586–88). Consequently, written records of private house transfers become common from the late fourth century B.C. onward throughout the Ptolemaic period.

Domestic Architecture

Some economic historians have argued that increased protection of property rights, for example through better documentation and enforcement, could make investment in private property less risky, more rewarding, and hence more attractive (North and Thomas 1973; North 1981). If this hypothesis is correct, then the increased state and temple involvement in the documentation of title to private property starting in the first half of the first millennium B.C. may have served to stimulate investment in privately owned houses, as well as increasing the amount of surviving written evidence for them. The surviving written evidence is unfortunately insufficient to track the proportion of privately owned houses through time, particularly if the sample is not equally representative through time due to an increased use of written documentation in the first millennium B.C., as suggested above. The architectural remains of houses, however, provide clear evidence of increased investment of material and labor in houses, through the rise of “tower houses” in the second half of the first millennium B.C., and their continued use through the first millennium C.E. as well. The casemate foundations of tower houses required more mudbricks than simple trench foundations, and more labor to make and lay the bricks, but the casemate foundations increased the usable lifespan of the tower houses, making them an investment in longevity.

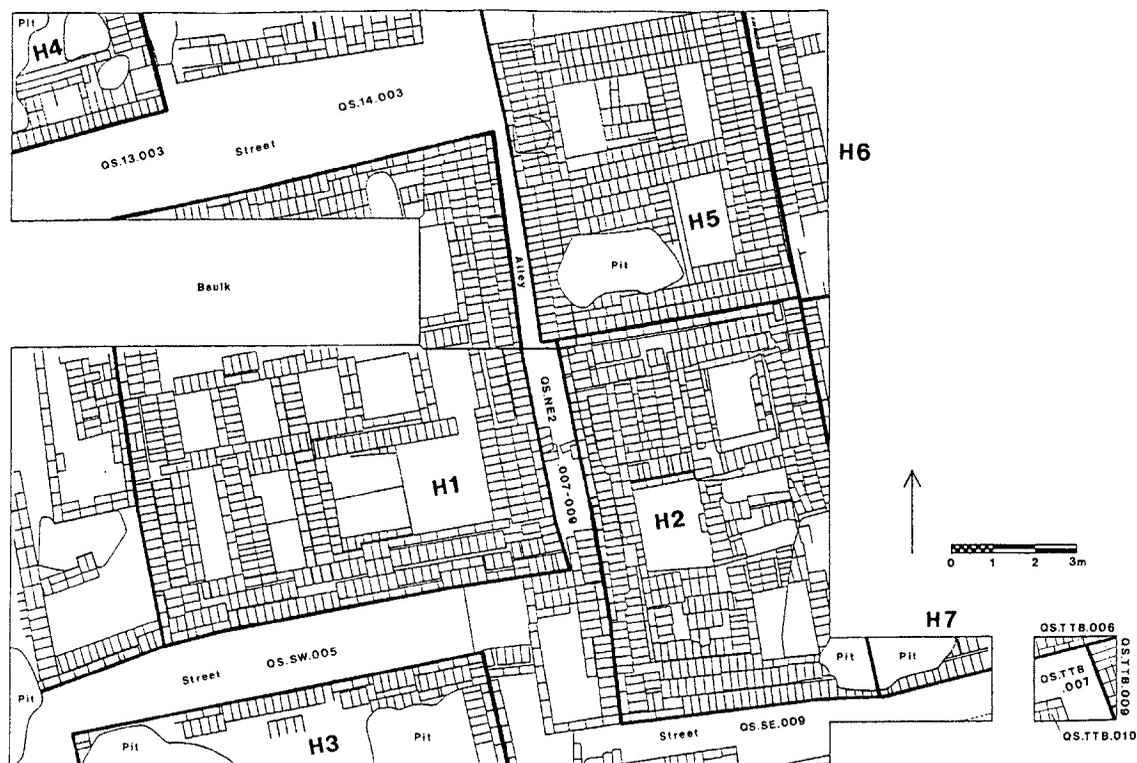
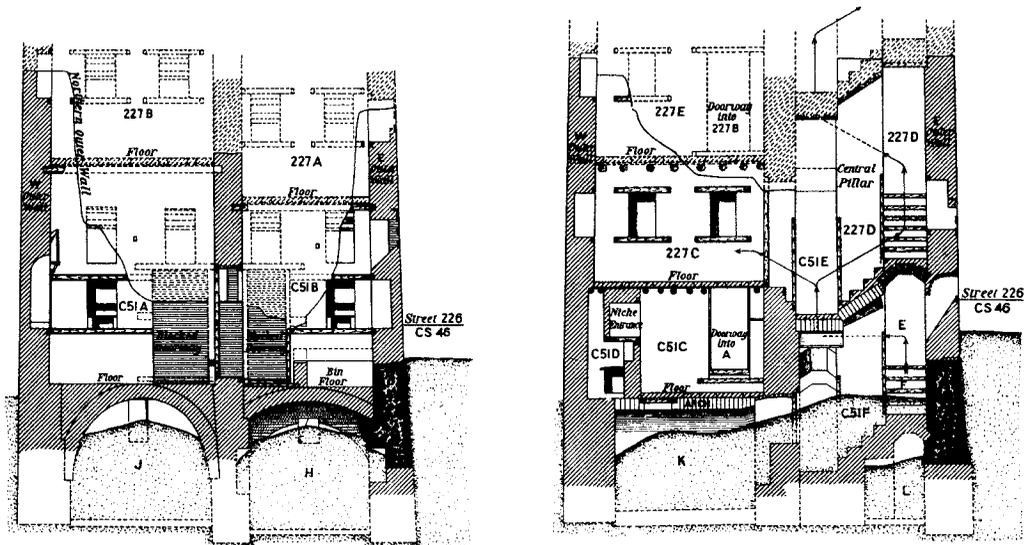


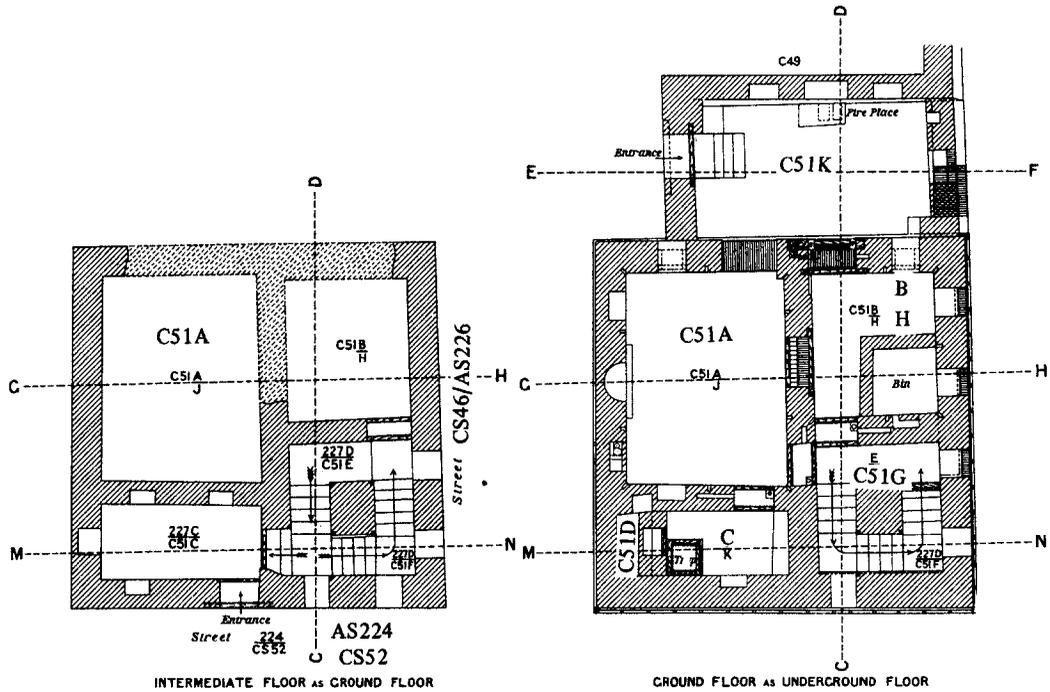
Figure 14.1. Plan of mudbrick casemate foundations of tower houses from Qasr Station at Tell el-Muqdam, dating to the late fifth century B.C. (after Redmount and Friedman 1997, p. 73, fig. 14)

Tower houses were characterized by multiple stories, as their name implies, but the upper stories only rarely survive in the archaeological record, at exceptional sites like Roman-period Karanis and early Islamic-period Jēme in the first millennium C.E. (see Arnold and Vorderstrasse, this volume). Tower houses were also characterized by sturdy mudbrick platform foundations, however, which often survive archaeologically (fig. 14.1). The ground floors of the tower houses were located on top of these platforms, and were often reached by stairs from the surrounding streets and alleys (Marouard 2012, pp. 125–27). The platform foundations usually incorporate several vaulted cells, which rarely communicate with each other or with the exterior of the platform. The cells thus served either as storage spaces accessed from above, or simply as dead spaces to reduce the volume of mudbrick needed in order to create the platform (*ibid.*, pp. 123–25). In either case, the mudbrick platform foundations represent significantly greater investments of material and labor than walls built directly on the ground or even in deep foundation trenches, as was typical in the second millennium B.C. These mudbrick platform foundations were undoubtedly needed to support the massive walls of these multi-story tower houses, but they may also have been intended to raise ground-floor levels in anticipation of the inevitable accumulation of dirt and garbage in unpaved streets and alleys, and the consequent rise of street levels relative to the house (cf. Arnold, this volume). If the latter was indeed an intention, it would merely have postponed the inevitable, illustrated by the Roman-period tower house C50/C51 at Karanis in the Fayum (fig. 14.2). The ground floor of this house was built on top of a semi-subterranean casemate



SECTION C-H From West to East. Looking North

SECTION M-N From West to East. Looking North



INTERMEDIATE FLOOR AS GROUND FLOOR

GROUND FLOOR AS UNDERGROUND FLOOR

Figure 14.2. Elevations and floor plans of tower house C50/C51 from B Level at Karanis, dating to the late third century c.e. (after Husselman 1979, plans 35–36)

basement, and the entrance was originally a step up from the street. As the street levels rose, however, the original floor-level rooms became semi-subterranean, and the original basement rooms were abandoned and filled with debris. In time, the rooms at ground-floor level were also abandoned and filled with debris (Husselman 1979, pp. 69–71, plans 31–37). Nonetheless, increased investment to extend the longevity and useful lifespan of houses would be a rational consequence of increased documentation and security of private property title. The increased documentation begins earlier than the increased investment, and thus it is unlikely to have been an effect rather than a cause of it.

Household Lifecycles

If increased documentation of property title in the first millennium B.C. encouraged ancient Egyptians to view houses as secure long-term investments, then it may also have reshaped the interaction between households and houses. In the second millennium B.C., it appears to have been common in Egyptian households for the house to pass from a father to a son, and for other sons and daughters to move out. As houses became increasingly valuable investments in the first millennium B.C., however, there seems to have been increasing pressure to give multiple children a share of that investment, either a physical share or a virtual part-ownership interest. Household structures and lifecycles may have had to adapt to the increasing importance of partible inheritance of houses (cf. Baker, this volume).

In ancient Egypt there were different socio-legal rules for succession to positions and for inheritance of properties. In general, the eldest son had an expectation to succeed to the position of his father, while all children, male and female, had an expectation to inherit portions of their parents' properties (Pestman 1969). These principles were often qualified, however. The expectations to succeed or inherit were usually tied to obligations to care for parents in old age and to bury them after death. Parents who wished to disinherit some or all of their children, and siblings who wished to dispute an inheritance, frequently cited a failure to fulfill these obligations (Janssen and Pestman 1968, pp. 164–70).

In the second millennium B.C., most of the Egyptian documentary evidence for the lifecycles of households concerns houses that were associated with official positions such as soldiers, or workmen in the royal tombs. In these households, one son succeeded his father as head of household, and other sons and daughters remained at his pleasure or moved out. In the first millennium B.C., however, the Egyptian documentary evidence increasingly concerns the lifecycles of households whose houses were private property, even when the heads of households apparently held official positions in temples or as soldiers. These houses were frequently divided among multiple children, which could lead to the physical division of the house, if more than one child stayed in the house; or to a division of title to the house, if it remained physically whole. Children then frequently sought to reunite such divided houses and titles through purchase or strategic marriage.

The change in the written evidence concerning household lifecycles between the second and the first millennium B.C. is undoubtedly amplified by the increase in the written documentation of property transfers in the first millennium B.C. Written documentation privileges the concerns of elites and sub-elites, who were literate and held state and temple positions more often than non-elites. The limited sample of written documentation from the third and second millennia B.C. may thus over-represent the household lifecycles of elites and sub-elites more than in the first millennium B.C. Privately owned houses certainly existed in

the third and second millennia B.C., as demonstrated by the examples of sales and transfers discussed previously and below. Furthermore, there is some archaeological evidence for the division of houses in the second millennium B.C. at Elephantine (von Pilgrim 1996a, pp. 223–26) and perhaps at el-Lahun (Kóthay 2001, p. 367, citing Kemp 1989, p. 155), which suggests that they may have been subject to partible inheritance. Consequently, the dramatic shift in the written evidence concerning household lifecycles probably reflects a more gradual shift in the proportions of household lifecycles dominated by positions (cf. Spence and Müller, this volume), and those dominated by property.

Middle Kingdom el-Lahun

In the Middle Kingdom (early second millennium B.C.), much evidence for household lifecycles comes from the site of el-Lahun or Kahun, a town associated with the pyramid and funerary temple of King Senwosret II. A private archive of documentary papyri from the town and dated to the late Middle Kingdom (eighteenth century B.C.) nicely illustrates a household that appears to have been associated with an official position, that of a soldier, which passed undivided from father to only son. It contains at least three census papyri found together describing three different states in a household lifecycle (Kemp 1989, pp. 157–58; Kóthay 2001, pp. 353–55), and some would attribute further papyri (*ibid.*, pp. 363–66). In the first stage (*Kahun I 4*), the household consists of the soldier Hori, his wife Shepset, and their son Sneferu. The absence of Hori's mother Harekheni suggests that Hori has established a new household rather than succeeding his father, perhaps because he was a younger son.

Papyrus UC 32164 (*Kahun I 4*), verso, lines 6–8 (Griffith 1898, p. 23, pl. 9; Collier and Quirke 2004, pp. 112–13):

- (6) The household document of the soldier Djehuty's son Hori, [being on] the second (unit?) of troops installed? [in the Northern District].
- (7) His wife Satsopdu's daughter Shepset woman of Gesiab
- (8) His son Sneferu infant

In the second stage (*Kahun I 5*), the household consists of Hori, his wife Shepset, their son Sneferu, his mother Harekhuni, and her five daughters. Hori's mother Harekheni and her five daughters have joined the household for an unknown reason, perhaps because her husband, Hori's father, had passed away.

Papyrus UC 32165 (*Kahun I 5*), lines 1–6 (Griffith 1898, pp. 22–23, pl. 9; Collier and Quirke 2004, pp. 114–15):

- (1) The household document of the soldier Djehuty's son Hori, [being on] the second (unit?) of troops installed? in the [Northern] District.
- (2) His wife Satsopdu's daughter Shepset woman of Gesiab
- (3) His son Sneferu child
- (4) His mother Harekheni her daughter Iset
- (5) Her daughter Qatsenut her daughter Rudet child
- (6) Her daughter Meket her daughter Sneferu child

In the third and final stage (*Kahun I 3*), the household consists of Sneferu, his mother Shepset, his grandmother Harekheni, and three aunts. Sneferu has succeeded his father

Hori upon his death (line 10), and his grandmother, mother, and three aunts remain in the household, while two other aunts have disappeared for unknown reasons.

Papyrus UC 32163 (*Kahun I 3*), lines 1–10 (Griffith 1898, pp. 19–22, pl. 9; Collier and Quirke 2004, pp. 110–11):

- (1) Year 3, 4th month of Akhet, day 15, under the majesty of the King of Upper and Lower Egypt Sekhemkare, may he live forever and ever.
- (2) Copy of the household document of the soldier Hori's son Sneferu, his father being on the second (unit?) of troops.
- (3) His mother Satsopdu's daughter Shepset *wꜣbt*-priestess of Gesiab
- (4) Mother of his father Harekheni free woman of the cemetery workers of the Northern District
- (5) Sister of his father Qatsenut ditto
- (6) Sister of his father Iset ditto
- (7) Sister of his father Satsneferu ditto
- (8) Entered under the household document of his father of Year 2
- (9) Swearing of this household in the office of the vizier in Year 5, 1st month of Peret, day 8
- (10) being the household of a dead man.

These are not three randomly discarded papyri, obviously, but rather private copies of official documents deliberately kept together by the heads of one household. The official documents were census records kept by the local authorities to track who was available for compulsory labor. The private copies may have been made at the request of the household heads, to establish that the son Sneferu was the heir of his father Hori.

Not all houses at el-Lahun were associated with official positions, however. A documentary papyrus dated to the late nineteenth century B.C. records the transfer of an office from a father to his son, and the transfer of a house to all of his children, or to all of his other children, depending upon whether the mother of his son is the mother of his other children. In either case, the transfer illustrates the distinction between succession to office and inheritance of property in Egyptian law.

Papyrus UC 32037 (*Kahun VII 1*), recto (Griffith 1898, pp. 29–31, pl. 11; Collier and Quirke 2004, pp. 100–01):

- (1) Year 39, 4th month of Akhet, day 29 (of Amenemhat III).
- (2) A transfer that the controller of the phyle, Intef's son Meri called Kebi, made for (3) his son Meri's son Intef called Iuseneb. "I give my (4) (office of) controller of the phyle to my son Mery's son Intef called Iuseneb for (being my) 'staff of old age' (5) because I have become old. Cause that he is appointed at once.
- (6) As for the transfer that I made for his mother previously, (I turn my) back to it.
- (7) As for my house which is in the district Hut-ma'at, it is for my (8) children born to me by the daughter of (9) the phyle-member and district councillor Sobekemhat's daughter Nebetnininisu, together with all that is in it."
- (10) List of the names of witnesses in whose presence the transfer was made:
- (11) The controller of the phyle, Sabastet's son ditto,
- (12) The [libationer?], Senwosret's son Senbubu,
- (13) [...]

New Kingdom Deir el-Medina

In the New Kingdom (late second millennium B.C.), much evidence for household lifecycles comes from the site of Deir el-Medina, a village in western Thebes home to the workmen of the royal tombs in the Valley of the Kings. At Deir el-Medina, houses were apparently associated with positions in the gang of workmen. One son could succeed to his father's position and house, but without a position or house of their own, other sons eventually would have been obliged to leave their father's and elder brother's house and the community as well, unless another position in the community became available, for example, if another workman died without a successor. Sons who had not yet succeeded to a position or left the community were known as "children of the tomb" (Černý 2001, pp. 113–20). Women did not hold positions in the gang, and consequently daughters were also encouraged/obliged to leave their father's house and community, unless they married another workman (Toivari-Viitala 2001, p. 86). Private property did exist at Deir el-Medina, however. It included furniture, utensils, clothing, and foodstuffs in the houses, as well as storerooms, tombs, and tomb equipment located just outside the village. Such property was divisible, and daughters as well as sons could inherit shares, in contrast to positions and houses (*ibid.*, pp. 96–109).

A letter from a father or father-in-law to a daughter written in hieratic on a limestone flake illustrates the different rules for the transmission of property associated with positions and private property. The workman Baki threatens to cast Tanetdjeseret out of his house, which is an idiom for divorcing her (Toivari-Viitala 2001, pp. 90–91). Tanetdjeseret apparently cannot make a claim to (part of) Baki's house, because it belongs to the state, that is Pharaoh, and Baki only has use of it because of his position (*ibid.*, p. 212). Therefore Tanetdjeseret's father offers her part of his storeroom, which he built himself and which is therefore his private property.

Ostrakon Petrie 61 (Černý and Gardiner 1957, pl. 23 no. 4; Wente 1990, p. 147, no. 199):

The workman Horemwia, he says to the citizeness Tanetdjeseret, his daughter: "You are my good daughter. If the workman Baki casts you out of the house, I will act. As for the house, it is what belongs to Pharaoh, l.p.h., but you may dwell in the anteroom to my storehouse because it is I who made it. No one in the world will cast you out of there."

The papyri of Kenherkhepeshef and his descendants also illustrate this. Kenherkhepeshef was a scribe of the tomb at Deir el-Medina (Černý 2001, pp. 329–37). He possessed an extensive library of literary, ritual, and medico-magical texts, the majority of which are now known as the Chester Beatty papyri. He died without children and his position was assigned to another, but his widow Naunakhte inherited his papyri. She married another workman, Khaemnun, with whom she had eight children, and thus she remained in the community. Khaemnun used and added texts to the papyri of Kenherkhepeshef, and subsequently two of his sons, Amennakht and Maannakhtef, did so as well (Pestman 1982). Naunakhte did not get on with all of her children, however, and consequently she drew up a will for the property that she had inherited from her father and from her first husband Kenherkhepeshef, and for one-third of the property that she had acquired with her second husband Khaemnun. Those children who had taken care of her, one daughter and three sons including Amennakht and Maannakhtef, received shares of this property. Those who had failed to take care of her, one son and three daughters, did not receive shares of this property (Černý 1945). Her chosen

heirs ultimately received this will, and kept it with the papyri of Kenherkhepeshef, which they had received from her as well.

Papyrus Ashmolean 1945.97, column 2, line 1–column 5, line 2 (Černý 1945):

(2,1) She said: “As for me, I am a free woman of the land of Pharaoh. (2,2) I brought up these eight servants of yours (2,3) and gave them an outfit of everything (such) as is usually made (2,4) for those in their situation. See, I am grown old (2,5) and see, they are not looking after me in my turn. (2,6) Whoever of them laid his hand on my hand, to him will I give my things. (2,7) He who has not given to me, to him I will not give of my things.”

(3,1) List of the workmen and women to whom she gave: (3,2) the workman Maanakhtef; (3,3) the workman Kenherkhepeshef, she said: “I give to him (3,4) a washing-bowl of bronze as reward over and above his fellows, 10 sacks of emmer”; (3,5) the workman Amennakht; (3,6) the citizeness Wasnakhty; (3,7) the citizeness Menatnakhty, as for the citizeness Menatnakhty, (3,8) she said concerning her: “She shall have her share in the division of all my things (3,9) except for the emmer which my three (3,10) male children and also the citizeness Wasnakhty have given me (3,11) and (except for) my fat which they have given me in the same manner.”

(4,1) List of her children of whom she said: (4,2) “They shall not enter into the division of my one-third, (4,3) but into the two-thirds of their father they shall enter: (4,4) the workman Neferhotep; (4,5) the citizeness Menatnakhty; (4,6) the citizeness Henutshenu; (4,7) the citizeness Khatnub. As for these four children (4,8) of mine they shall, <not> enter into the division of all my things. (4,9) As for all the things of the scribe Kenherkhepeshef, my (first) husband, (4,10) and also his landed property, and this storeroom of my father, (4,11) and also this emmer that I collected (4,12) with my (first) husband they shall not divide them.

(5,1) As for these eight children of mine, they shall enter into the division (5,2) of the things of their father, one single division each.”

Ptolemaic Thebes

Written records of house sales and transfers become numerous in the Ptolemaic period, making it impossible to discuss more than a couple of examples of household lifecycles from this period here. The first example comes from a private archive of documentary papyri dated to the early Ptolemaic period (fourth–third centuries B.C.). It probably comes from a tomb in western Thebes to the north of Deir el-Medina, though it concerns a house next to the temple of Amun in eastern Thebes. This archive has been selected because it illustrates the “fission” of a household and its house (fig. 14.3). A head of household with a position as carpenter of the estate of the temple of Amun treated his house as private property, physically dividing it among multiple sons and heirs, who further subdivided it. These subdivisions were inherited, sold, and used as security for loans, passing from one household to another, until they and their documents arrived in the possession of the final owner named in the papyri, Teineni daughter of Teos, for whom the archive is named. The archive of Teineni daughter of Teos consists of at least twenty-two papyri dating from 324 to 274 B.C. (Pestman 1983, pp. 288–90; Muhs 2005b, p. 130). The oldest papyrus in the archive, papyrus Strassburg 1, is dated to 324 B.C. It is a donation contract, in which the carpenter of the estate of the temple of

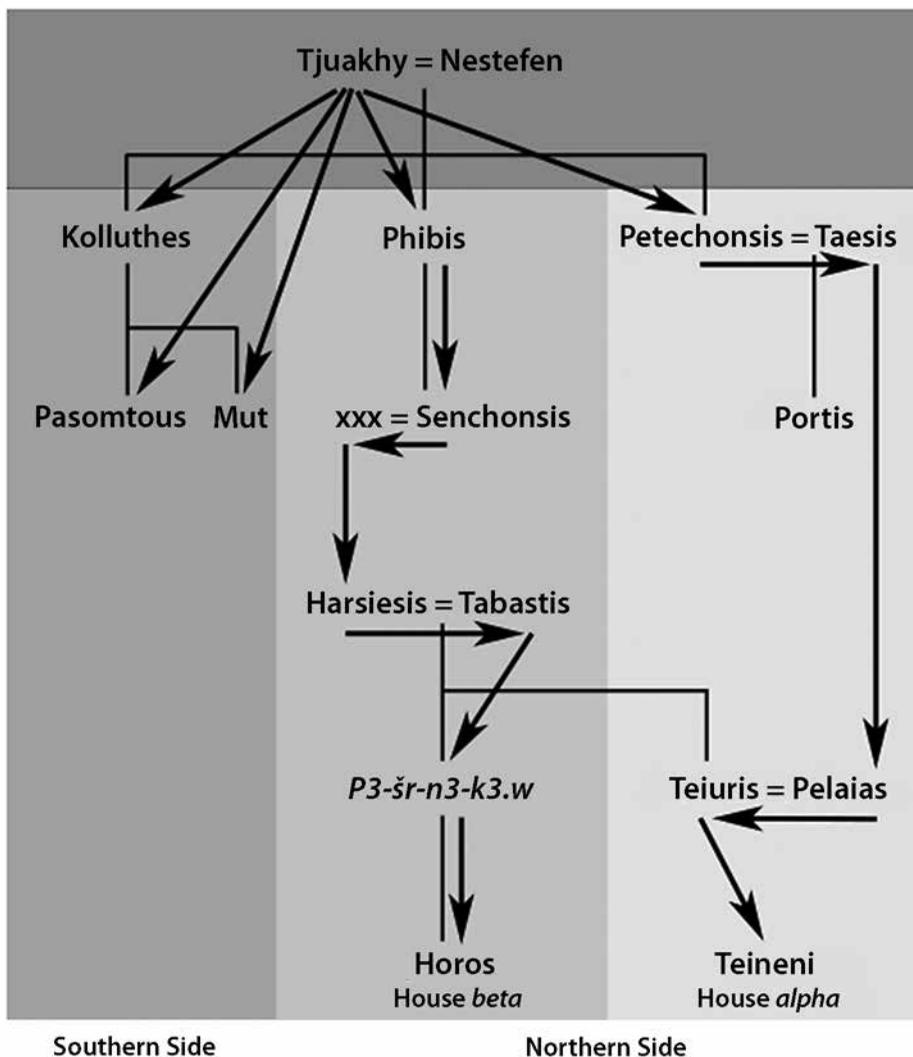


Figure 14.3. The House of Tjuakhy at Thebes in the early Ptolemaic period

Amun, Tjuakhy, donates specific pieces of his house to his various sons and grandchildren, obliging them to contribute to his burial (Spiegelberg 1902, pp. 18–20; Glanville 1939, pp. xxvii–xxxvi). In the first part of the contract, Tjuakhy donates to his eldest son Kolluthes the entire roof and shares of certain common areas, namely the entry, the stairs, the women’s quarters, and the courtyard. These shares are clearly part interests in otherwise undivided areas. The term translated as “women’s quarters” (*hrr*) is known from other texts to have been a place for menstruating women usually located under the stairs (Wilfong 1999, pp. 429–30 and nn. 30–32).

Papyrus Strassburg dem. 1, line 1 (Spiegelberg 1902, pp. 18–20; Glanville 1939, pp. xxvii–xxxvi)

(1) Year 9, Thoth, of Pharaoh Alexander (the Great). Has said the carpenter of the estate of Amun, Tjuakhy son of Wedjaiharmeten, his mother is Taesis, to the carpenter of the estate of Amun, Kolluthes son of Tjuakhy, his mother is Nestefen: “My eldest son! I have given to you the share (*tny*) of the entry (*hyt*), its entire roof (*tp-h*), and the share of the stairs (*trt*), and the share of the women's quarters (*hrr*), and the share of the courtyard (*inh*),”

In the next part of the contract, Tjuakhy donates to his grandson Pasomtous the southern side or chamber of the house, along with part interests in the common areas. He also donates to his granddaughter the right to work in the courtyard.

Papyrus Strassburg dem. 1, line 1, continued (Spiegelberg 1902, pp. 18–20; Glanville 1939, pp. xxvii–xxxvi)

While there belongs to the pastophoros of Amunnesutawyrpares, Pasomtous son of Kolluthes, the southern side/room (*ry.t*) of this house and the share of the entry (*hyt*) and the share of the stairs (*trt*) and the share of the women's quarters (*hrr*) and the share of the courtyard (*inh*). While the woman, Mut daughter of Kolluthes, does any work in the above courtyard (*inh*) with you (plural), as her share, regarding which a document was made for her for the courtyard (*inh*) according to that to which she is justified.

In the third part of contract, Tjuakhy donates to his two younger sons Phibis and Petechonsis the northern side or room of the house. Furthermore, he orders Phibis and Petechonsis to make a new door to the street and to wall up the door to the rest of the house. This is thus a rare example of household fission in Egypt, and it is clearly driven by pressure for partible inheritance of property, but not of households.

Papyrus Strassburg dem. 1, lines 1–2 (Spiegelberg 1902, pp. 18–20; Glanville 1939, pp. xxvii–xxxvi)

While there belongs to Phibis son of Tjuakhy and Petechonsis son of Tjuakhy, making two (people), my children, your younger brothers, (2) the northern side/room (*ry.t*) of the house, and its hall (*syh*) which is behind it as their share which falls to them in my estates (*pr.w*) and vacant lands (*wrh.w*); and they shall make a door in the middle of their northern side/room to the north to the street of Pharaoh; and they shall block the door in the northern side/room that opens to your entry (*hyt*).

Phibis and Petechonsis apparently further subdivided their northern side or room into western and eastern parts, which Egyptologists refer to as Houses *alpha* and *beta*. The other papyri in the archive document the successive transfers of these “houses.” Each time one of these properties was donated, inherited, bought, or sold, a new document was drawn up and given to the new owner, along with all the older documents pertaining to the property, to establish the chain of title, thereby creating a private archive of documentary papyri (Pestman 1983, pp. 288–90).

Petechonsis received the western part of the northern side of his father Tjuakhy's house, the part known as House *alpha*. Petechonsis subsequently married the woman Taesis daughter of Peteamenope as recorded in Demotic marriage contract papyrus Rylands dem. 10, dated to 315 B.C. (Griffith 1909, vol. 1, pl. 48; vol. 3, pp. 114–15, 254–55; Lüddeckens 1960, pp. 22–25 (*Urk.* 10)). Petechonsis died, and House *alpha* passed to Petechonsis' wife Taesis, after Petechonsis' son Portis ceded his claim to it to her in Demotic quitclaim contract papyrus BM Glanville 10522, dated to 297 B.C. (Glanville 1939, pp. 3–9, pls. 1–2). Taesis then took out a

loan from the lector-priest Pelaias son of Thotortaios with House *alpha* as security in Demotic loan contract papyrus BM Glanville 10523, dated to 295 B.C. (Glanville 1939, pp. 9–14, pls. 3–5) and presumably defaulted on the loan, because she sold and ceded the house to him in Demotic sales and quitclaim contracts papyrus Moscow dem. 115 and 116, dated to 293 B.C. (Struve 1954, pp. 51–61; Shore 1968, p. 196). Pelaias son of Thotortaios then took out a loan with House *alpha* as security in Demotic loan contract papyrus Moscow dem. 113, dated to 285 B.C., but evidently paid off the loan, as the contract was returned to Pelaias (Struve 1954, pp. 51–61). Pelaias son of Thotortaios married his neighbor's daughter, Teiuris daughter of Harsiesis, and sold House *alpha* to her in return for care in old age and burial in Demotic sales contract papyrus Rylands dem. 11, dated to 284 B.C. (Griffith 1909, vol. 1, pls. 49–52, 60; vol. 3, pp. 122–23, 257–60). Pelaias took out another loan with House *alpha* as security in Demotic loan contract papyrus BM Glanville 10525, dated to 284 B.C. Pelaias phrased the loan as if he still owned the house, but his wife Teiuris gave her consent. Presumably Pelaias repaid this loan as well, as the contract returned to him (Glanville 1939, pp. 33–38, pls. 3, 7–8). Pelaias died, and Teiuris daughter of Harsiesis sold and ceded House *alpha* to the woman Teineni daughter of Teos in Demotic sales and quitclaim contracts papyrus Rylands dem. 12 and 13, dated to 279 B.C. (Griffith 1909, vol. 1, pls. 53–60, vol. 3, pp. 124–29, 260–63). Teiuris' father and Teineni's neighbor Harsiesis ceded his claims to the house in Demotic quitclaim contract papyrus Rylands dem. 14, also dated to 279 B.C. (Griffith 1909, vol. 1, pl. 61; vol. 3, pp. 124–29, 263–64).

Petechonsis' brother Phibis received the eastern part of the northern side of his father Tjuakhy's house, the part known as House *beta*. Phibis appears to have had a daughter Senchonsis, who married and died, because her husband sold House *beta* to the lector-priest Harsiesis son of Panas, in return for the latter burying Senchonsis in Demotic sales contract papyrus Bruxelles dem. 2, dated to 301 B.C. (Spiegelberg 1909, pp. 3–9, pls. 2–3; Glanville 1939, pp. xxxvi–xli; Shore 1968, pp. 193–98, pl. 31). Harsiesis son of Panas appears to have transferred House *beta* to his wife Tabastis, who transferred it in turn to their son *P3-šr-n3-k3.w*, from whom it passed to their grandson Horos by 288 B.C. [cf. quitclaim papyrus BM Glanville 10527], although Harsiesis was still alive in 279 B.C. [cf. quitclaim papyrus Rylands dem. 14]. Somehow all of the documents relating to House *beta* ended up in the same archive as those relating to House *alpha*, which led Pieter W. Pestman to speculate that the owner of House *alpha*, Teineni daughter of Teos, married the owner of House *beta*, Horos son of *P3-šr-n3-k3.w* (Pestman 1983, p. 290). There is no evidence for this, except that men frequently did marry the women living in adjoining houses in this neighborhood (Muhs 2005a).

Ptolemaic Hawara

The second example of a household lifecycle from the Ptolemaic period comes from another private archive of documentary papyri, dated to the early Ptolemaic period (fourth–third centuries B.C.). It comes from the town of Hawara, located among the ruins of the Middle Kingdom pyramid and funerary temple of King Amenemhat III, a few kilometers to the west of the pyramid of his grandfather Senwosret II. This archive has been selected because it illustrates the partible inheritance of shares of title to a house, without a physical division of the house itself (fig. 14.4). The earlier Hawara archive in Chicago and Copenhagen probably consists of twenty-four papyri dating from 365 to 183 B.C. (Vleeming 1999, p. 130; Muhs 2008, pp. 191–93). The portion of the archive dealing with the house, however, dates to the

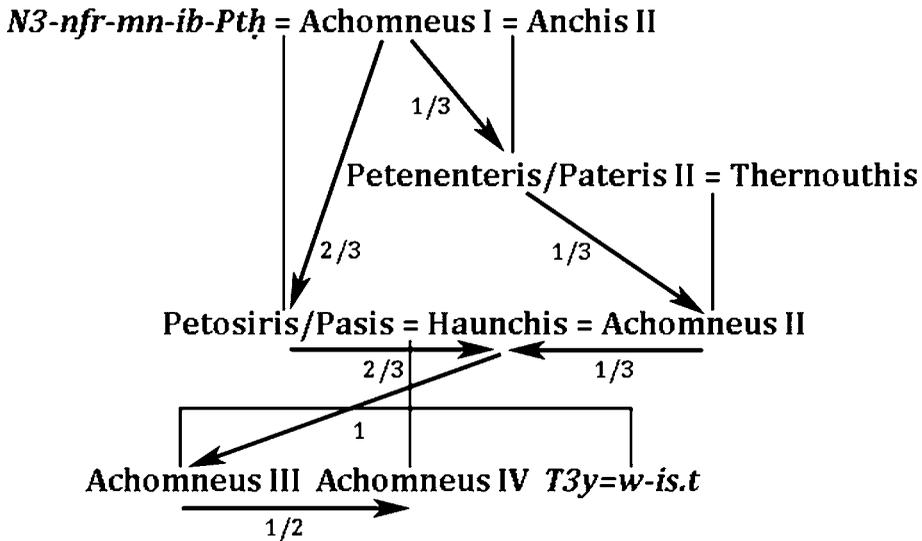


Figure 14.4. The House of Achomneus I at Hawara in the early Ptolemaic period

third century B.C. The embalmer Achomneus I gives his eldest son Petosiris or Pasis a two-thirds share of a house in Hawara that measured 18×19 cubits, among other things, in Demotic donation contract papyrus OIM 25262, dated to 292 B.C. (Hughes and Jasnow 1997, pp. 23–26, pls. 20–24 [4]). Petosiris son of Achomneus I married the woman Haunchis daughter of Marres and gave her and their children a claim to his two-thirds share of the house, through Demotic annuity contract papyrus OIM 25388, dated to 259 B.C. (ibid., pp. 33–37, pls. 30–37 [6]). Petosiris never ceded his own claim to his two-thirds share, but it died with him when he predeceased his wife.

Achomneus I apparently had a second son Peteneteris II or Pateris, to whom he gave the other one-third share of the house in Hawara. Demotic loan and sales contract papyrus OIM 25255, dated to 245 B.C., records that Peteneteris II borrowed 1 deben and 6 kite of silver, with security consisting of one-third share on the southern side of a house in Hawara, which measured 18×19 cubits (Hughes and Jasnow 1997, pp. 38–45, pls. 38–41 [7A–B]). This was almost certainly the other share of the same house mentioned in papyrus OIM 25262 in 292 B.C., though the lack of a list of neighbors in the latter papyrus prevents confirmation. The measurements were the same in both cases (18×19 cubits), despite the different sizes of the shares involved (two-thirds and one-third), clearly indicating that the house was physically undivided, and that the shares were only ownership interests.

Significantly, the two different ownership interests were reunited through a strategic marriage. Achomneus II son of Peteneteris II married Haunchis daughter of Marres, widow of Petosiris son of Achomneus I, and gave her and her children a claim to his one-third share of the house that he had inherited from his father, through Demotic annuity contract papyrus Carlsberg 34, dated to 239 B.C. (Lüddeckens 1998, pp. 2–12, pl. 1 [Urk. 1]), and Demotic sales contract papyrus OIM 25263, also dated to 239 B.C. (Hughes and Jasnow 1997, pp. 52–58, pls. 49–55 [9]). Six years later Achomneus II ceded his own claim to his one-third

share with Demotic quitclaim contract papyrus Carlsberg 36, dated to 233 B.C. (Lüddeckens 1998, pp. 21–36, pl. 3 [*Urk.* 3]). Haunchis daughter of Marres and her children thus obtained control of the entire house and all of the papyri documenting the transfers of both portions of the house. The following year, however, her children divided ownership interest in the house again. Haunchis' eldest son Achomneus III son of Petosiris gave his younger brother Achomneus IV one-half share of the house, with the consent of Haunchis and her daughter, in Demotic donation contract papyrus Rendell, dated to 231 B.C. (Hughes and Jasnow 1997, pp. 63–70, pls. 58–62 [Appendix]).

Conclusions

Increased documentation of property title starting in the first half of the first millennium B.C. may have rendered property a more secure and attractive investment. This thesis is supported by contemporary changes in domestic architecture in the second half of the first millennium B.C., such as the appearance of multi-story houses built on sturdy casemate foundations, which appear to have been investments in extending the durability of houses. An apparent increase in the importance of partible inheritance of houses in the second half of the first millennium B.C. also supports this thesis. The increased durability of houses may have encouraged partible inheritance of houses to take the form of virtual shares rather than physical divisions, but the lack of preserved upper stories of tower houses in the second half of the first millennium B.C. makes it difficult to test this hypothesis archaeologically.

Abbreviations

BM	British Museum, London
JdE	Journal d'Entrée of the Egyptian Museum, Cairo
OIM	Oriental Institute Museum, Chicago
UC	University College, London

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Late Middle Kingdom Society in a Neighborhood of Tell el-Dab^ʿa/Avaris

Miriam Müller, *The Oriental Institute**

Introduction

A discussion of the ancient Egyptian social structure will always be biased in light of the overwhelming evidence coming from the ruling class and the administrative apparatus in contrast to the large base of working population at the bottom of the social ladder. Opposing views on the existence of a middle class and its character predominate in recent discussions of ancient Egyptian society (e.g., Richards 2005; Kemp 2006; Grajetzki 2006, 2010). Of particular interest is the era of the Middle Kingdom, since the developments in this time represent a transition from the state formation process and development of the administrative apparatus in the Old Kingdom to the display of a greater variety within the echelons of society and the chance for social mobility in the New Kingdom. The Middle Kingdom generated evidence for fundamental changes in the societal structure, the proliferation of new positions and ranks within the administrative apparatus and a suppression of provincial nobility, but also a flourishing of literature and a “democratization of the afterlife” (Franke 2001; see also Picardo, this volume). The rise of a middle class was postulated mostly on the basis of textual evidence,¹ but scholars have so far struggled to prove it a general theme in Middle Kingdom society in the absence of convincing archaeological evidence. Settlement data supports the notion of a prescriptive state with rigid state-planned residential areas that display strict control exercised by the government (Kemp 2006, pp. 241–44). The existence of an independent, prosperous middle class thus seemed to be impossible for the sociocultural setting of the Middle Kingdom. The reappraisal of data from the mortuary realm and the growing body of settlement studies now add new evidence to the discussion of the ancient Egyptian social structure and allow a different perspective.

Egyptian society is well known for its sharp separation into an upper and a lower class with evidence mostly coming from the elite, the king, and the administrative ranks.² Over the course of the history of Egyptological research the idea for the existence of a middle class that is only scarcely visible in the archaeological record was expressed very early on (Richards 2005, p. 7). It was understood as a group independent of the ruling class that was

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¹ See also the discussions of different topoi that are in various attempts linked to this “new class,” such as the First Intermediate Period *nedjes* “commoner” in Franke 1998 and the Middle Kingdom *s n niwt tn* “townsmen” in Quirke 1991 and Andrásy 1998.

² I employ the terms *class*, *elite*, and *rank* based on Richards’ (2005, pp. 13–18) and Grajetzki’s (2010, pp. 180–81) discussions. *Class* is here defined as the “socioeconomic grouping” or “level,” while *rank* comprises a subdivision of class and *elite* denotes the ruling group.

able to earn a considerable income through private enterprise and had to pay taxes to the government based on earnings (Katary 2009, pp. 264–65).³ This part of the society was thus not involved in administrative tasks and typically held no titles. We see glimpses of this middle sector, but it is difficult to characterize this part of the society on the basis of the preserved records. Most often it is the absence of finds that leads to its characterization as “‘invisible elites’ whose wealth, range of activities, local power and influence, even social contacts, made them indispensable actors in the economic, political and social life of ancient Egypt despite their scarce appearance in the official sources” (Moreno García 2013, p. 96).

Considerations of social stratification, status, and rank as seen in the archaeological record are, as discussed above, difficult to achieve and afflicted with uncertainties. An interpretation based on the absence of certain features or objects must not necessarily draw the correct picture. Therefore it is inevitable to combine as many lines of evidence as possible (Ames 2007, p. 508). In the case of residential areas the combination of settlement and mortuary data can be rewarding, if a link between inhabitants of a certain area and tomb owners can be established. House size, building material, construction, and storage capacity, as well as grave contents, size, details of construction, and funerary rites can be investigated. The objects found in the settlement and tombs give evidence of the materials used for their manufacture, its exclusivity, and the time invested in the manufacturing process. Bioanthropology and human osteology provide information on diet and health. An additional aspect to measure wealth is the diversity and number of specific objects such as drinking and serving vessels. Furthermore, the control of space, a specific way of accessing a building and the location of representative and private rooms, can enhance our understanding of the inhabitants’ status. Whereas there is a possibility to distinguish status by analyzing property and the means to display wealth, it is nearly impossible to determine status based on personal influence, prestige, social honor, or popularity without the help of textual evidence or specific symbolic objects (e.g., Neunert 2010).

Household Archaeology at Tell el-Dab^{ca}/Avaris

In this paper the attempt of distinguishing class and social hierarchy in the archaeological record of a settlement of the late Middle Kingdom and early Second Intermediate Period is presented. The analysis is based on material from a neighborhood at the site of Tell el-Dab^{ca} in the eastern Nile Delta, identified with ancient Avaris (Bietak 1996a). The city gained its importance as a trade hub in the second millennium B.C. due to its strategic position at the crossroads of the Egyptian and Levantine realms. It later became the capital of the first foreign kings ruling over parts of Egypt, the so-called Hyksos dynasty, with its probable origins in the Levant.⁴ The site was, however, settled over a long time and the sociocultural and historical setting shortly before the coming into power of the Hyksos is of great interest, since evidence for the nature and origin of the Hyksos kingship is sparse (Marée 2010; Oren 1997;

³ The appearance of a middle sector of society was often characterized by preconceived notions based on modern views and historical treatments of the middle class phenomenon (Grajetzki 2010, p. 181; Helck 1959, pp. 1–2).

⁴ There are different opinions on the origin of the Hyksos based on similarities with the material culture of the Levant. Manfred Bietak’s latest assessment of this topic has, however, concisely shown that the Hyksos most probably originated from the northern Levant (Bietak 2010a, pp. 150–51, with reference to contrary views).

Ryholt 1997; Hein, Milnar, and Schwab 1994; Helck 1959, p. 28). The period under discussion spans the time from the late Middle Kingdom, the Thirteenth Dynasty, to the beginning of the Hyksos period, the Fifteenth Dynasty (1795–1640 B.C.; Middle Bronze Age IIA–B), including the formation of a local kingdom of the Fourteenth Dynasty (Bietak 1984c).⁵ Different areas have been excavated over the last fifty years — palaces, temples, administrative buildings, and cemeteries (for an overview, see Bietak 2010b; Forstner-Müller 2010). For an examination of the social structure of the late Middle Kingdom, however, residential areas provide the most compelling evidence. Located in different zones of the city — center and periphery as well as neighboring settlement mounds, geziras rising over the floodplain that were spared by the annual inundation — a number of excavated areas reveal a small glimpse into the very diverse nature of the different neighborhoods of the city (fig. 15.1).⁶ From the architectural point of view, differences can be seen in terms of a specific character, such as uniformly planned quarters in the early Middle Kingdom (F/I, Strata e/3-1: Czerny 1999; and R/I, Strata e/4-1:

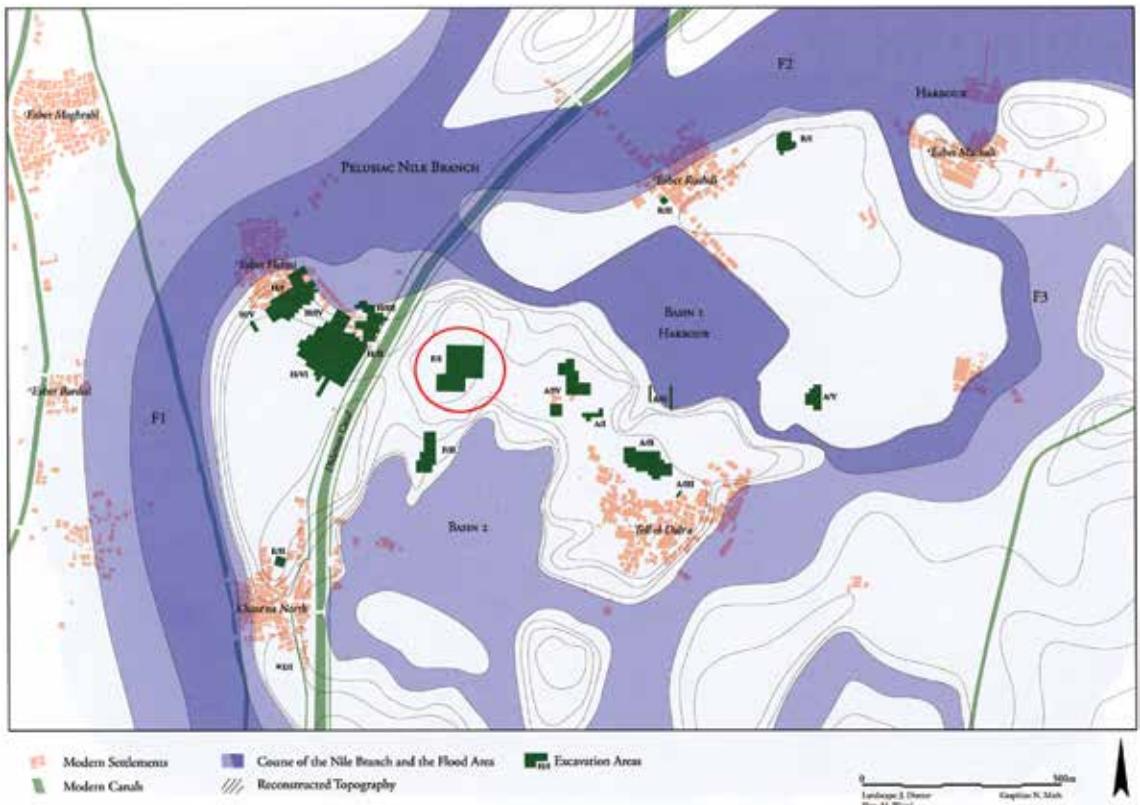


Figure 15.1. Map of Tell el-Dab'a (after Bietak 2010b, p. 32, fig. 6)

⁵ For a differing view, see Ryholt 1997, pp. 103–05.

⁶ I use the term “neighborhood” as a designation for residential areas with a uniform character in different parts of the city (see Smith 2010 for a discussion of neighborhoods in preindustrial cities). These areas show markers such as the same house types, sizes,

and orientation. The exact extent of these “neighborhoods” could, however, not be determined due to the limitations of the excavation. Only in one instance, the planned early Middle Kingdom quarter in area F/I, an idea about the extent of the neighborhood enclosed by a wall could be gained.

Czerny 2010), naturally grown neighborhoods in the late Middle Kingdom (A/II, Phases H–G: Bader 2011; and F/I, Strata c-b/1: M. Müller 2011), or the settlement density and house size in the Hyksos period (A/II, Phases D/3–2: Bietak 1991; and A/V, Phases E/2–D/2: Hein and Jánosi 2004; and R/III, Strata b–k: Forstner-Müller and Rose 2013). Relating to the different locations, the character of the neighborhood, and house sizes the inhabitants' status can be anticipated. However, only a detailed analysis of every single household can guarantee an adequate consideration of the social stratification displayed in the area. Different household compositions, the nature of the family, and even gender can be discussed. Since the population of Tell el-Dab'a used to bury their deceased within the settlement (van den Brink 1982), mortuary data can also be included in the analysis.

The Neighborhood F/I

In the 1980s, excavations were undertaken in the fields west of the main Tell A (fig. 15.1) (Bietak 1984a; 1984b; 1996a, pp. 31–36, 49). Among other spectacular finds such as a large mansion with an adjacent necropolis of high-ranking officials (Eigner 1985, 1996; Schiestl 2009), the excavations revealed a residential area that was occupied from the late Middle Kingdom to the beginning of the Hyksos period.⁷ The development can be traced in four succeeding layers — Strata c–b/3 (fig. 15.2) and b/2–b/1 (fig. 15.3) — and a period of thirty years as a reference point was equated with one phase depicting a building generation.⁸ Being the former location of the above-mentioned large mansion, the population returns

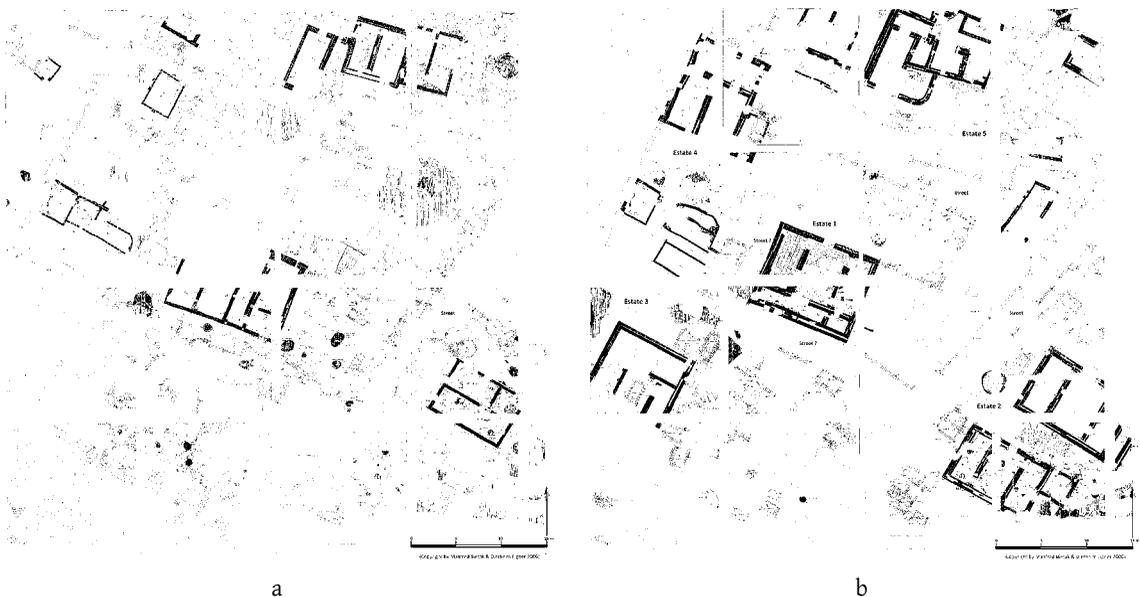


Figure 15.2. (a) Area F/I, stratum c; (b) stratum b/3.

(© Austrian Archaeological Institute/Manfred Bietak and Dieter Eigner 2006)

⁷ The investigation of this residential area formed the core of my Ph.D. project conducted at the Austrian Academy of Science and the University of Vienna from 2008 to 2012 (M. Müller 2012).

⁸ The division in four succeeding layers is based on similar developments characteristic for each single phase such as the introduction of new burial or house types and stylistic changes in the pottery. It

after a hiatus and resettles the place (Stratum c; fig. 15.2a). Parts of the old ruins are used to build small houses and huts, and enclosure walls indicate the wish to separate different territories. Undulating walls, a typical feature of the Middle Kingdom, are added to confine single estates. Burials are interred in different locations, in houses, courtyards, and in open areas in the north and south of the quarter, forming small cemeteries. Space for a street is cleared which shows an early need for circulation and access to the different territories. In this part of Avaris the orientation of the buildings follows the course of the Pelusiac Nile branch which equates with local north. In the next phase or “generation” (Stratum b/3; fig. 15.2b) the remnants of former buildings are torn down and the boundaries of five big estates can be outlined. They almost occupy the same grounds that were already defined in the earlier generation. Infrastructural organization is given through a system of streets and alleys that separate the different territories. All estates consist of a central house with subsidiary buildings and storage compounds within a wide courtyard surrounded by an enclosure wall. The houses are equipped with facilities for food preparation such as ovens and fireplaces, mortars and querns, occasional sherd pavements that could indicate work areas, and storage jars sunk or half-buried in the ground (fig. 15.4). Niches in secondary rooms can be interpreted as alcoves for beds in analogy with similar constructions, for example, in the houses of Amarna (Peet and Woolley 1923, p. 45; Frankfort and Pendlebury 1933, p. 8, pl. 18:2).⁹ Besides these installations, the houses possess mudbrick pavements and limestone



Figure 15.3. (a) Area F/I, stratum b/2; (b) stratum b/1
(© Austrian Archaeological Institute/Manfred Bietak and Dieter Eigner 2006)

has to be acknowledged though that these are processes of dynamic development that cannot be correlated with exact dates (for a discussion of house lifecycles, see Tourtellot 1988).

⁹ Also compare depictions of house interiors in Theban tombs (Roik 1988) or on the *talatat*-blocks found in Karnak (Traunecker 1988), where the bedroom is usually designated as a room with a wind hood (*malqaf*) and a bed depicted in a niche.



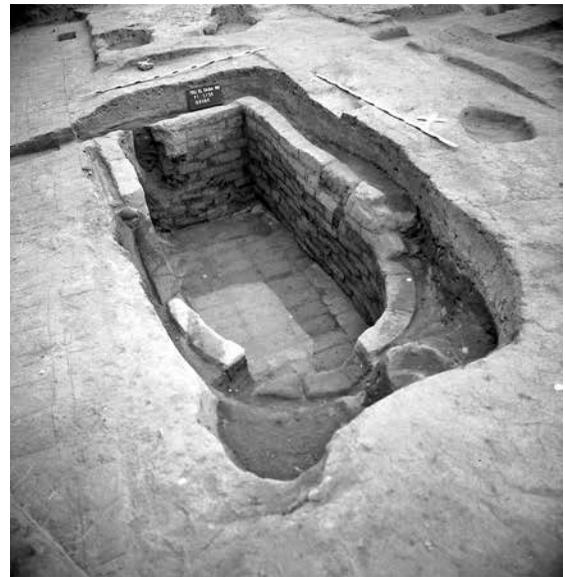
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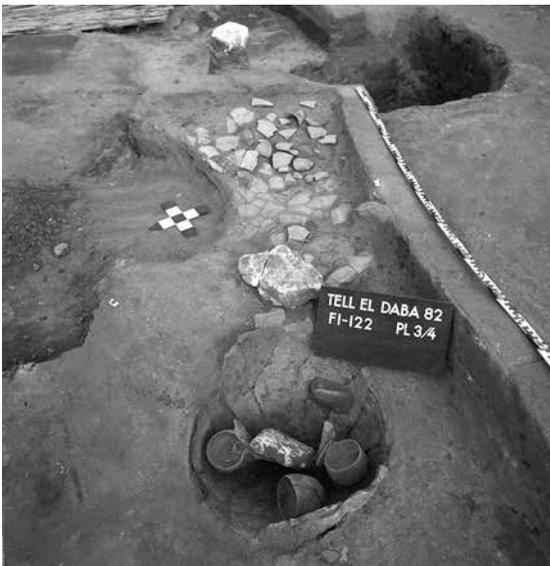
b



c



d



e



f

Figure 15.4. Built-in features of the houses of area F/I: (a) limestone threshold; (b) oven; (c) large storage jar sunk into the floor; (d) subterranean storage pit; (e) storage jar sunk into the floor with sherd pavement; (f) quern and grinder (© Austrian Archaeological Institute)

thresholds in a number of rooms (fig. 15.4a). The next phase (Stratum b/2; fig. 15.3a) shows the development of a standard house type. More rooms are added to construct an elaborate entrance sequence and additional secondary rooms are probably used for storage purposes. Food-processing facilities are now found in separate enclosures in the courtyard. Already visible in the previous phase, the tradition of burying the dead in the settlement is further developed with a new architectural element, so-called “houses of the dead” (Bietak 1996a, pp. 49–54; Bietak 2010b, p. 18). These small rooms are attached to the houses and comprise a chambered tomb in the center with additional tombs along the sides. The last phase of this residential area (Stratum b/1; fig. 15.3b) is characterized by an enormous enlargement of single properties. The dominant core estate has broadened its territory beyond the limiting street and now forms a single large unit with the adjacent property to the north. The whole compound is characterized by an agglutination of rooms, and even if parts, as for example the core house, have a distinct layout, it is difficult to distinguish between living space, service facilities, and storage rooms. Fireplaces and ovens are now situated inside the house again. Equally, storage pits and grain silos are embedded into the house in storage rooms or inner courtyards, respectively. A huge compound with quite a different orientation occupies the eastern part of the quarter. As a result of the densely built area it is difficult to detect spaces potentially used as courtyards. The district’s western part is unfortunately lost, the upper layers in this area having been destroyed before excavations, and no information could be gained about the possible development of this zone. Many child burials in amphorae were found next to the walls under the house floors. Larger tombs are, however, rare compared to the previous phases and houses of the dead are no longer visible. Without substantial space for courtyards — the main location for burials — it is hardly possible to estimate the number of tombs. Perhaps they were transferred to a necropolis outside the residential area.

The Material Culture

The ceramic corpus — tableware, cooking pots, storage jars — comprises the largest share of the finds.¹⁰ Typical Egyptian forms of the late Middle Kingdom prevail next to a considerable amount of imported and locally imitated Middle Bronze Age forms from the Levant (figs. 15.5–6).¹¹ A large number of flint tools documents the primary use of stone implements for all kinds of crafts such as food preparing, leather and textile processing, and harvesting. However, copper tools such as chisels, knives, and harpoons were also in use and account for the available amount of copper that must have entered the city via different trade routes (fig. 15.7). Tokens, clay figurines, spindle whorls, loom weights, faience and copper jewelry, cosmetic palettes, and stone vessels represent typical assemblages from the houses (figs. 15.8–9). Very few seal impressions with decorative motifs and modest seals (fig. 15.8:1) mostly come from the courtyard areas and constitute refuse that was dumped in pits and abandoned silos. Outstanding examples within the corpus of finds are stone molds, pottery crucibles, and tuyères (fig. 15.7:7–8) (Bietak 1984b, pp. 337–40; 1984a, pp. 6–8; Philip 2006,

¹⁰ Unfortunately, the time limit of this doctoral dissertation did not allow a consideration of the sherd assemblages in the first instance. Currently, 730 complete or partially reconstructed vessels as well as significant pieces are featured in the analysis. A

selection of relevant sherd assemblages will, however, be part of the final publication.

¹¹ See Bader 2001; Aston 2004; and Kopetzky 2010 for an overview on the ceramic corpus of Tell el-Dab'a.

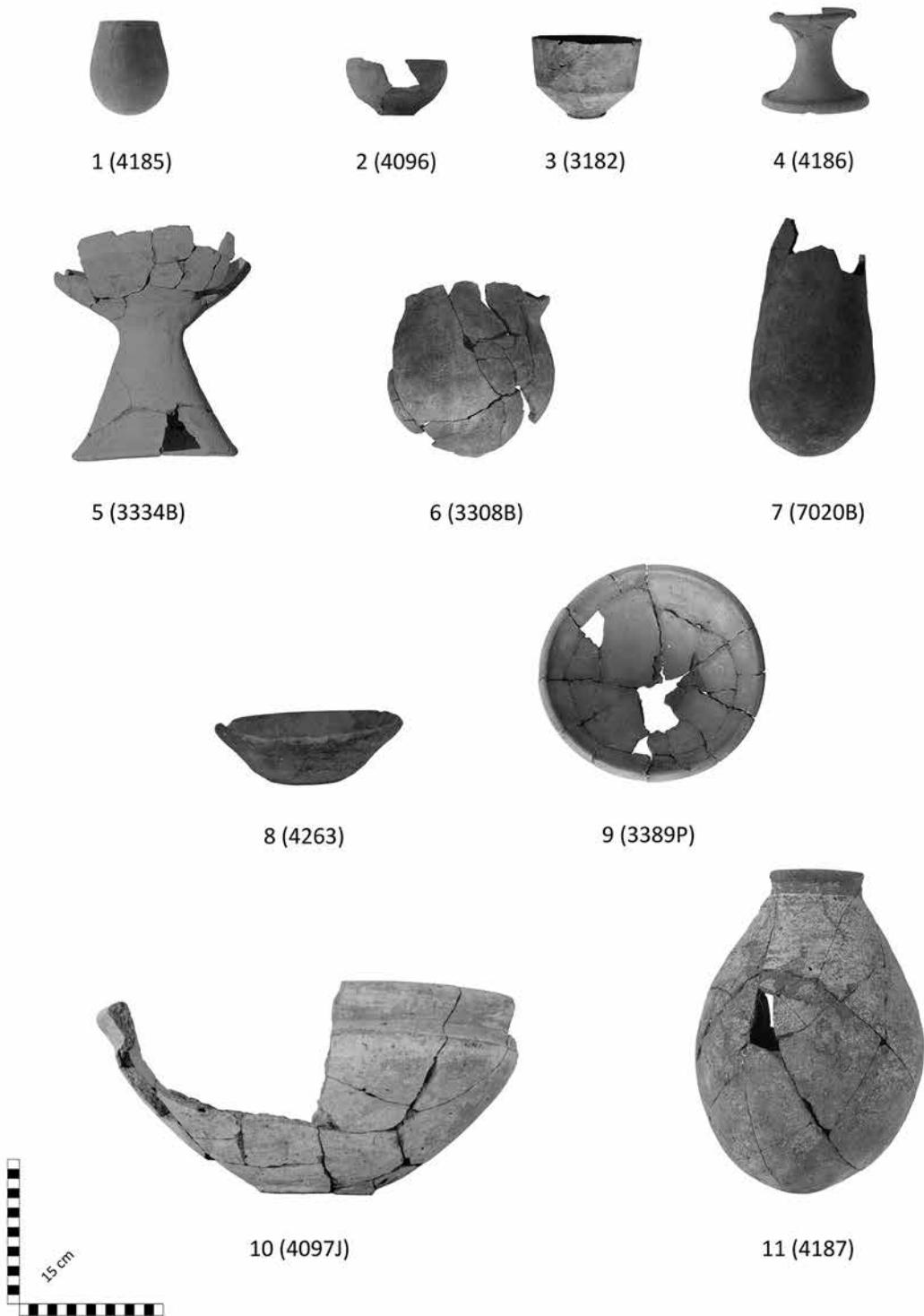


Figure 15.5. Egyptian pottery from area F/1, strata c-b/1: (1) Nile B round-bottomed cup; (2) Nile B bowl with flat base; (3) Nile B carinated bowl with disc base; (4) Nile B ring stand; (5) Nile B footed bowl; (6) Nile B spouted vase; (7) Nile B beaker vase; (8) Nile B flat-based bowl; (9) Nile C round-bottomed bowl; (10) Marl C carinated bowl; (11) Marl C vase (© Austrian Archaeological Institute)

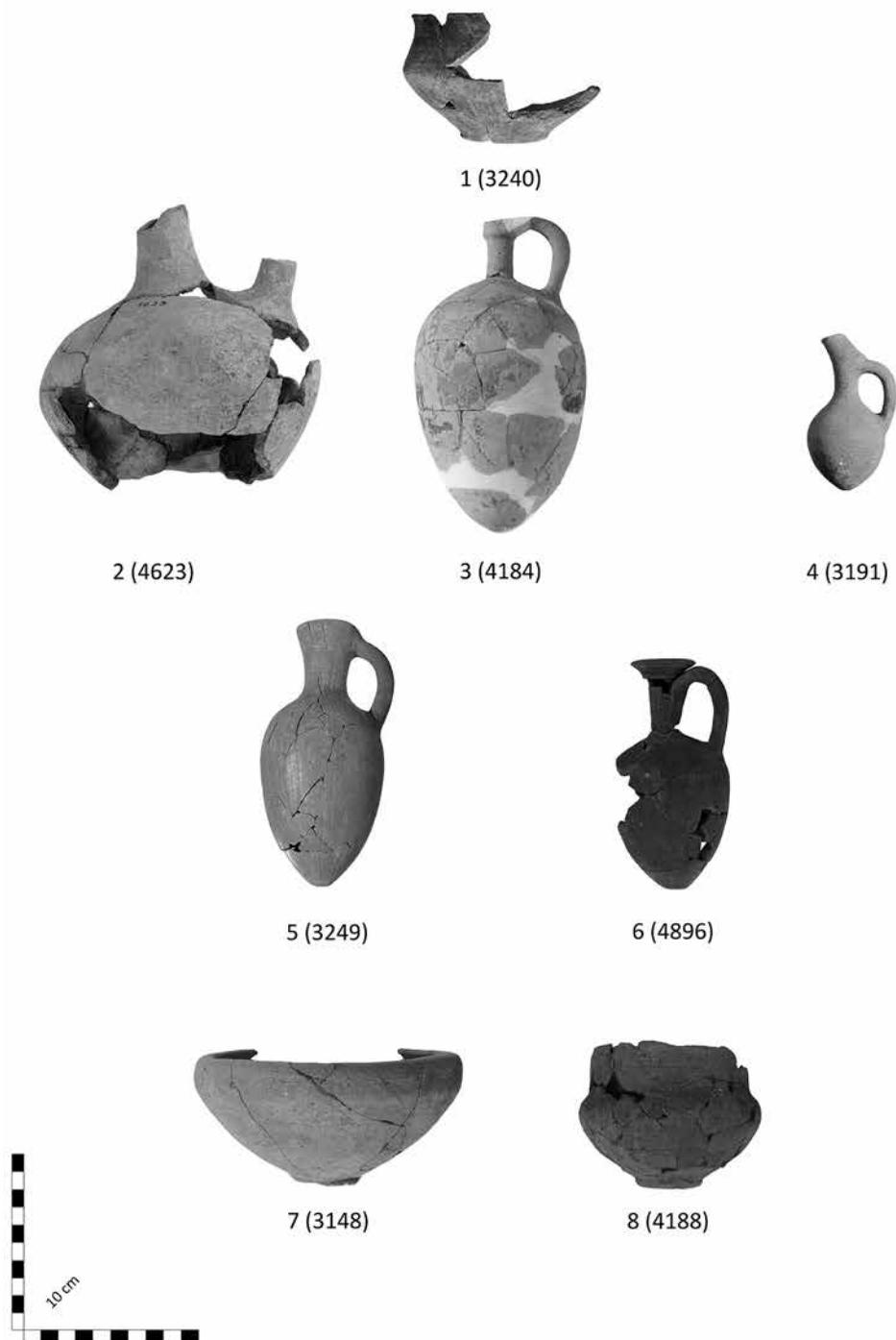


Figure 15.6. Middle Bronze Age pottery forms from area F/I, strata c-b/1: (1) Levantine small pot with everted rim and ring base; (2) Levantine biconic jar; (3) Levantine ovoid jar with candlestick rim, double handle, and round bottom; (4) Levantine or Nile D dipper jug with flattened pointed base; (5) Levantine spouted jar with double handle and flat base; (6) Nile D piriform jar with candlestick rim and double handle (imitation); (7) Nile B bowl with incurved rim and ring base (imitation); (8) Nile D carinated vessel with ribbed neck (imitation) (© Austrian Archaeological Institute)

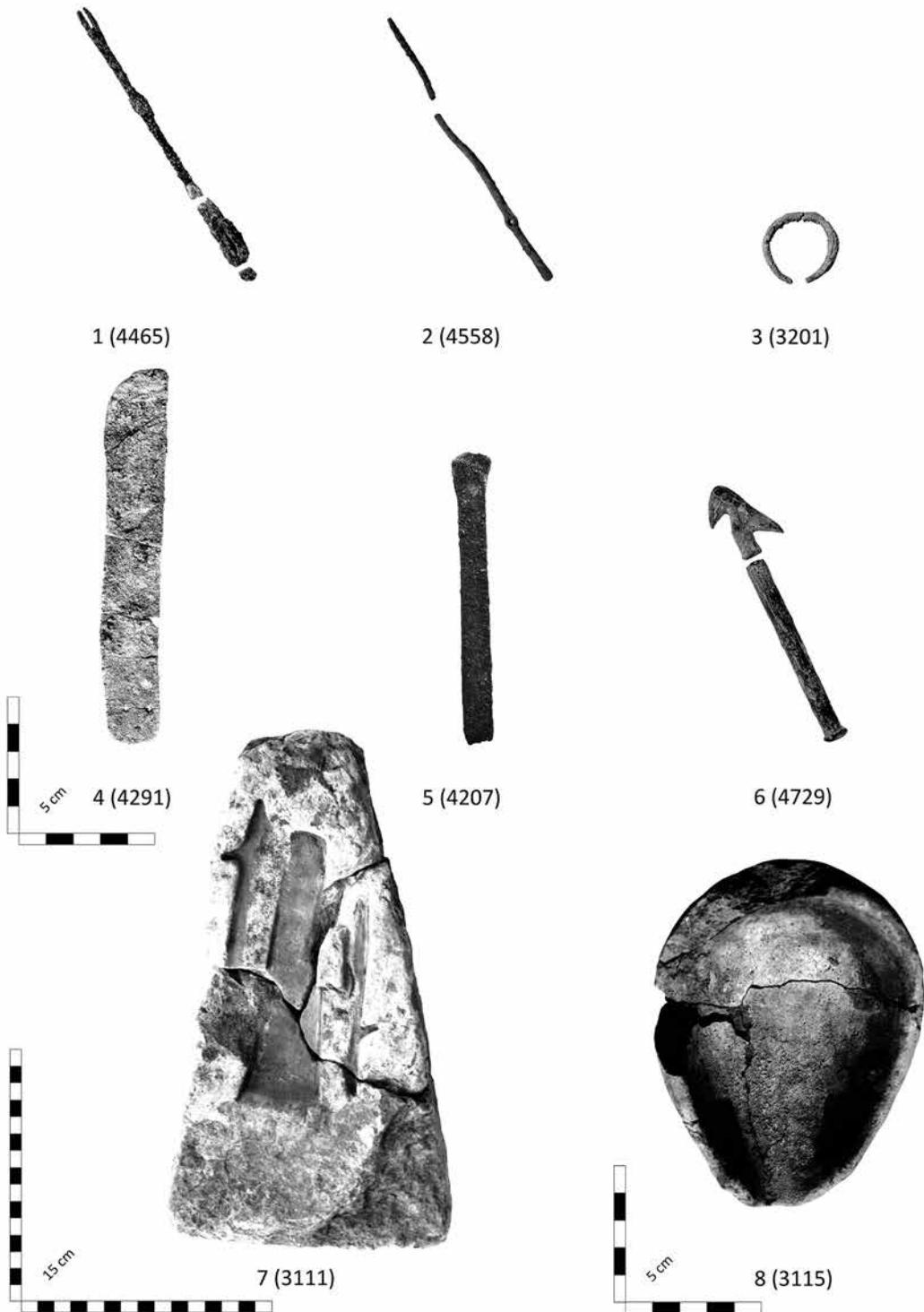


Figure 15.7. Metalworking objects from area F/I, strata c-b/1: (1) copper dress pin or spindle; (2) copper toggle pin; (3) copper ring; (4) copper knife; (5) copper chisel; (6) copper harpoon; (7) limestone mold; (8) Nile C crucible (© Austrian Archaeological Institute)

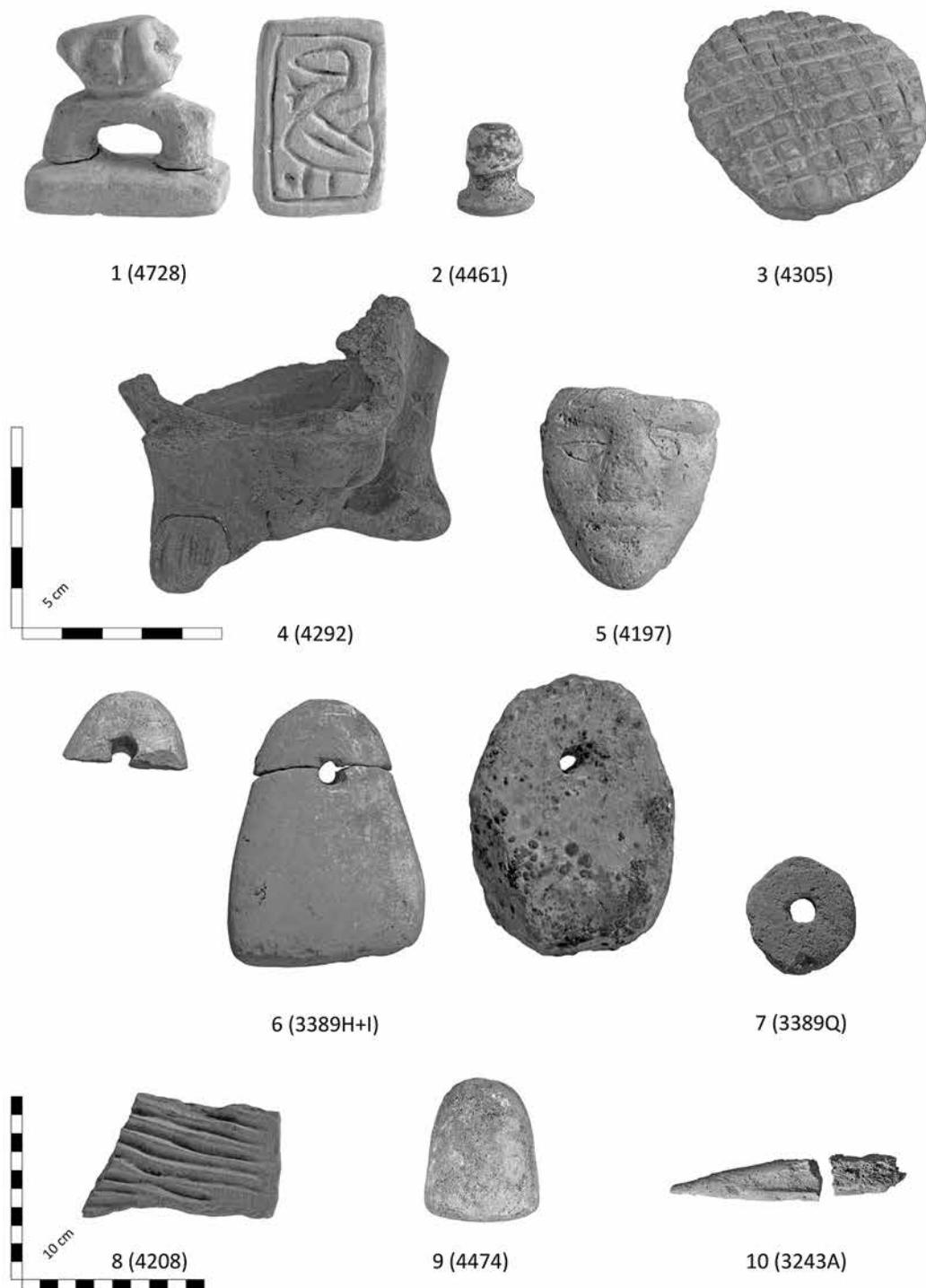


Figure 15.8. Small finds from area F/I, strata c-b/1: (1) limestone seal; (2) faience token; (3) limestone token (?); (4) Nile B figural vessel; (5) Nile B mask appliqué; (6) limestone loom weights; (7) Nile C spindle whorl; (8) sandstone whetstone; (9) basalt pounder; (10) bone awl
(© Austrian Archaeological Institute)

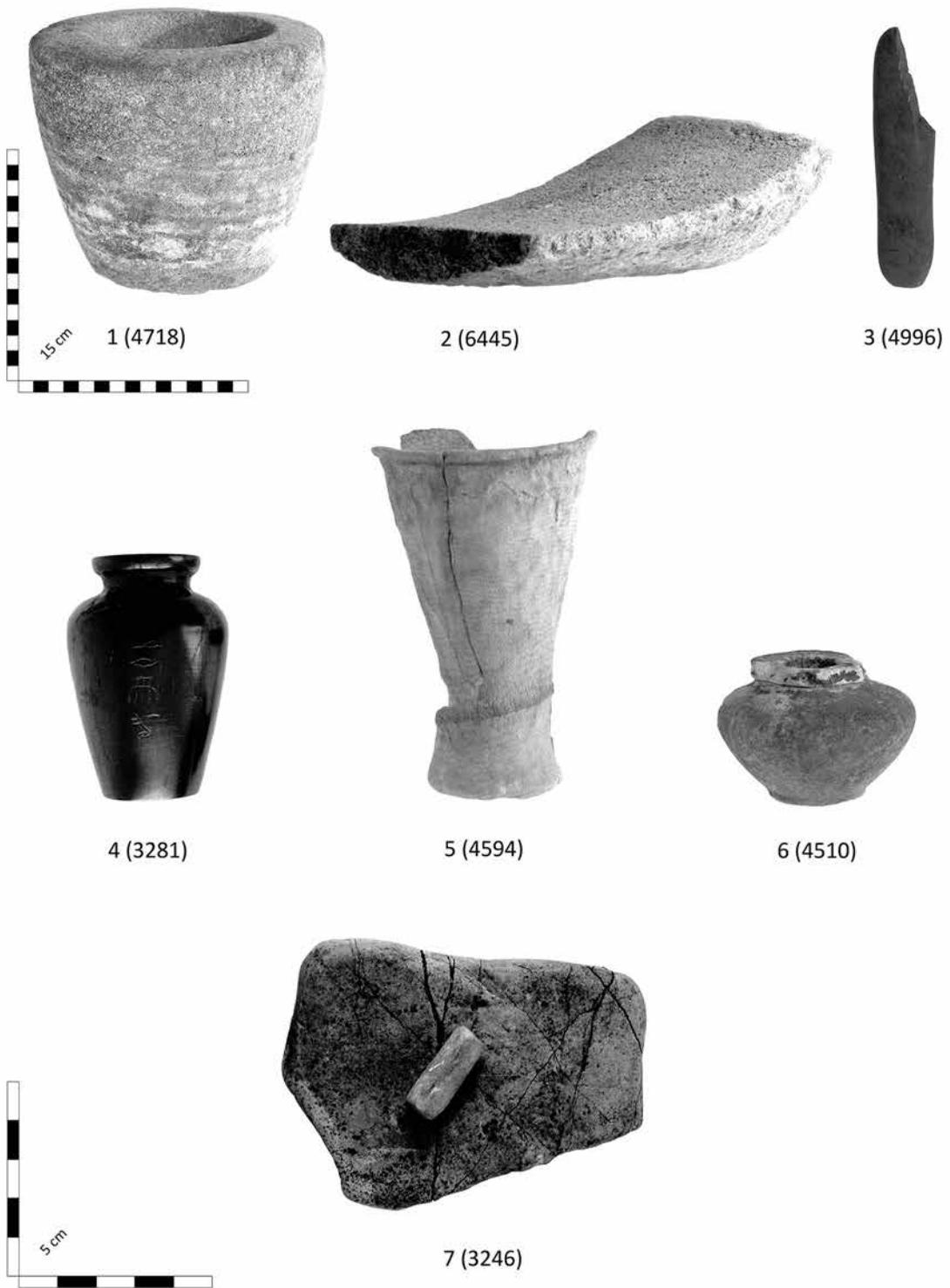


Figure 15.9. Stone objects from area F/1, strata c-b/1: (1) quartzite mortar; (2) lime-sand stone quern; (3) schist rubbing and polishing stone; (4) hematite cosmetic vessel; (5) alabaster vessel; (6) calcite-alabaster kohl pot; (7) limestone palette with rubbing stone (© Austrian Archaeological Institute)

pp. 171–204) as well as a few musical instruments (Bietak 1985). The finds are typical for a settlement that was abandoned by the inhabitants. Precious objects were removed and the climatic conditions impede any preservation of organic materials.

The Mortuary Data

Eighty-five burials are directly associated with the different estates.¹² They are interred either under house floors, in the houses of the dead, or in the courtyards. However, more burials are located outside the properties' enclosures, in small cemeteries in the quarter's open areas. The burials associated with the houses comprise child burials in amphorae mostly aligned to the walls inside the houses, simple pit graves, and chambered tombs in the courtyards and under house floors. All three types were also found in the houses of the dead. The bad preservation of the bones in most cases impedes an investigation of the diet or specific diseases.¹³ A number of burials yielded scarabs with mostly decorative motifs. In one instance a male figure holding a stick and a corrupt hieroglyphic writing is represented (Mlinar 2004, pp. 117, figs. 6a–7, and 119); in another case the title *ḥm k3* "mortuary priest" and an individual's name can be identified (*ibid.*, pp. 111–12, fig. 3-2). One burial under a house floor was equipped with two spearheads (Philip 2006, pp. 61–62, 67, fig. 24:4–5). Other burials not directly associated with the estates also yielded different types of weapons. These burial assemblages stand in the tradition of the Levantine "warrior burials" (Philip 1995, 1989) and they must be seen as a group marker conveying a specific status related to its Levantine background (Philip 2006, pp. 230–31). A specific phenomenon constitutes the custom of placing bodies along the outer tomb walls (Bietak 1989). Similar arrangements are observed for burials of the same generation in another area of Tell el-Dab'a (A/II: Forstner-Müller 2008, pp. 44–45). In all cases the buried individuals were young females, sometimes with their heads turned toward the entrance of the tomb and without any burial goods. The specific position of the skeletons seems to yield evidence for bound wrists and ankles in a few cases, and the women were buried at the same time as the tomb owner. In view of this evidence the obvious explanation for this phenomenon is the occurrence of attendant burials.

Household Analysis of Estate 1 (Stratum b/2)

The following analysis of a significant estate, the core property in the center of the quarter, documents how data from different lines of evidence can successfully be combined to result in a more detailed picture of the composition of a household in that neighborhood. The information can then be used to consider the sociocultural setting of the late Middle Kingdom at this particularly important site. Estate 1 in stratum b/2 represents the third generation in this quarter after its resettlement and the following consolidation of the properties'

¹² Statistical analyses of the tomb contents in comparison to the corpus of finds from the settlement have to await full publication of the results obtained by Kopetzky within the framework of her magistral thesis (Kopetzky 1993).

¹³ The analysis of the skeletal material from area F/I is not yet published. The reference material of area A showed in more than 50 percent signs of malnutrition, parasitic infections, and anemia, which primarily resulted from the climatic conditions and the proximity to marshland (Winkler and Wilfing 1991, p. 132).

boundaries and gradual enlargement of the houses (fig. 15.3a). Since it comprises a house of the standard type that was developed over the previous generation, and appears at the same time on different compounds, it is representative of a certain trend in the domestic architecture and displays a specifically perceived domestic concept by the inhabitants. An analysis of the architecture will be combined with an access graph that displays the network of the different rooms (Hillier and Hanson 1984). Built-in features and finds will be considered for activity-area analysis in the house, and lastly the composition of the estate and mortuary data will be integrated.

The estate, with an approximate size of 770 square meters, is centered on the house of about 300 square meters (figs. 15.10–11). The house shows the typical layout known from other settlements such as Lahun and Amarna (Bietak 1996b; M. Müller 2012; see also Spence and Picardo, this volume). The core rooms, a tripartite structure composed of a larger middle hall¹⁴ and two flanking secondary chambers were constructed in the previous generation (compare fig. 15.2b). Two narrow elongated rooms constitute the rear part of the house. In this generation an elaborate entrance sequence was created preceding the core rooms (fig. 15.11). It comprises a small projecting entrance room at the northwest corner of the house that leads to a broad vestibule spanning the full length of the core rooms. The vestibule then connects to the middle hall. The house is further enlarged with elongated chambers east of the core rooms. A house of the dead is attached in the west. The graphic representation of the accessibility of the different rooms clearly shows the entrance sequence and the number of rooms that had to be traversed to reach the main room of the house, the middle hall functioning as a distributor to enter the other rooms, as well as secluding more private rooms. Approaching the house from the side, the incoming person had to take a number of ninety-degree turns which shows the exact same principle that is displayed in the Amarna houses. Changing lighting and alternating smaller and bigger rooms create a system of disorientation and at the same time a feeling of grandeur that the visitor experienced while entering the house, as convincingly pointed out by Kate Spence (2010, pp. 292–93; and in this volume). A limestone pedestal as an emplacement for a large storage jar was excavated in the southeastern corner of the vestibule. A cup with broken-off rim and traces of powder found nearby yields evidence for the reuse of tableware as lamps. The floor has a whitewash coating.

After traversing the broad vestibule the entrant reached the main hall, which was equipped with a mudbrick pavement. The room is not only distinguished by its elaborate floor treatment, but also by limestone thresholds that mark the doorways of the connecting rooms (compare fig. 15.4a). In its function as distribution room and the largest and innermost room of the house, it probably served as the place where the family convened and shared meals as well as a representative room for the reception of visitors. The only possible location for a door to the rooms in the rear of the house is in the southwestern corner of the main hall or in the adjacent chamber to the east. This reconstruction thus leaves sufficient space along the back wall of the main hall for the placement of a wooden seat, where the household master would sit facing the entrance of the room and thus visitors immediately when they entered the hall. This concept is well known from the houses at Amarna that feature a dais

¹⁴ In Egyptological research, “middle room/hall” or “central hall” (Mittelsaal/halle) became the standard expression for the central room of a house, based on

Borchardt’s (1907, p. 21) term “deep hall” in describing the domestic architecture of Amarna (Peet and Woolley 1923, p. 40; Ricke 1932, pp. 28–32).

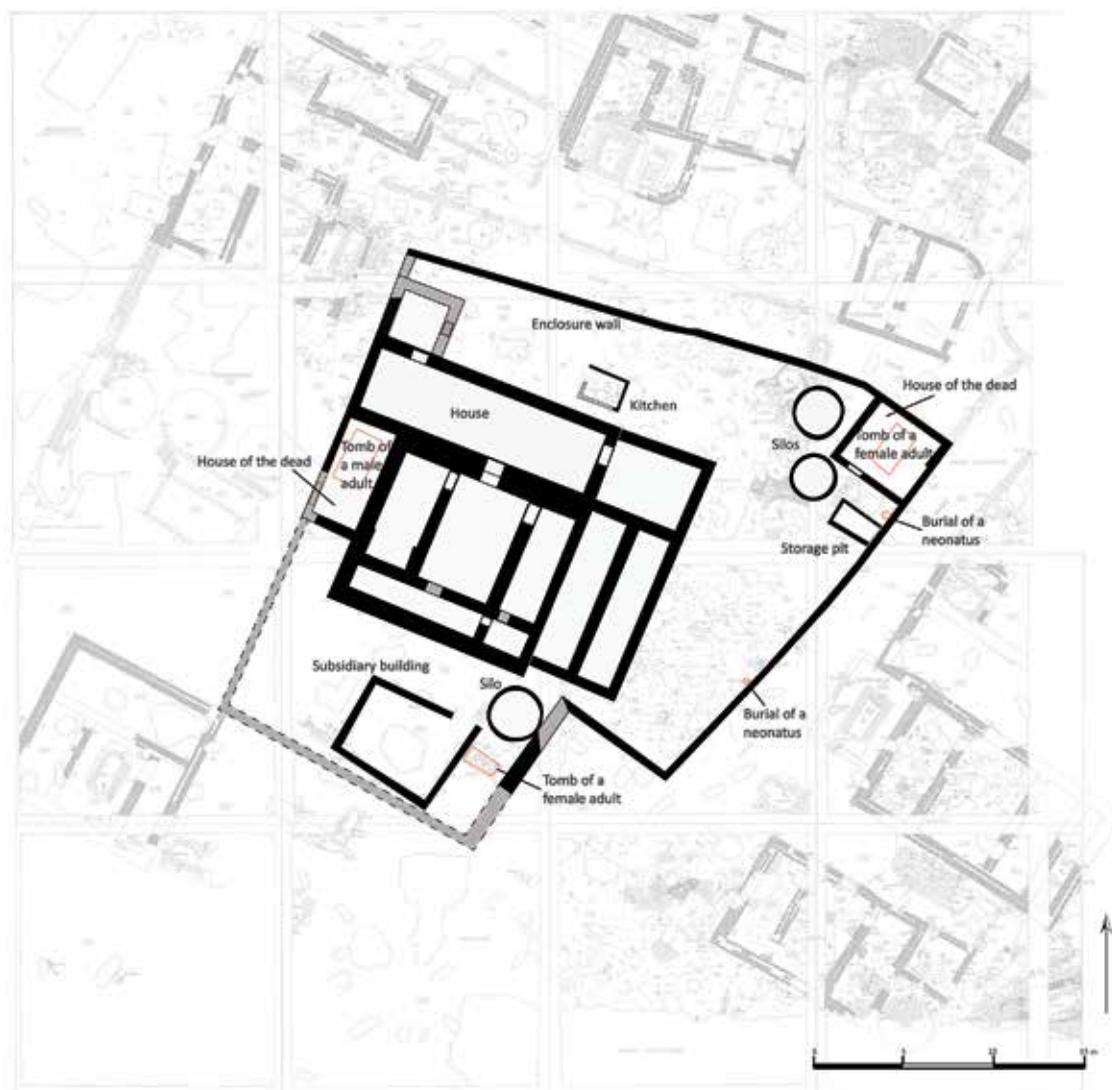


Figure 15.10. Schematic representation of estate 1, stratum b/2

as an elevated position for the master's chair (Peet and Woolley 1923, pp. 40–45; Borchardt and Ricke 1980; see also Spence, this volume).¹⁵ The middle hall furthermore controlled access to the other rooms of the house. It gave way to two secondary chambers with a similar size that flanked the central room on either side. The western room was also equipped with a mudbrick pavement and had a prominent niche in the southern part that is interpreted as an alcove for a bed frame (see n. 9). In its location as one of the most private rooms of the house, with only one doorway toward the main hall, it can be identified as a bedroom. A ring stand found in the northeast corner of the room on the pavement demonstrates the location of a storage jar, maybe a jug holding water. Part of a high stand of a type typically

¹⁵ See also n. 9 for references to depictions of this arrangement.

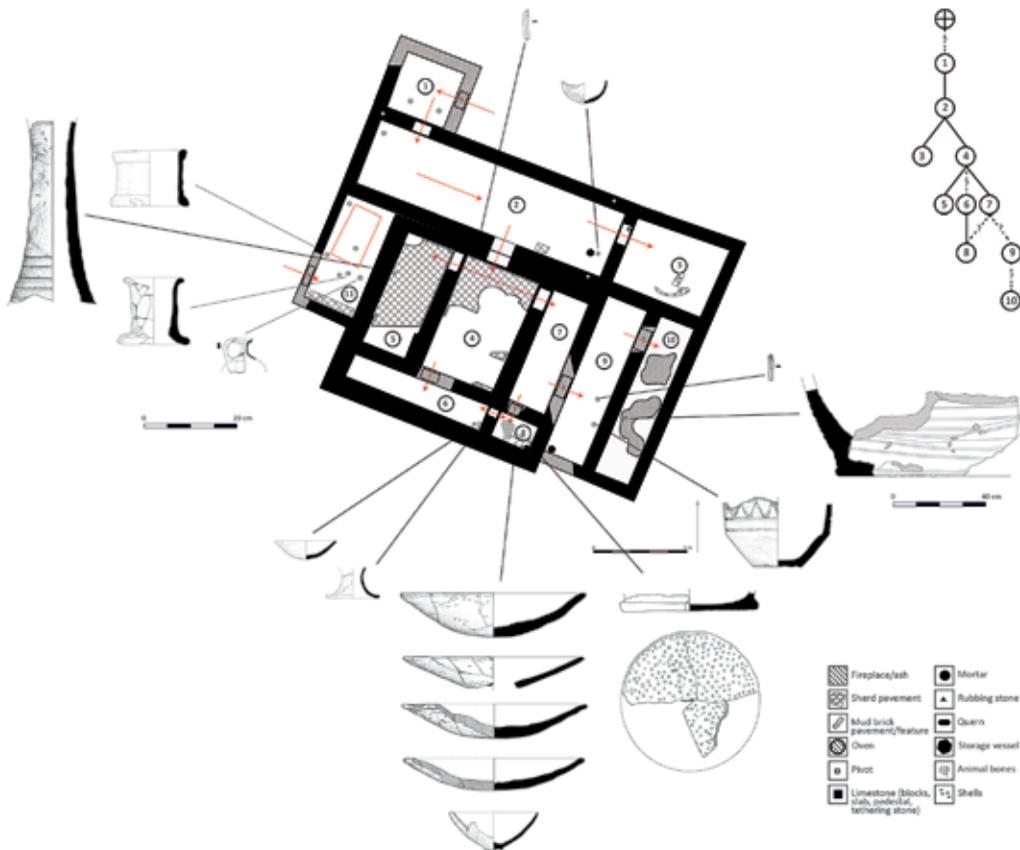


Figure 15.11. Household analysis of the house of estate 1, stratum b/2

interpreted as offering stand from its common appearance in temples, chapels, and adjacent to tombs (Aston 2004, pp. 178–79), appeared at the foot of the western wall that separates the bedroom from the house of the dead. Since the stand is not the only find associated with cultic activity in a bedroom of one of the houses in this area, the reconstruction of rituals related to ancestor veneration that were executed in the house and at the nearby tomb is highly probable (M. Müller 2014; M. Müller forthcoming). The eastern chamber did not yield any specific features, neither a mudbrick pavement nor particular installations or finds. The main hall and also the eastern chamber were very likely connected via a doorway with the rooms in the rear of the house — an elongated room with a small, nearly square annex in the east. In both rooms a collection of cooking and serving vessels such as a small bowl and ring stand and a baking tray were found on the floor. Combined with a pavement of sherds from four large bowls in the small annex, a storage vessel, and a rubbing stone, one possible function for this area is the preparation of food. The floor is treated with a white coating. Elongated rooms to the east of the core rooms present very ashy floor surfaces. Parts of big storage vessels and a flint tool were found on the floor. Since these rooms are later additions to the core rooms that were interpreted as the living quarters, a function for storage purposes and maybe also as work space can be supposed. The evidence is, however, meager, and flint tools were also found in the vestibule and on the mudbrick pavement of the middle

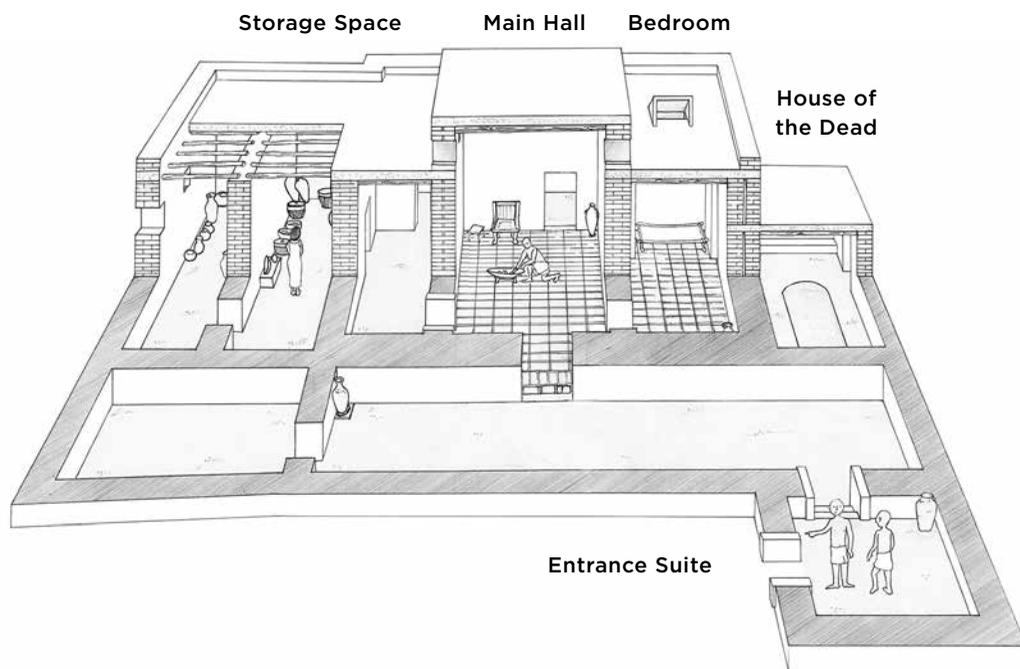


Figure 15.12. Reconstruction of the house of estate 1, stratum b/2
(© Katinka Strzeletz and Pablo Garcia Plazas)

hall. The almost square room in the northeast corner of the building yielded the remains of a brick installation that could have been part of a fireplace. The westernmost room or house of the dead is characterized by a chambered tomb in the center. Furthermore, a brick installation attached to the south wall of that room can be identified as a bench. Ring stands for drinking and serving vessels and small jars probably for libations seem to have played a role in ritual and ceremonial activities executed at the tomb (see above). The chambered tomb belonged to a male adult (Kopetzky 1993, vol. 2, pp. 77–78).¹⁶

The whole estate produced evidence for four other burials (fig. 15.10). Another house of the dead, the only one not attached to a house, was built into the corner of the northeastern enclosure wall and the tomb inside belonged to a female adult (Kopetzky 1993, vol. 2, pp. 151–54; V. Müller 2008, vol. 2, pp. 253–55). The burial and the content of the house of the dead are, however, heavily disturbed and it is not unlikely that more burials were originally placed inside. This house of the dead also yielded evidence for offering practices and mortuary banquets, since the remains of these activities were discharged in a pit adjacent to the tomb.¹⁷ Two newborns were buried along the eastern enclosure wall (Kopetzky 1993, vol. 2, pp. 115–16, 154). The estate furthermore features two silos and a rectangular storage pit in the northern courtyard area. The southern enclosure of the estate is a tentative reconstruction based on the fact that the enclosure wall seems to run south to include the structures

¹⁶ For a three-dimensional reconstruction of the house of estate 1 in stratum b/2, see figure 15.12.

¹⁷ V. Müller investigated the contents of the offering pits at Tell el-Dab'a and reconstructed on the basis of

the vessel typology an offering cult which lasted for at least two generations in this specific case (2008, vol. 1, pp. 303, 309–10, vol. 2, pp. 253–65).

that are situated in this part. A subsidiary building consisting of one spacious room, a burial that also seems to be attached to the dwelling, and a silo are featured in this area. The burial belonged to a female adult (Kopetzky 1993, vol. 2, pp. 75–77). It is difficult to determine if these structures were still in use at that time, since they had already been built by the previous generation. The silo is, however, a new addition that speaks for the use and integration of this southern part into the estate's property.

Sociocultural Implications

With the aim to come to a better understanding of the sociocultural setting in the late Middle Kingdom shortly before the coming into power of the Hyksos, the societal structure in this neighborhood is here investigated based on the detailed analysis of every single household, their interplay on the micro-level, and their development over time. The information can then be used to shed light on the social and economical changes that possibly influenced the political formation at the Delta site. This directly relates to the question of whether it is possible to determine class and status of the inhabitants of this neighborhood. A traditional approach in examining status in the archaeological record involves looking at different scales of architecture (for ancient Egypt, see Ricke 1932). It has, however, been repeatedly mentioned that house size is often a misleading factor in determining status (e.g., Pfälzner 2001, p. 22). It is thus necessary to also carefully evaluate artifacts and, if possible, as in the case of this neighborhood, take associated burials, construction, grave goods, and osteological data into consideration.

The neighborhood under discussion is in every sense a fortuitous case, since it presents a development over a period of time and seems to display social changes within these approximately 120 years. The diachronic comparison of the different households shows a gradual rise in size of the properties' territories as well as the houses (fig. 15.13). It is clear that the formation of the different estates documents a continuity that can be related to the notion of family-owned properties remaining each in the hand of a single family. Furthermore, the construction of the houses of the dead can, on the basis of the tombs found therein and their attachment to the houses, be equated with family vaults. It supports the idea of displaying family continuity that is also expressed in a strong focus on ancestor cults (see also Moreno García 2010). The domestic group, the household, can thus be equated with the kinship group, the family. That the development of the different estates represents household lifecycles also seems to be visible in the number and composition of tombs that show different kinds of burial types with buried individuals of all ages and single tombs emphasized by location, size, and construction and thus probably belonging to the heads of the different households.¹⁸ According to the mortuary data the different households consisted of six to eight members, the parents, up to three children, and one or two other relatives or servants, thus forming a nuclear or extended family (see also Allam 1977; Moreno García 2012).¹⁹

¹⁸ Infant mortality was very high as it is underscored by a very high percentage of malnutrition and deficiency symptoms observed at the skeletal material of area A (Winkler and Wilfing 1991, pp. 129–30, 132).

¹⁹ A clarification of the different family concepts is needed in order to clearly differentiate family com-

position, since the terms “nuclear,” “extended,” and “joint” families are often used in a very divergent manner by the respective authors. According to Peter Laslett's definition, a nuclear family comprises the conjugal couple and their children, with an average number of five people. An extended family

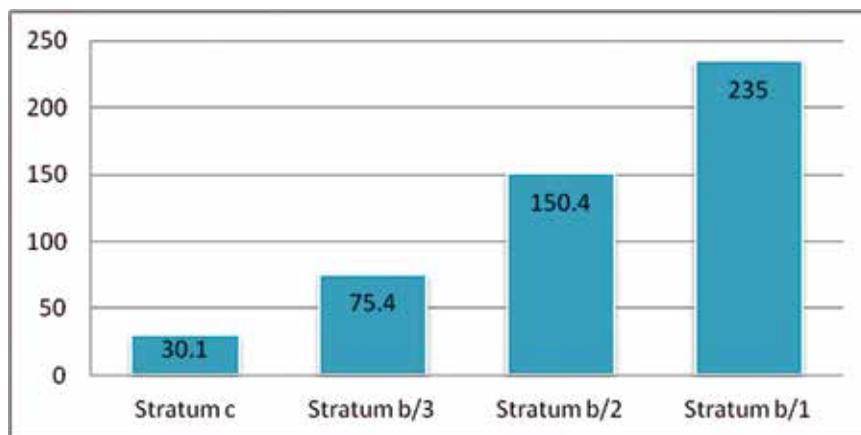


Figure 15.13. Average house size (sq. m) per stratum

Household lifecycles show in different stages a varying number of individuals as it is for example, represented in documents from the Middle Kingdom pyramid town Lahun (Griffith 1898, pp. 19–24; Valbelle 1985, pp. 75–77; Kóthay 2001, pp. 352–55; Kemp 2006, pp. 219, fig. 79, 221; Muhs, this volume). The lists document the number of family members of the soldier Hori and his son Sneferu over an unknown time span. In the initial stage the family encompasses three members — the head of the household Hori, his wife Shepset, and his son Sneferu. In the course of the household’s lifecycle the number increases to nine individuals while the son is becoming the head of the household upon the father’s death. Internal modifications of the house and the construction of additional rooms — in terms of Lahun probably the incorporation of an adjacent house (Kóthay 2001, pp. 366–67) — have very likely accompanied the different stages of the household’s lifecycle. The houses of the neighborhood F/I must have undergone the same processes. Families remodeled their property over time due to the needs of each generation. The different households were focused on the male head of the family (Franke 1983, p. 349; Spence, this volume). Upon the father’s death the responsibility for the household was transferred to the oldest son, who would take over the family business, care for the widowed mother and maybe another single or younger relative, and maintain the cult at his father’s tomb in the adjacent family vault.²⁰ Additional

includes one or two relatives, for example, a widowed mother or unmarried siblings, usually forming a number of seven or eight. A joint family consists of multiple couples and their offspring co-residing in one house, such as the families of father and son or multiple brothers (Laslett 1972; see also Moreno García 2012, pp. 3–4). A joint family concept does not seem to apply to the household composition in this case study, since the house only features one standard set of rooms. In another instance, evidence for the partitioning of a house or two separate though equal-sized houses on one estate could indicate a

joint family concept (Pfälzner 2001, p. 22; see also note 20).

²⁰ The question remains whether the son with his own family shared residence with the father’s household until the father’s death or left the father’s household and later moved back in with his family. If they had lived under the same roof, one would expect the enlargement or remodeling of the house with an additional set of standard rooms such as a second living room (compare Pfälzner, this volume). In two instances the modifications to a house or the existence of a second, equal-sized house on the estate suggest exactly this process.

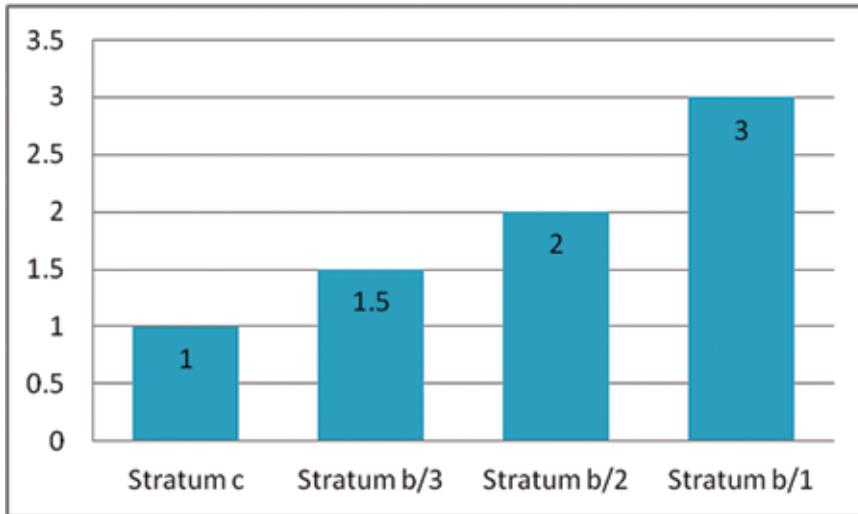


Figure 15.14. Average wall thickness (bricks) per stratum

members of the household such as servants and dependents would, however, not have lived under the same roof, but in the subsidiary buildings on the different estates.²¹ It is thus assumed that the houses in this neighborhood did not accommodate more than eight family members at any time. The development of the different properties strongly supports this view. The enlargement of the houses goes hand in hand with an increase in wall thickness from one to three bricks (fig. 15.14) — a feature that is clearly not linked to a growing number of inhabitants, but rather with status.²² The enlargement of the house with a standard entrance suite fulfilled the need for a more representative entry sequence leading into the inner parts of the house and for the screening of visitors. Food preparation facilities are furthermore transferred to the courtyard area and a “cleaner” and more comfortable environment is thus created for the inside of the houses.²³ The same principles can be observed for the spacious living quarters at the New Kingdom site Amarna. More than 1,000 houses, including large estates with subsidiary buildings, were excavated at this short-lived capital of the Amarna period. They display a very similar layout and urban setting as the estates at Tell el-Dab‘a. Christian Tietze (1985, 1986, 2008b) attempted to reconstruct the societal order

²¹ The subsidiary buildings on the different estates yielded domestic assemblages and even burials were found under the floors. Compared to the same phenomenon on the spacious Amarna estates that at the same time display larger secondary buildings assumed to be inhabited by a major-domo, the son of the family, or relatives (Kemp 2006, p. 216; Spence, this volume), it can be argued that the subsidiary buildings at Tell el-Dab‘a were used as dwellings for dependents with a very modest standard of living (Bietak 1984b, p. 341; 1996a, p. 49).

²² Endruweit (1994, p. 189, n. 296) proved in his analysis of the climatic effects on mudbrick architecture

in Egypt that wall thicknesses of more than 1.5 bricks do not have a positive effect on the indoor climate (see also Tietze 2008b, p. 93; von Pilgrim 1996a, pp. 208–09).

²³ Arnold (this volume) is able to trace the same development for the domestic architecture on Elephantine. His argument for a chronological placing of the transfer from a central court to a hall by the time of the New Kingdom is, however, only valid for the particular site of Elephantine and already presented in earlier examples from other sites as can be seen in Tell el-Dab‘a in the late Middle Kingdom (see also Moeller, this volume).

based on architectural and economic factors. He distinguishes three groups: the upper 10 percent with houses of more than 300 square meters, a middle sector with houses of 100 to 200 square meters, and the large percentage of houses of ca. 50 square meters belonging to the lower classes. According to his chart (1985, p. 57, fig. 1; 2008a, p. 90, fig. 4), houses of the Tell el-Dab'a size (137–365 sq. m) would belong to the upper middle class.

Apart from house size, storage capacity is also taken into account for an examination of the status and wealth of a household (e.g., Tietze 1986, 2008a). In analogy to calculations based on the excavated silos of the Thirteenth Dynasty settlement in Balat (Marchand and Soukiassian 2010, pp. 111–21),²⁴ an average number of ten to twenty-five people could be provisioned by the volume of stored grain on the different estates over time. It is remarkable that the storage capacity increases from the initial resettlement of the area to the consolidation of the properties' territories and construction of large houses, including the formation of subsidiary buildings in the second generation. The storage volume then remains largely the same over the following development. By establishing a number of six to eight family members, the storage capacity yields a significant surplus that was apart from an amount as seed for the coming agricultural season considered as payment for all kind of services (Adams 2007, pp. 16–19). It is, however, also likely that the surplus was used to supply a number of dependents and servants dwelling in the subsidiary buildings on the different estates, as well as employees and other relatives living nearby or working on the household master's fields in other parts of the country (Eyre 1994, pp. 115–16, n. 37; Kemp 1972, pp. 670–74; 2008, pp. 268–71). The reconstruction of the composition of a household in this neighborhood and the evidence from the archaeological record is backed up by contemporaneous texts. In the Heqanakht letters, Heqanakht, the head of a large household, describes intricate family connections and the management of his property in writing to his family (Allen 2002). At least nineteen members of the household comprise the extended family of Heqanakht, his wife and three children, his widowed mother, a younger brother and sister, as well as an older sister.²⁵ In addition, the household includes at least ten dependents, the foreman and major-domo with their families, an unmarried scribe, a farm worker, and two servants. Every household member received a share of the monthly income. The situation displayed in the Heqanakht letters that might have had its counterpart in the archaeological record of the neighborhood F/I thus presents a patrimonial system that was outlined by Lehner (2000) as the fundamental principle of the ancient Egyptian society (based on Schloen 1995, 2001).

The analysis of the finds did in general not yield compelling evidence for a higher status of the inhabitants. The picture is, however, distorted by the fact that valuable objects were taken along upon abandonment. In addition, formation processes play a substantial role in rendering an inadequate picture of the objects that were used and stored in the houses

²⁴ It is difficult to estimate the average height of the silos when only the lowest brick courses are preserved, as is the case for Tell el-Dab'a. Marchand and Soukiassian reconstruct lower heights for the Thirteenth Dynasty silos at Balat based on one or two examples where the lower curvature of the dome was still visible. Tietze (1986, p. 68) establishes slender forms with considerably higher silos for the Eighteenth Dynasty structures at Amarna. With respect to the contemporaneous parallels at Balat and in line

with the archaeological record at Tell el-Dab'a, the lower estimates seem to better fit the evidence. Depictions, moreover, display a changing form of the silos from more compact types to slender models over time (Badawy 1948, pp. 117, 121, fig. 123; 1966, p. 32).

²⁵ For a model of the economic relationships implicated by the letters and accounts of Heqanakht, see Picardo, this volume, fig. 11.12.

(Schiffer 1987). Materials that were not locally available, such as copper and the many imported vessels from the Levant and Cyprus, present a considerable amount of precious objects and could thus be potential markers of status. However, the geopolitical role of Avaris and its growing importance as trade hub created a very favorable situation for the existence of a high number of imported materials and objects in the settlement and it was probably less difficult and cost-intensive to acquire these products. Grave goods such as weapons, however, hold a significance that is clearly linked to a specific position and status of the buried individuals. The attendant burials in particular account for a high status of the tomb owners. It is furthermore very difficult to attribute specific objects to different genders. Loom weights and spindle whorls can be tentatively assigned to the women's realm; sickle blades, on the other hand, to the men's sphere. Beads are an accessory of women, but they did not only have a decorative character. Beads of specific stones served as protective amulets for children (Erman 1901, pp. 8–9). However, depictions of overseers of farm work also show men of a certain status wearing necklaces with beads and amulets (Seidlmayer 2009, pp. 323–28). The interpretation of mud figurines as either objects of cultic activities or children's toys underlines the ambiguous nature of many objects and the uncertainties involved in an attribution to different genders (compare Hendon 2006).

The source for the considerable wealth of the neighborhood's inhabitants and in particular of the households' masters is typically sought in an affiliation with the government and an official position that was rewarded by the state. The masters' rank could be displayed by titles inscribed on the house entrances' door frames (Budka 2001) or on scarabs in the household masters' tombs. However, the settlement and particularly the burials yielded no sign of an official function of any of the inhabitants of this neighborhood.²⁶ The burials contained scarabs with decorative motifs, corrupt writings, a standing figure in one instance, and a name associated to the position of a mortuary priest in another instance (Mlinar 2004). The few seal impressions found in the settlement also result from different decorative motif scarabs.²⁷ Matthew Adams (2005, pp. 550, 579–80) concludes on the basis of a similar collection of scarabs from a residential area of the First Intermediate Period–early Middle Kingdom at Abydos that the inhabitants of this neighborhood were not dependent on state institutions. He interprets the scarabs as private seals and reconstructs a low-level private exchange system, since the sealings with different motifs indicate different sources and are not particularly numerous (see also Picardo, this volume). It thus can be concluded that the household masters of neighborhood F/I were largely dependent on farming, indicated by the large compounds for storing grain that allowed them to accumulate considerable wealth. Also, Heqanakht does not refer to a position related to any governmental activity except for his function as a mortuary priest for a high official. Juan Carlos Moreno García (2013, p. 93), however, rightly mentions that Heqanakht might have been a dignitary as well, since he had received scribal training, but that this position was not important in his everyday communication with his household. In the same way, Cornelius von Pilgrim (2001, p. 169) discusses the possibility that scarabs with decorative motifs belonged to people of importance, since

²⁶ For an example of a title owner and his high-status tomb with six donkey burials from the same period (phase F = stratum b/3) in area A/II, see Bietak 1991, pp. 51–58; and for earlier strata in area F/I, see Schiestl 2009, pp. 193–95.

²⁷ With modern-day excavation standards of drying the soil from the fill and later sieving, probably more seal impressions could have been detected for the settlement.

patterns are more difficult to forge than names and titles (based on Fraser 1900; see also Moeller 2012).

Conclusion

The detailed analysis of the different households in the residential area F/I at Tell el-Dabʿa/Avaris has yielded substantial material for an examination of the social structure of this neighborhood as well as for implications on the sociocultural and historical setting of the late Middle Kingdom shortly before the coming into power of the Hyksos. It has at the same time raised a number of questions concerning the terminology and general assessment of ancient Egyptian society. What is a middle class in ancient Egyptian terms, did it exist, and how would the people have defined themselves at that time? Wolfram Grajetzki (2006, p. 151) made an attempt to characterize a potential middle class as comprising well-trained craftsmen, traders, or rich farmers with some servants, but underlines at the same time that “for the Middle Kingdom it seems at the moment impossible to give a definitive answer.” The results of the foregoing analysis substantiate the picture of a wealthy middle sector defined by the above-mentioned professions. The evidence suggests that private entrepreneurial activity could lead to a well-off position detached from the administrative ranks, but considerably more comfortable than the situation of the average working population.²⁸

Uncertainties will, however, always remain as to the degree of independence of this — in the absence of a better expression — middle class (Grajetzki 2010, p. 195–96). Even if the archaeological record and the written sources are “silent” about any governmental affiliation,²⁹ the households in this neighborhood could have been subordinate to higher-ranking patrons in the same way they constituted an authority for lower-ranking dependents.³⁰ Nonetheless, the opportunity for upward social mobility is clearly visible in this neighborhood. It prospers at a time when the overall nature of the Egyptian state is characterized by political crisis, instability, and decline caused by a destabilized kingship and decentralization (Ryholt 1997, pp. 295–301). The picture gained from this neighborhood emphasizes the importance of the place, its prosperity, and significant role in the formation of the Hyksos rule. In line with Adams’ (2005, p. 595) conclusions on an analogous process in the First Intermediate Period, the study also stresses the importance of a detailed micro-level analysis that can result in a considerably different picture of a certain period than the official records imply. The political circumstances led to the formation of small local kingdoms, and Tell el-Dabʿa itself constituted the capital of one of these Fourteenth Dynasty Delta territories.³¹ The inhabitants of this neighborhood lived in a surrounding that offered

²⁸ Similar conclusions were drawn for the First Intermediate Period–early Middle Kingdom settlement at Abydos (Adams 2005, pp. 573–81, 589–92, 594–95; 2007) and backed up by mortuary data from the Middle Kingdom necropolis at Abydos (Richards 1997, pp. 39–40; 2005, pp. 156–69).

²⁹ See Grajetzki 2006, p. 150, on the topic of “absent” titles and that this could simply mean a selection of what was recorded.

³⁰ A dependence on a higher-ranking official is also indicated in the Heqanakht letters (Allen 2002, p. 117; Moreno García 2013, pp. 90–91).

³¹ Bietak (1984c and 1989, p. 40) correlates the founding of this local kingdom with phase F in the Tell el-Dabʿa stratigraphy which equates with stratum b/3 in F/I and thus with the consolidation of the different properties, the construction of large houses including subsidiary buildings, and the appearance of attendant burials (compare, however, n. 5).

great potential for upward social mobility for everyone who knew how to make use of the amenities of the place as trade hub and melting pot of multiple cultural and political entities in the second millennium B.C. Considering the rapidly changing political circumstances and the emergence of a new ruling class³² might also explain a phenomenon such as the attendant burials.³³ Whether we are dealing with a non-elite context based on the absence of titles and thus a wealthy upper middle class³⁴ or “invisible elites” (Moreno García 2013; see also Quirke 2013, pp. 53, 56–57) given the uncertainties as to the “hidden” ranks of the neighborhood’s masters and eventually whether the inhabitants of this neighborhood considered their own position in quite a different way, will, in the absence of written documents, remain in the dark for the present-day viewer. The results of the detailed household analysis in this neighborhood of the ancient city, however, leave us with a better idea of the sociocultural and historical setting shortly before the coming into power of the Hyksos and helps in the understanding of the enigmatic kingship of this foreign dynasty (see also M. Müller forthcoming).

A word of caution is nonetheless necessary at the end of this assessment of the societal structure of the late Middle Kingdom at Tell el-Dab‘a/Avaris. The material is addressed from an Egyptian perspective and the conclusions are drawn on the basis of analogies with other Egyptian settlements and Egyptian texts. The population of Tell el-Dab‘a/Avaris was, however, a mixed society of individuals with foreign origins and local Egyptians intermingled for many generations. The material yields substantial evidence for a firm assimilation to Egyptian norms in the public sphere, but also hints at a perpetuation of the inhabitants’ foreign traditions in the private sphere (Bader 2013). To what extent also foreign and maybe different social concepts have played a role in shaping the society at this place can only be assumed on the basis of the available material.³⁵ It nevertheless has to be taken into consideration as a considerable factor when dealing with a site such as Tell el-Dab‘a.

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³² Signs of internal political stress were already visible in a previous generation in area F/I that led to the abandonment of the large mansion before the area was resettled in stratum c (Bietak 2010a, p. 151).

³³ Richards (2005, p. 15) stresses the opportunity for greater social mobility in unsettled times (based on Yoffee 1979, 1995).

³⁴ A previous assessment of the nature of this neighborhood as an elite quarter (M. Müller 2011) then has to be revised.

³⁵ Contrasting Egyptian and Near Eastern ancestor cults and the possible combination of both cultural spheres at Tell el-Dab‘a may provide an indication of closely linked cultural perceptions and not considerably different social concepts in both traditions (M. Müller 2014, forthcoming).

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Family Structure, Household Cycle, and the Social Use of Domestic Space in Urban Babylonia

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Introduction

In this paper I present my ideas about how the Babylonian terms for parts of the house may be correlated with contemporary architectural forms as represented by the excavated house plans of the first millennium B.C. Drawing on both archaeological evidence and cuneiform tablets, the paper aims to demonstrate that a better appreciation of how the Babylonians conceived of and described domestic space can help us to figure out how living space was apportioned, which in turn sheds light on family living conditions. Mapping the Babylonian terms onto the ground plan of the archetypal house in this way permits us to draw some conclusions about the social use of domestic space in situations where houses were divided up for ownership and/or occupation. We can then add to this scheme such information as is available for the function of different parts of the house. As a means of demonstrating the principles of spatial organization that emerge from this procedure, I shall then present and discuss three case studies, one from the Neo-Babylonian period, the second of (most likely) later Achaemenid date, and the third from the Hellenistic period. These case studies are intended to illustrate the potential for integrating the written and archaeological evidence in the study of house and household in first-millennium B.C. Babylonia, as well as the problems involved. The first case study compares a textually attested double house with an excavated house that seems to serve as a close parallel in terms of its general spatial organization. The second case study presents a new reconstruction of the house described in the enigmatic cuneiform tablet AO 17648. The third and final case study traces the history of a property which is attested in tablets from Hellenistic Uruk and which permits the study of house and household transformation over four generations.

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Sources and Methodology: An Overview

The textual sources that shed light on the Babylonian house consist primarily of legal contracts written in the Babylonian dialect of the Akkadian language using the cuneiform script impressed on clay tablets. The relevant tablets cover the period from the seventh century B.C. down to the second century B.C., with a significant peak in the sixth–early fifth century and another (albeit smaller, and restricted to the southern Babylonian city of Uruk) in the third–second centuries B.C.¹ The tablets bearing the most detailed property descriptions are those involving sale, inheritance, and exchange, but other categories of document also add useful details.² These tablets were produced by (or on behalf of) the very people who actually owned — and often also inhabited — the houses that the documents concern. They employ the vernacular Babylonian terminology for different parts of the house, and it is often used in a context that elucidates the family circumstances surrounding the apportioning of domestic space, especially in matters concerning inheritance and the transmission of property within the family. The tablets themselves are rarely provenanced since most were acquired by museums already in the nineteenth century, long before the advent of controlled excavation. However, the legal documents almost invariably name the place of writing, so that the city or town of origin can easily be determined (if broken, then often the contents offer some clue, especially via prosopographical information). They also supply the date, in the following format: month + day + regnal year + king's name.

The archaeological evidence comprises some forty-six Neo-Babylonian houses from an urban context that have been cataloged and discussed in detail by Peter Miglus (1999, pp. 179–213, 307–14), plus a few later ones. In the following pages I devote more space to explaining the nature of the written evidence, simply because the nature of the cuneiform documentation is in all likelihood less familiar to the reader. Moreover, the archaeological evidence is rather more accessible, especially since the ground plans of the excavated Neo-Babylonian houses have been conveniently illustrated by Peter Miglus at a common scale and alignment (*ibid.*, pls. 89–92, 94–100). Although the balance of my explanatory remarks is necessarily weighted toward the written documentation, this does not mean that I prioritize the textual record over the archaeological in terms of its value as evidence. Rather, I try to establish a recursive dialogue between archaeology and text in order to test ideas and build up a picture that does justice to both fields and complies with their respective methodologies.

In general, the layout of the Babylonian house could remain stable over many years (in some cases even over several centuries) without significant modification, owing in large measure to the practice of reusing the wall stubs of the previous phase as foundations for the next. Sometimes houses expanded or contracted in area according to the circumstances of the occupants, but there is a sufficient degree of regularity in plan for us to be able to extrapolate the essential principles of spatial organization as discussed in the following pages. The analysis presented here relies heavily on the houses excavated in the Merkes quarter of

¹ The archival material from Hellenistic Babylon is different in character from the Uruk corpus and contains little information of relevance for the present study.

² There are other genres of text, including those parts of the omen corpus which relate to the house

and household (Guinan 1989, 1996; see also Brusasco, this volume), as well as certain ritual texts and other kinds of literary compositions, which reflect social attitudes toward domestic space. However, consideration of these is beyond the scope of the present study.

Babylon,³ which represents the best-preserved area of first-millennium Babylonian residential housing uncovered to date. For the sake of matching the textual and archaeological data I take House I at Merkes as the “archetype” or classic form of the Neo-Babylonian house. It should be noted that the occupants of these Merkes houses were certainly situated toward the upper end of the social spectrum and that the houses reflect this in terms of their regularity of plan, quality of construction, and above average size.⁴

House and Household in the Cuneiform Sources

When classical archaeologists write about the Greek or Roman house they tend to scatter their text with references to the written sources, typically referring to the rooms by their Greek or Latin names. Such an approach is not without problems, as scholars such as Lisa Nevett and Penelope Allison have shown.⁵ Given these difficulties, it seems that the Babylonian texts are in some respects better suited for the study of domestic space: we are dealing with a relatively homogeneous corpus of (primarily) legal documents that were written down to serve the immediate needs of the house owners and/or occupants. And yet, archaeological studies of Neo-Babylonian housing have failed so far to integrate the textual data with the material evidence to anything approaching the same degree as our colleagues in classical studies have done.

In her critique of the use of written sources in the study of Roman domestic space, Allison distinguishes two key genres of text: the writings of contemporary authors, and the epigraphical sources (Allison 2001). The former are completely lacking for Mesopotamia: authors are as good as unknown, and we have no narrative sources. The closest Babylonian counterpart to the Roman epigraphical sources (especially the papyri) comprises the numerous cuneiform legal documents, which come primarily from private family archives and were written for everyday, utilitarian purposes. According to Allison, the Roman epigraphical sources are more useful for investigating the composition of the household than for studying the social use of space within the house (*ibid.*, p. 184). The Babylonian documents, by contrast, are useful for both, although so far they have only been investigated for the study of the household and family. In the following pages I concentrate on exploring ways of using this material for the study of domestic space.

The corpus of texts drawn on here includes contracts relating to urban property sales (ca. 390 tablets), leases (ca. 190), debt security (ca. 127), inheritance (ca. 56), and dowry (ca. 25), plus smaller numbers of miscellaneous contract types.⁶ Not all of these texts shed direct

³ See the excavation report of Reuther 1926.

⁴ It is clear from the written sources that the same Babylonian terminology relating to domestic space was used throughout the land (allowing for some occasional minor regional variation in vocabulary). This, combined with the archaeological evidence for relatively standardized house forms, suggests that the results presented here are generally applicable. I rely here on the Merkes houses as the point of departure for the analysis of domestic spatial organization, on account of their generally good state of preservation and regularity of plan. Nevertheless, further, detailed study of the generally simpler and

smaller houses excavated elsewhere, especially at Nippur and Uruk, is desirable.

⁵ For a critique of the use of written sources in this way, see Nevett 1995, p. 364; 2010, p. 20; Nevett, this volume; Allison 2001.

⁶ The tablets referred to here form part of the corpus of over 1,200 cuneiform tablets drawn upon in the author’s forthcoming study of the Babylonian cities of the first millennium B.C. Precise counts are not advisable, not least because there will always remain relevant unpublished tablets that could not be consulted. However, the sample is surely large enough to be representative.

light on the Babylonian terminology that is central to the present study, but as a group they provide a substantial amount of contextual detail and background for understanding the conditions surrounding the occupation and ownership of urban properties. These property-related tablets form only one part of the vast corpus of tens of thousands of Neo- and Late Babylonian everyday documents on which our understanding of the society and economy is based.⁷

The present article represents the first attempt to combine these textual sources with the archaeological evidence from first-millennium B.C. Babylonia in investigating the social use of space within the house. This study has involved confronting the seemingly obscure Akkadian terminology and examining hundreds of potentially relevant documents, many of them still unedited or even unpublished. For the Old Babylonian period (earlier second millennium B.C.), by comparison, considerable progress has already been made in identifying the contemporary Babylonian terms for parts of the house (e.g., Kalla 1996; Jahn 2005; Gruber 2012; Gruber and Roaf 2012). Also, a number of recent studies have examined the Old Babylonian house in its social setting (Stone 1981, 1987; Charpin 2003; Feuerherm 2007). What is particularly interesting, however, is that the Old Babylonian terminology for the parts of the house differs radically from that used in the first millennium B.C. Significant differences can also be observed in terms of house layout and spatial organization (preliminary observations in Baker 2011b, p. 547). The intervening period, the later second millennium and the beginning of the first millennium B.C., is rather more poorly documented, both textually and archaeologically, and so it remains difficult to determine precisely when the key changes took place. These changes present significant opportunities for further research into the development of the Babylonian house and household over the longer term.

A recent study drew attention to the discrepancy between the size of excavated Neo-Babylonian houses and those documented in the cuneiform tablets (Baker 2004, pp. 57–62). New research based on a considerably larger corpus of textually documented properties of known size both reinforces this discrepancy and permits a more nuanced study of the question of property size (Baker 2014, and forthcoming, ch. 5). This phenomenon — of textually documented houses being substantially smaller on average than their excavated counterparts — has already been observed for earlier periods of Mesopotamian history going back as far as the Ur III period in the late third millennium B.C. (e.g., Van De Mieroop 1999, pp. 261–67; Waetzoldt 1996, pp. 145–47). It has been attributed to a number of factors but especially to the fact that the documents are often dealing only with parts of houses, whereas excavators will tend naturally to define a house by its external perimeter, insofar as this can be determined. As is well known, the Akkadian word *bitu* “house” can just as easily mean “room” or “(house) sector”; compare the uses of the word *bait* in Arabic (Bianca 2000, p. 77). Thus it should not be assumed that *bitu* in the context of a legal contract always refers to a “complete” house of the conventional type. One of the aims of this study is to examine more closely the instances in which only parts of houses are referred to in the cuneiform tablets, and to attempt to identify these sectors on the ground plans of excavated houses. An understanding of the Akkadian terminology relating to the house is essential for shedding light on the use of domestic space, especially because for this period there is little possibility of

⁷ For an overview of the corpus of everyday documents, see Jursa 2005. By “everyday” documents I

mean legal contracts, administrative documents, and letters (both private and official).

distinguishing discrete activity areas within the house based on artifacts found in situ, owing to the scarcity of good-quality excavation data.⁸

The shared ownership and/or use of a house may be accompanied by physical modifications to its fabric, but this is by no means necessarily the case. The archaeological evidence for physical alterations to Neo-Babylonian houses has been discussed elsewhere in an attempt to relate it to the textual evidence for shared occupation (Baker 2010, p. 21); that study contains further, detailed discussion of some of the issues that are only briefly touched upon here.

For the purposes of this study, as already noted, we rely primarily on the “everyday” documents, especially the legal contracts relating to the transfer of property. We witness social relations through a prism of legal relationships formed around the transfer of ownership/tenure under certain conditions (sale, inheritance, marriage, etc.). In contrast to the Old Babylonian period, we are confronted with an almost complete lack of private family archives found in situ within the excavated housing (cf. Brusasco 1999–2000 and this volume for Old Babylonian Ur; Stone 1981 and 1987 for Old Babylonian Nippur). There is not a single case known to me whereby a house described in a tablet can be matched up with the building in which the tablet was found. We are forced therefore to operate on a more abstract level, drawing on the information on family and household structure contained in the tablets but with no real possibility of relating these directly to particular houses and their occupants. Nevertheless, it is possible to elucidate principles concerning the social use of domestic space by examining repeatedly occurring Babylonian terms in the light of the contextual information supplied in the tablets and by attempting to correlate them with “standard” architectural forms.

In order to evaluate the cuneiform sources concerning urban properties, we have to bear in mind a number of key factors that shaped the written documentation. Record-keeping practices center around the need to demonstrate title to property and to record outstanding obligations. Especially in the realm of family affairs, difficult cases are more likely to have been written down, while straightforward ones are likely to be under-represented in the extant records.⁹ Contemporary legal practices are also important, especially with regard to inheritance procedure and dowry giving (see Oelsner, Wells, and Wunsch 2003 for an overview). To help us correlate the tablets with the archaeological record we also have to understand Babylonian surveying practices as well as the conventions governing the written description of urban properties (Baker 2011a).

Thanks to recent studies, we are pretty well informed about the Babylonian family of the first millennium B.C. (see, e.g., Roth 1991, 1994; Wunsch 1995, 2003). Ideologically speaking, importance was attached to the “father’s house” (*bīt abī*) as well as to the wider lineage,¹⁰ especially since we are often dealing with temple personnel whose offices were passed down from father to son, with close attention paid to purity of birth, one of the key criteria for admission to the priesthood (Waerzeggers 2008). In Neo-Babylonian times, the oldest son

⁸ The attempt at a functional analysis by Castel (1992, pp. 71–98) relied primarily on the presence of built fixtures and on the treatment of walls and floors, rather than on artifact distributions. Miglus (1994) questioned some of Castel’s conclusions, pointing out that her distinction between roofed and unroofed spaces was based on faulty reasoning.

⁹ As repeatedly stressed by van Driel: “the normal does not require documentation” (van Driel 1998, p. 197).

¹⁰ See Waerzeggers 2010, pp. 81–84, on the role of the *bīt abī* within temple prebendary circles. On patrimonialism as a general feature of ancient Near Eastern society (but with particular reference to the Levant), see Schloen 2001.

inherited a half-share of the paternal estate, with the other half being shared by his brothers. So, depending on the amount of family property and other resources to be disposed of, a younger brother might take a smaller share in the paternal house(s) or might form his own household elsewhere. In the textual record we can observe processes similar to those observed by Elizabeth Stone (1981) for Old Babylonian Nippur, with brothers/cousins buying out their co-heirs when necessary in order to consolidate fragmented holdings and avoid the undesired effects of repeated division. Upon marriage, a woman went to live with her husband, and any dowry house that she might own typically served as a source of rental income for her. The properties owned by women were significantly smaller than average, based on study of the textually attested house-size data (Baker forthcoming), and many of them correspond in size to what (as I argue presently) was the equivalent of a more or less standard unit of living space within a typical house.

The Babylonian Terminology for Parts of the House

Babylonian terms for rooms of specific function occur relatively rarely in the everyday documents of the first millennium B.C. This does not necessarily mean that most rooms were multi-functional, but rather it reflects the prevailing conventions of record-keeping: room function was irrelevant in contexts where properties were being transferred, therefore it normally went unrecorded (Baker 2007, p. 71). The small number of references to bedrooms (*bīt erši*) confirm that specific functions could be assigned, at least to some rooms.¹¹ The terms which are attested much more frequently in the first-millennium tablets are those referring to key sectors of the house, namely, the central courtyard (*tarbašu*) and the rooms/suites enclosing it, the *bīt iltāni*, *bīt šūti*, *bīt amurri*, and *bīt šadī*. These latter four terms are designated after the compass points, literally meaning “room/suite of the north/south/west/east” respectively. The use of these terms is restricted to contexts where houses are in divided ownership and/or occupation; when an entire house was transferred there was no need to refer to its constituent parts. Detailed study of these terms has shown that they mean the exact opposite of their conventional interpretation, that is, a *bīt iltāni* (literally “room/suite of the north”) is not a “north room/suite” but rather a “north(-facing) room/suite,” situated to the south of the central courtyard, and so on. Upon examining all of the occurrences of these terms in those legal tablets which contain a detailed property description (mainly the sale tablets and records of inheritance division), and on drawing up a schematic diagram of the house described in each instance, it became clear to me that the suite in question was always on the “wrong” side of the courtyard that it adjoined.¹² These rooms/suites are clearly named after the direction in which they faced, looking across the adjacent central courtyard

¹¹ A detailed study of the Akkadian terminology relating to the house will be published shortly (Baker forthcoming).

¹² For a brief explanation of this finding, see Baker 2008. It was through study of the Hellenistic tablets VS 15 39 // 40 // 49 (see Case Study 3 below) that this phenomenon first came to my attention. The fact that the principle clearly applies with regard to the house complex described in YOS 6 114 (see Case

Study 1), a tablet also from Uruk but written some 375 years earlier, supports its general validity in a first-millennium Babylonian context. Furthermore, the argument that it applies also to cultic structures, specifically the ziggurat temple of Babylon (as suggested by Baker 2008) has been accepted by Andrew George in his commentary on the recently published “Tower of Babel Stele” (George 2011, p. 158). Further case studies drawn from the Babylonian legal documents will be discussed in Baker forthcoming.

that served as their principal source of light and air through the doorway which normally formed their only means of access.

Matching the Babylonian Terms with the Archaeological Evidence

In the light of this new interpretation of these terms for the key sectors of the house, it is possible to locate them on the ground plan of the typical Neo-Babylonian house with confidence. It is clear that the *bīt iltāni* (“north[-facing] room/suite”) typically corresponds to the main living room, which was usually the largest room in the whole house and was normally situated on the southeast side of the central courtyard: among the data collected by Miglus there are only three exceptions to this out of a total of forty cases (Miglus 1999, p. 343, table 29; for the relevant plans see pls. 89–92, 94–100). Such a location, typically facing toward the northwest, would have afforded the most favorable living conditions for the climate of southern Mesopotamia. The largest room of the house is often referred to in the literature as the “reception room” (or “Empfangsraum”), but I prefer to avoid this term as it presupposes a function that is, to my mind, not proven. Entertaining may have been one of its functions but it seems to me likely that its primary purpose was to serve as the main living space for the family. In cases where the house was occupied by different groups belonging to one extended family, it presumably served the overall head of the household and his family, thus reflecting and at the same time reinforcing his social status.¹³

As for the usage of these terms *bīt iltāni* and the like, contextual examination shows that in some instances they refer to a single room accessible directly from the courtyard, but more often they refer to that room together with the smaller rooms associated with it. The *bīt iltāni*, consistent with its function as the main living room of the house, tended to have the largest number of other rooms associated with it. Taking House I (Babylon, Merkes) as an example (fig. 16.1),¹⁴ it is possible to identify the different architectural units according to their Akkadian terms. The rooms associated with the entrance form a separate suite that may be characterized as semi-public space (see below). The common Babylonian term for this house sector is uncertain since it is called by name only very rarely in the texts, and different terms are used in each instance; one such term, *kisal pāni*, is discussed briefly below.

Within this scheme we may distinguish between the principal living rooms and their associated rooms, forming suites which were self-contained and could be closed off if necessary by simply shutting the door from the courtyard, and those that were accessible to all, namely, the entrance suite, the courtyard, and any single rooms which were directly accessible only from the courtyard. The archaeological evidence suggests that a typical location for the kitchen was in a single room on the eastern side of the courtyard, that is, what the Babylonians called a *bīt amurri* (fig. 16.2).¹⁵ The detailed written descriptions of the Hellenistic

¹³ Compare the remarks of Brusasco (2004, p. 148) on the main living room of the Old Babylonian house.

¹⁴ Throughout this article the sectors of the house have been systematically labeled in the figures according to the following scheme: N = north(-facing) suite (*bīt iltāni*); S = south(-facing) suite (*bīt šūti*); E = east(-facing) suite (*bīt šadi*); W = west(-facing) suite (*bīt amurri*); C = courtyard (*tarbašu*); V = vestibule/entrance suite.

¹⁵ Baker 2010, pp. 189–91, citing examples from Isin and Nippur. The identification of kitchens follows the excavation report in each case and is based on the presence of built ovens etc. Since the rooms in question are small, it seems likely that they were used solely for food preparation and therefore the functional designation “kitchen” seems plausible.

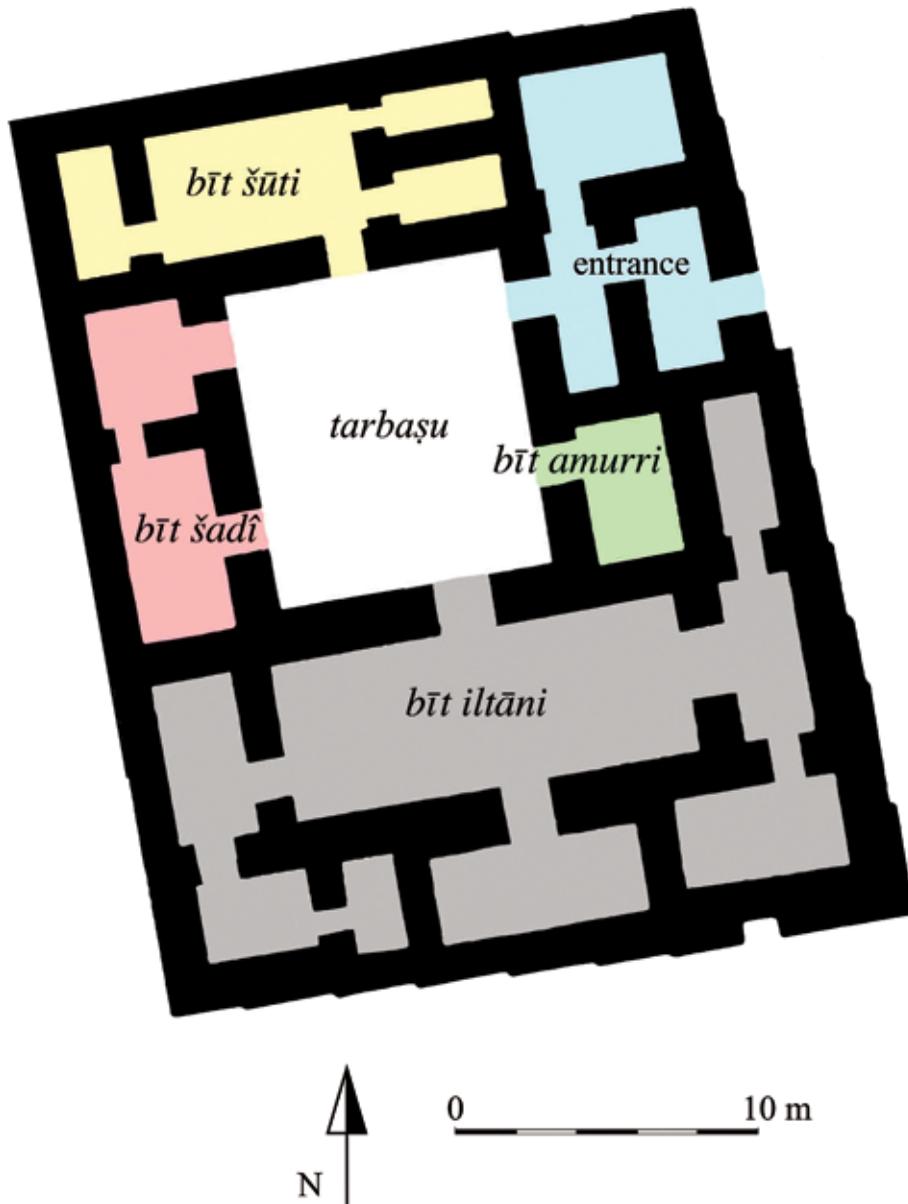


Figure 16.1. Babylon, Merkes, House I, with sectors labeled according to their Babylonian names

period (see below) make it clear that a bedroom (*bīt erši*) would have been one of the smaller rooms associated with a main living room. Thus, in the light of the excavated house plans, a bedroom would have been located either at the short end of such a main living room, or perhaps in a second row of rooms behind it (see the *bīt iltāni* and *bīt šūti* in fig. 16.1), but bearing in mind that smaller houses elsewhere tended not to have such an additional row (see, e.g., fig. 16.3). The archaeological evidence for bathrooms and, more rarely, toilets, indicates that in the Neo-Babylonian period these facilities were most frequently integrated into the main living suite of the house (that is, the suite I identified as the *bīt iltāni*), and less



Figure 16.2. Houses with rooms identified as kitchens: (a) Babylon, Merkes, House VI; (b) Isin, Nordabschnitt III; (c) Nippur, WC-2, Building B, Level I

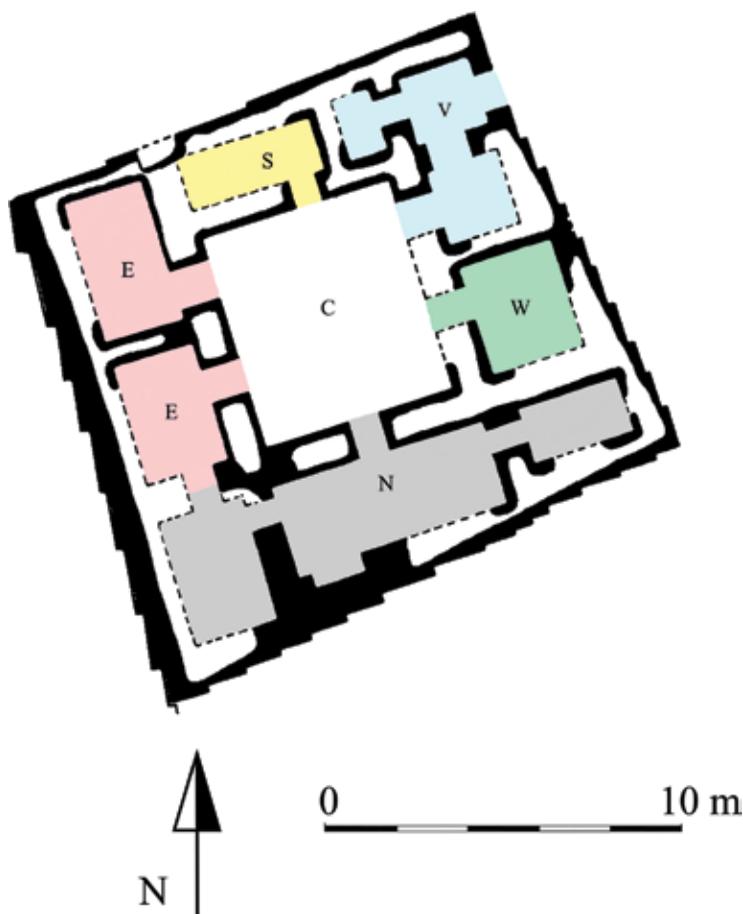


Figure 16.3. Babylon, Merkes, House XIII

frequently with the courtyard (Miglus 1999, p. 344, table 31; examples in fig. 16.4). In the case of houses of more complex plan, differential accessibility and other features may point to social differentiation within the household. See, for example, Case Study 1, below, for a detailed discussion of the double-courtyard house.

So far I have outlined the main principles of spatial organization of the Neo-/Late Babylonian house. I should add that I am assuming that most houses of this period were single-story (following Miglus 1999, pp. 204–05; on the written evidence, see Baker forthcoming). There were certainly exceptions, but even in those cases it cannot be determined for certain that we are dealing with complete second floors covering the entire roofed space of the ground floor, as opposed to less substantial structures built onto (part of) the roof.

A concern with family privacy is suggested by several elements of house design and spatial organization. One such element is the potentially self-contained nature of the main living suites (see above). Another is the nature of access to the house: normally the single door from the outside formed part of an entrance suite which was configured so as to prevent visual access to the house interior, that is, the courtyard. Also, it may be that this entrance area, typically situated at the end of the building farthest from the main living suite, served as semi-public space where visitors were received. In the Neo-Babylonian house it was quite



Figure 16.4. Houses with rooms identified as toilets: (a) Isin, Nordabschnitt III; (b) Babylon, Merkes, House IX; (c) Babylon, Merkes, House II

common to have to pass through more than one room in order to reach the courtyard from the house entrance. Even when only a single room formed the passageway linking the outside with the courtyard, it often had at least one side room associated with it. These side rooms could well have been used to entertain visitors, thus keeping them away from the house's interior and maintaining family privacy (see the entrance areas in figs. 16.1, 16.4:c). Such an arrangement finds a close parallel in the men's reception room of the traditional Islamic city house,¹⁶ and it has also been noted in a Greek context that access to different parts of the house might have been regulated according to the nature of the visitor's relationship with the family.¹⁷

Finally, it is worth noting that the possibilities for spatial segregation — both of people and of activities — depended on the size of the house itself as well as on the number of occupants and their relationship with one another. Some textually documented scenarios make it clear that courtyard houses could be shared by families that were not related to one another, especially in (but not restricted to) rental situations; such cases are, however, somewhat rare.

Case Study 1: The House Described in Tablet YOS 6 114

In order to develop further these ideas about relating the Babylonian terminology to domestic architecture, I take as my first case study YOS 6 114, a tablet recording a division of inheritance that was written in the southern Babylonian city of Uruk in 555 B.C. A new edition of this tablet will be published shortly (Baker forthcoming); here I focus on comparing the property it describes with the contemporary excavated housing.

The contract describes a “main/great house” — in Akkadian, *bitu rabû* — and a second sector called the *tarbašu bābānû* “outer courtyard.” The whole complex is divided between three brothers and their paternal uncle; evidently the father of the three brothers had not divided the property with his own brother while he was still alive, and so his share passed to his sons. The father, Arad-Innin, must have been older than his brother Eanna-līpu-ušur since his three sons inherited the greater share of the property. (At this period the oldest heir typically took a preferential share of the paternal estate and in the event of his death this devolved to his own heirs, hence the priority of the brothers over their uncle.)

The main house (*bitu rabû*) was taken jointly by the oldest brother and the youngest brother, who was very likely still a minor since the two brothers' individual shares are not described in detail: if both were adults capable of forming their own households, the tablet would have recorded a precise description of their shares in the house, according to the usual practice. As for the other part of the property, the term *tarbašu bābānû* (literally “outer courtyard”) clearly refers not to a courtyard alone but also to the rooms around it, since later on in the text these same rooms are apportioned in detail between the other two heirs, the middle brother and his uncle. Judging from the detailed description given in the tablet, the *tarbašu bābānû* represents a house of the typical central courtyard type, though apparently it was considered secondary to the “main house” (*bitu rabû*). This is confirmed by the respective

¹⁶ Ragette 2003, p. 75; Brusasco 2004, p. 150; also Brusasco 1999–2000, pp. 87–88, for similar observations concerning Old Babylonian Ur.

¹⁷ See, e.g., Nevett 1995, pp. 372–74. Cf. also Spence 2010, pp. 290–92, and in this volume on the ancient

Egyptian houses at Amarna (where the main hall is used to control access in a similar fashion); I am grateful to Miriam Müller for drawing my attention to this article.

sizes of the two sectors, as given in the tablet: *bītu rabû* — ca. 441 square meters; *tarbašu bābānû* — ca. 343 square meters. In addition to sharing the rooms around the courtyard, the middle brother and his uncle also each took a half-share in the courtyard itself and in an outbuilding (*asuppu*) situated in the courtyard,¹⁸ an arrangement that was typical in cases of shared occupation of a courtyard house. A schematic representation of the property showing the various shares allocated to the four parties is shown in figure 16.5.

The layout of the house clearly corresponds to the double-courtyard type of which three Neo-Babylonian examples have been excavated, namely Houses II, IV, and X at Babylon, Merkes (Miglus 1999, p. 191 [“Doppelhäuser”] and pl. 92, figs. 410–12). In all three examples one courtyard sector is somewhat smaller in area than the other, as in YOS 6 114. In the case of Houses II and IV, the secondary (smaller) courtyard sector had an internal courtyard flanked by rooms on only three sides. In the third case, House X, both sectors lacked a row of rooms on the northern side (the courtyard of the southern sector adjoined the north(-facing) wing of the northern sector, without any direct access between the two). The same phenomenon may be observed in single-courtyard houses: the norm was for the courtyard to be enclosed by rooms on all four sides, but there are excavated (and also textually attested) examples with rooms on only three sides,¹⁹ or even two.²⁰ In the case of the house described in this

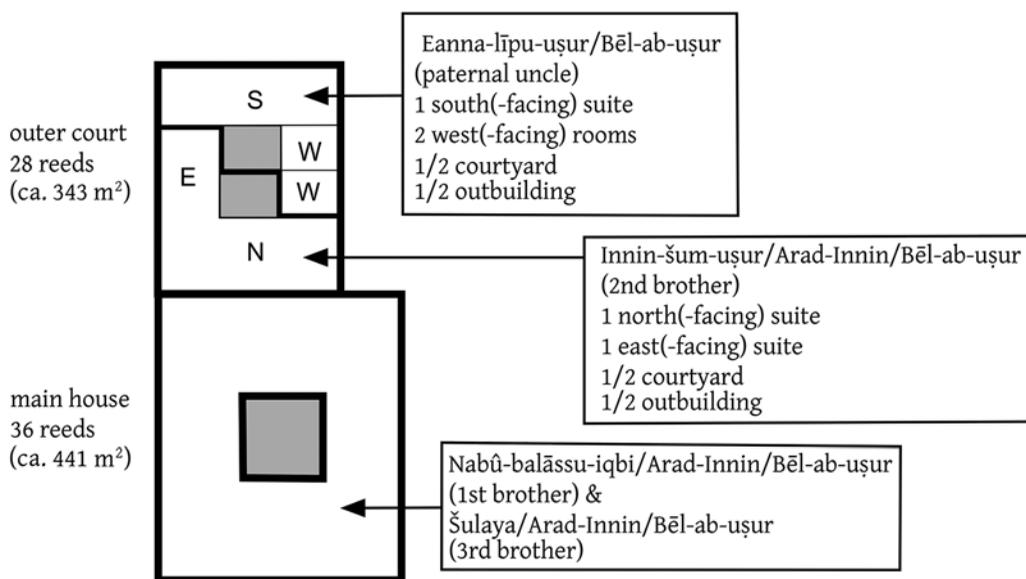


Figure 16.5. Schematic representation of house described in YOS 6 114, with details of inheritance shares

¹⁸ The textual sources provide few details concerning *asuppus*. However, insubstantial structures have occasionally been excavated within house courtyards, e.g., Building B, Level I, in the WC-2 area of Nippur (for a plan, see fig. 16.2:c). It is possible, but not certain, that these remains correspond to the Akkadian term *asuppu*. Other terms for structures located in the courtyard are occasionally attested, such as *kāru*,

although *asuppu* is the most common term for such a feature. For further discussion of outbuildings, see Baker forthcoming.

¹⁹ E.g., Houses XII and IX at Babylon, Merkes (Miglus 1999, pl. 89, figs. 402 and 404); houses d1 and d7 at Uruk (ibid., pl. 94, figs. 417 and 419).

²⁰ House d6 at Uruk (Miglus 1999, pl. 94, fig. 418). For a textually attested example, see Case Study 3, below.

inheritance-division tablet, both sectors appear to have had a courtyard that was enclosed by rooms on all four sides. Although there is no precise parallel for this among the excavated housing, I believe that its layout conforms in its general spatial organization to the double-courtyard house type, and thus it may be compared with House IV excavated in the Merkes quarter of Babylon (see fig. 16.6) (Reuther 1926, pp. 105–08).

The northern sector of House IV would correspond to the main house (*bītu rabû*); at 410 square meters in area it is substantially bigger than the other sector and has a courtyard enclosed by rooms on all sides. The smaller (220 sq. m), southern sector contains an entrance that serves both sectors, though the northern sector also has an entrance of its own (the corridor-like arrangement, rooms 8 and 9, is unparalleled). This secondary sector of House IV,



Figure 16.6. Double-courtyard house: (a) Babylon, Merkes, House IV; (b) schematic representation of House IV for comparison with figure 16.5

which may be compared with the *tarbašu bābānū* of YOS 6 114, has a courtyard that is enclosed only on three sides: east, south, and west. Aside from the vestibule (room 1), it comprises a two-room *bīt iltāni* (rooms 3 and 4), a two-room *bīt amurri* (rooms 6 and 7), and a single-room *bīt šadī* (room 5). The *bīt iltāni* and the *bīt amurri* measure about 65 and 52 square meters respectively.²¹ There is another interesting point of comparison between the house described in tablet YOS 6 114 and House IV at Merkes. As part of his share in the secondary house (*tarbašu bābānū*), the uncle took two *bīt amurris*. This can only refer to a pair of self-contained rooms/suites on the east side of the courtyard, each accessed by its own doorway from the courtyard. There is a precise parallel to this scenario in the main, northern sector of House IV, which has two such single rooms on the eastern side of the courtyard (fig. 16.6:a, rooms 20 and 21), each communicating only with the courtyard. In fact, in the typical house layout, it is generally only the *bīt amurris* and *bīt šadīs* that may feature as single rooms, since the *bīt iltāni* is always associated with at least one smaller room accessible from it, and the *bīt šūti*, normally forming the second largest room/suite in the house, often has at least one other room attached to it (see, for example, figs. 16.1 and 16.3).²² As noted above, there is some archaeological evidence to suggest that a single room on the eastern side of the courtyard (that is, a *bīt amurri*) was a typical location for a kitchen (fig. 16.2).²³

Case Study 2: The Enigmatic Tablet AO 17648

In the light of this new interpretation of the Babylonian house terminology, it is now possible to elucidate the contents of a tablet from the Louvre, AO 17648, that has so far evaded satisfactory explanation.²⁴ It is of no certain provenance but probably belongs with a small tablet archive from late Achaemenid-period Nippur centered around a man named Ninurta-aḥḥē-bullīṭ (Joannès 1982, pp. 70–86; 1992; Jursa 2005, pp. 111–12, “the Absummu archive”).

The tablet contains only seven lines of text, beginning with the extraordinary heading “This is the configuration (*tapristu*, literally “dividing up”) of our house in which I live.” Unfortunately, the writer is anonymous and has not left us his address. The remaining six lines list the main parts of the house together with their dimensions. In addition to the four suites identified by the compass directions, the tablet lists a courtyard (*tarbašu*) and a “vestibule” (*kisal pāni*). This latter term, *kisal pāni*, literally means “court of the front” and has been translated as “cour de devant” and “forecourt” (see Joannès 1982, p. 81; and Robson 2008, pp. 204, 206, respectively). However, although the Akkadian word *kisallu* can refer to an open

²¹ These measurements include not only roofed space but also the walls (like the contemporary Babylonian house surveys); in the case of a party wall shared between adjacent units I have measured along the center of the wall.

²² There are, occasionally, ambiguous cases. For example, room 18 in the northern (main) sector of House IV, which would surely be identified as a *bīt šadī* owing to its location and its main access via the west side of the courtyard, is also directly accessible from the adjacent *bīt iltāni* which comprises the main living room (13) and its associated rooms (14, 15, 16, 17, and 19). A small number of similar cases can be found among the excavated house plans.

²³ The archaeological evidence suggests that when courtyard houses were physically divided up for shared occupation, the kitchen remained accessible to all parties. The implications in this case of the uncle having the two *bīt amurris* (= possible location of kitchen) as part of his share are unclear since we cannot determine how far the division of domestic space was actually implemented in the daily living arrangements of uncle and nephew; it may have been carried out “on paper” only.

²⁴ The tablet AO 17648 was published as a copy by Durand (1981) and edited by Joannès (1982, pp. 81–84, no. 24).

courtyard, in this context we are certainly dealing with a roofed space associated with the main entrance to the house, so I prefer the translation “vestibule” to avoid confusion. The only unroofed space in the house was the central courtyard, and for this the contemporary legal documents always use the term *tarbašu*. The use of *kisal pāni* in this tablet represents one of very few surviving vestiges of the Old Babylonian terminology; at that period the term *kisallu* features in association with the front part of the house (Jahn 2005, pp. 140–49).

The individual measurements for each space are given in cubits (kùš = *ammatu*, ca. 0.5 m) and fingers ((šu.)si = *ubānu*, ca. 0.02 m). In some instances a fraction of a cubit is given in place of the equivalent in fingers (e.g., 2/3 cubit = 16 fingers). The terms equivalent to “length” and “width” are *šiddu* “(long) side” and *pūtu* “short side” (literally “front”). These terms are conventionally employed in pairs in contemporary urban property surveys, even when the plot is an exact square. The dimensions of each sector are expressed using the following formula:

x *šiddu* (uš) ana y *pūtu* (sag.ki)

“x (measurement), the long side, times y (measurement), the short side”

The measurements are summarized in table 16.1, following the order given in the tablet. As expected, the width of the roofed rooms (that is, all excluding the central open courtyard, *tarbašu*) always falls below the maximum span that could be roofed using locally available timber, that is, around 3.5–4.0 meters (Miglus 1999, p. 264; Moorey 1994, p. 355).

Table 16.1. Dimensions of house sectors as described in tablet AO 17648

Sector	Long Side (<i>šiddu</i>)	Short Side (<i>pūtu</i>)	Length × Width (m)	Area (sq. m)
<i>bīt iltāni</i> — north-facing room	11 kùš 8 si	7 kùš 8 si	5.67 × 3.67	20.80
<i>kisal pāni</i> — vestibule	6 2/3 kùš	3 kùš 8 si	3.33 × 1.67	5.56
<i>tarbašu</i> (tùr) — courtyard	12 2/3 kùš	11 kùš 8 si	6.33 × 5.67	35.89
<i>bīt šūti</i> — south-facing room	11 kùš 8 si	5 kùš 8 si	5.67 × 2.67	15.14
<i>bīt šadī</i> — east-facing room	12 2/3 kùš	3 kùš 8 si	6.33 × 1.67	10.57
<i>bīt amurri</i> — west-facing room	6 2/3 kùš	3 kùš 8 si	3.33 × 1.67	5.56
Total				93.52

A number of attempts have been made to reconstruct the basic layout of the house described in this tablet. I now review these previous proposals and then argue for a new reconstruction that conforms to the new understanding of the Akkadian terminology outlined above as well as to the archaeological evidence for the layout of the Neo-Babylonian house.

In his edition of the tablet, Francis Joannès published three possible versions of a reconstruction of the house. His first two suggestions (reproduced here as fig. 16.7:a–b) have to be discounted since it is only his third proposal (see fig. 16.7:c) that places the courtyard at the center of the house, where it clearly has to be.²⁵ Contextual study of the terms *bīt iltāni*

²⁵ Joannès 1982, p. 83, figs. 1–3. These figures (and that of Robson 2008, fig. 7.6) that are reproduced below as figs. 16.7–9 have been systematically re-

labeled according to the scheme explained in note 13 to aid comparison with one another.

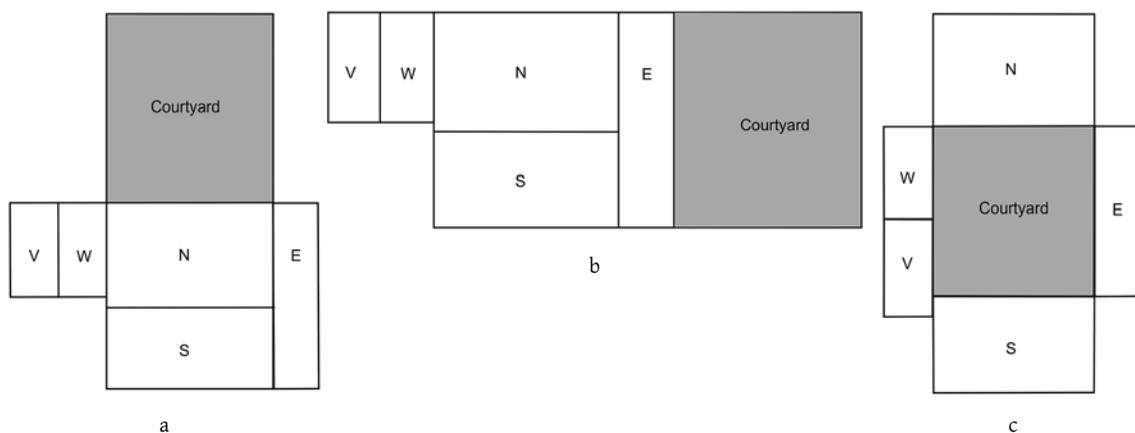


Figure 16.7. Suggested reconstructions of the house described in tablet AO 17648. After Joannès 1982, p. 83, (a) fig. 1, (b) fig. 2, and (c) fig. 3

etc. shows that they only ever occur in direct association with an adjacent courtyard: this is integral to their very conceptualization. So Joannès' third proposal is a fair representation of the house sectors as described in AO 17648, though of course we have to swap his labels around, exchanging north for south and east for west in the light of our new understanding of the key terms. Having done this, we arrive at a modified version of his reconstruction, shown here as figure 16.8.

This reconstruction looks somewhat odd because the corners of the house are missing, but I believe that it is essentially correct and that the tablet does not describe the house in its entirety, only the key elements. I return to this point shortly, but first I discuss another attempt at a reconstruction recently published by Eleanor Robson (2008, pp. 204–05, fig. 7.6) (see fig. 16.9). Her version is based on a comparison with a supposedly contemporaneous house plan drawn on a clay tablet. The plan as reproduced comprises a courtyard enclosed only on three sides, with the south-facing room (*bīt šūti*) and west-facing room (*bīt amurri*) to the north, the east-facing room (*bīt šadi*) to the west, and the north-facing room (*bīt iltāni*) to the south, adjacent to the “forecourt” (*kisal pāni*) which is placed in the bottom right (= southeast) corner.²⁶

I believe this version to be incorrect, for a number of reasons. First, the house plan with which it is compared is said to be a “roughly contemporaneous house plan from Larsa” (Robson 2008, p. 206). Robson does not present any argument for dating this house plan tablet to the Neo-Babylonian period, and in fact this date is by no means certain. An Old Babylonian date has been tentatively ascribed to it by other scholars who have studied tablets bearing house plans (Heisel 1993, p. 29; Dolce 2000, p. 376, fig. 7; Bagg 2011, p. 572). There are very few such tablets that are securely datable to the first millennium. In fact, previously it has

²⁶ In fact, Michael Roaf has kindly pointed out to me that there are traces visible on the original published photograph of the tablet which may indicate the presence of rooms on the fourth side; see Parrot 1968, p. 157. None of the subsequent studies that reproduce this plan as a line drawing includes any such additional rooms, but having looked at the pho-

tograph, I find this suggestion quite convincing (I have not had an opportunity to examine the original tablet). If there are indeed rooms depicted on the east side of the courtyard, then this invalidates Robson's use of this plan to support her reconstruction, independently of the other problems raised here.

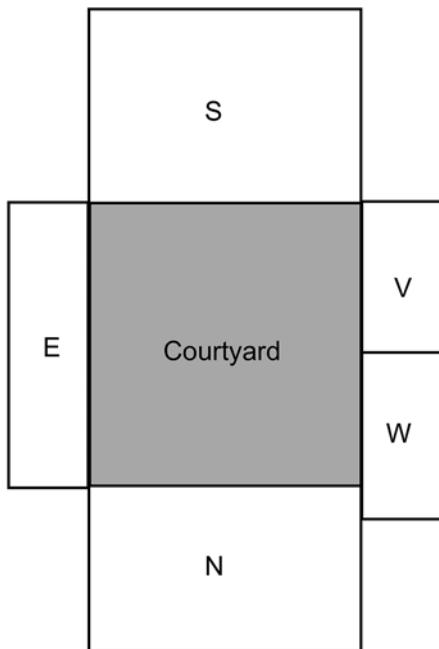


Figure 16.8. Emended version of Joannès 1982, p. 83, fig. 3, showing correct position of suites, according to the new understanding of the Babylonian terms

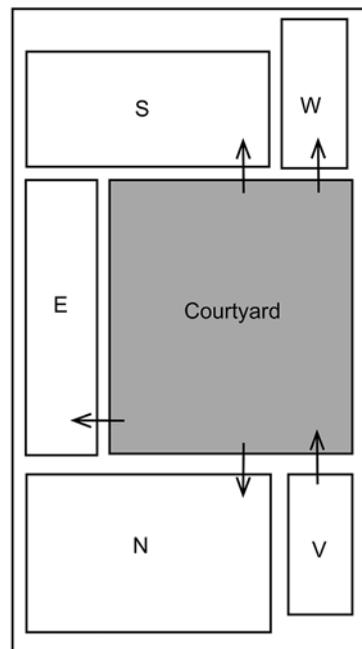


Figure 16.9. Suggested reconstruction of the house described in tablet AO 17648 (after Robson 2008, pp. 204–05, fig. 7.6)

been suggested that there are none at all (Baker 2004, p. 59), though this statement must be modified since the plan on the reverse of tablet BM 46740 is certainly of Neo-Babylonian date (Wiseman 1972, p. 144, fig. 3; Bagg 2011, p. 575 [no. 27], p. 584, fig. 27). As Donald Wiseman noted (1972, p. 145), the style of the drawing on BM 46740 differs significantly from the house plans of the Old Babylonian period: the walls are shown as single lines with double hatches to indicate doorways, whereas the older house plans depict the thickness of the walls in more realistic fashion, with gaps for doorways. The style of the Larsa plan places it squarely within the older group. Given this uncertainty regarding the date of the house plan, it is methodologically more secure to use the excavated first-millennium houses as a point of reference, especially since they are relatively numerous and we can be confident that they really are roughly contemporaneous with tablet AO 17648.

My second reason for rejecting Robson's reconstruction is that, judging by the excavated housing, the entrance and its associated vestibule (*kisal pāni*) are likely to have been situated at the farthest end of the house from the main living room (*bīt iltāni*) rather than adjacent to it.²⁷ Third, Robson's reconstruction takes into account my new interpretation of the Akkadian terminology but misapplies it in one crucial respect. The west(-facing) room is placed in the northeast corner of the house, to the north of the courtyard; however, as we have seen, it should be situated on the east side of the courtyard, facing west across it. The written property descriptions of the first millennium that contain the term *bīt amurri* confirm

²⁷ House d7 at Uruk is a very rare exception to this principle; see Miglus 1999, pl. 94, fig. 419.

without exception that such a room/suite faced westward across the courtyard, not southward as in Robson's reconstruction. A fourth objection relates to the overall layout of the reconstruction, which does not conform to the general principles of Neo-Babylonian house design. Aside from the adjacent "forecourt" (or rather, "vestibule"), the north-facing room is depicted as occupying the entire southern side of the house. We know from the tablet AO 16748 that this is the largest room of the house (20.72 sq. m), falling within the lower half of the size-range for excavated "reception rooms" (see Miglus 1999, p. 343, table 29). However, all of the excavated "reception rooms" (which correspond to the *bīt iltāni*, considered here to be the main living room) have at least one smaller room associated with them, but this one does not. Moreover, the long sides of the *bīt iltāni*, *bīt šadī*, and *bīt šūti* all match precisely the lengths of their corresponding courtyard sides, which suggests (but does not prove) that they were actually coterminous. The *kisal pāni* and the *bīt amurri* are an exception to this since their combined long sides (6.67 m) are longer than the adjacent courtyard side (6.33 m), but this can be explained by the presence of a wall in between them. Allowing for a wall of (typically) 1 meter width, the north end of the *kisal pāni* must have projected beyond the north side of the courtyard, as depicted in the new reconstruction presented below.

The house is reconstructed by Robson on the assumption that the five rooms (aside from the courtyard) listed in AO 16748 represent the house in its entirety. However, as already mentioned, I believe that the tablet does not describe the complete house, but rather it lists only the main rooms which were accessed directly from the courtyard, omitting the other, smaller rooms reached via these main rooms. Essentially, we are dealing with the layout depicted in figure 16.8, but with the corners occupied by rooms not listed in the tablet. It is possible to arrive at a house plan approximating quite closely to contemporary excavated examples if we (1) add rooms at the corners of the house by projecting the lines of the existing rooms; (2) add walls of approximately 1-meter thickness (since the dimensions given in the tablet refer only to the interior of the rooms);²⁸ (3) add doorways located according to the architectural conventions of the day. For the resulting reconstruction see figure 16.10:a. If we compare this proposed reconstruction with (the considerably larger) House I from Babylon, Merkes (fig. 16.10:b), we can see that there is quite a high degree of similarity in terms of their general spatial organization.

The additional rooms added at the corners measure approximately 4.46 square meters (northwest corner), 2.20 square meters (northeast corner), and 6.13 square meters (southwest and southeast corners). Thus the house has a total roofed living space of about 112.10 square meters (93.18 [room measurements given in tablet] + 18.92 sq. m [corner rooms added]). The total house area including the walls is about 216 square meters. The courtyard is of a typical size (ca. 35.83 sq. m) though as a percentage (ca. 17%) of total house area it falls at the lower end of the known range.²⁹ The house itself is of a size typically owned by middle-ranking temple personnel, judging by the excavated housing associated with the precincts of the Eanna temple at Uruk and the ziggurat Etemenanki at Babylon. These range between 95 and 570 square meters, with an average size of 240 square meters and a median size of 216 square meters.³⁰ If the house was indeed associated with the family of Ninurta-aḥḥē-bullit, whose

²⁸ House walls in this period were significantly thicker than those of the Old Babylonian period; Miglus (1999, p. 184) cites widths of 1–2 meters for the walls of houses at Ur and Babylon.

²⁹ Based on the data collected in Miglus 1999, p. 342, table 28.

³⁰ Based on the figures presented in Miglus 1999, p. 341, table 27. For further discussion of house size and its correlation with different sectors of society, see Baker 2014.

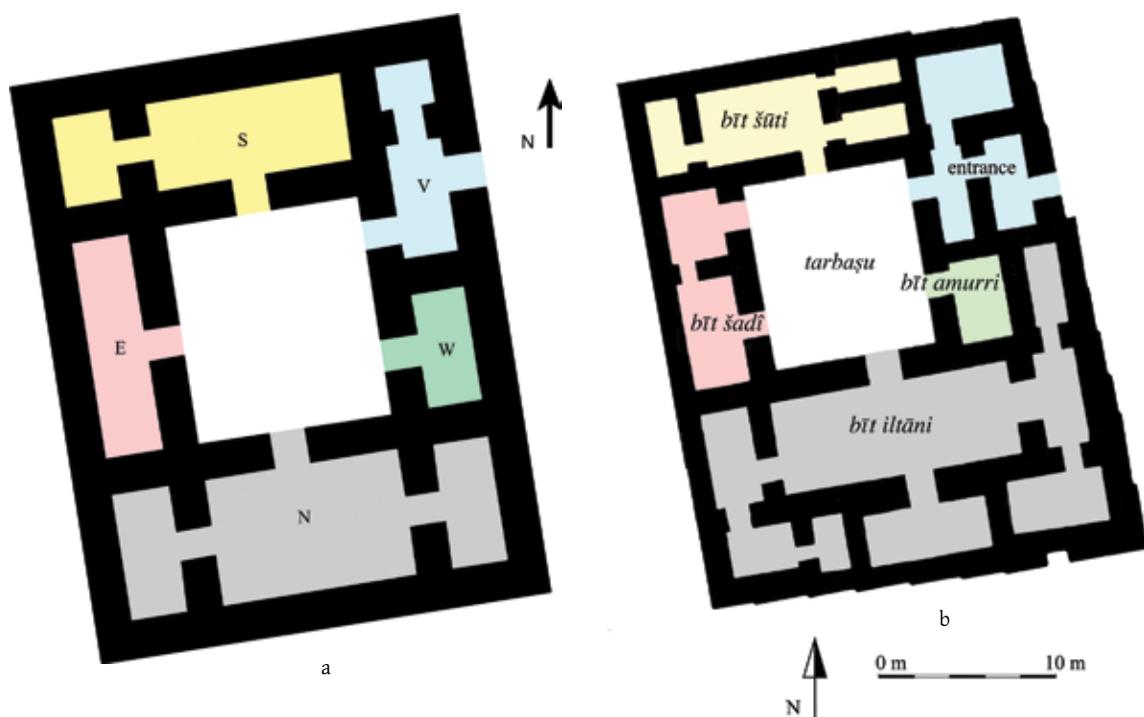


Figure 16.10. Comparison of (a) proposed reconstruction with (b) Babylon, Merkes, House I

members included temple brewers, then it conforms well to the housing typically occupied by people of their social status.

The purpose for which the tablet was originally drawn up remains obscure. In contrast to the detailed property surveys found in the contemporary house sale documents, which (unlike their Old Babylonian counterparts) calculate the total area based on the external perimeter of the plot (Baker 2004, p. 57), in this tablet it is the interior measurements of the main rooms which are given. An approximation to a complete survey could have been achieved by extending the lines of the existing rooms and by using an average wall thickness (just as I have done in fig. 16.10:a), but on balance it seems to me more likely that the tablet was drawn up to meet some private family purpose rather than as part of a formal property survey.

Case Study 3: The Šumāti Family of Hellenistic Uruk

The third and final case study involves the history of a house belonging to members of the Šumāti family in Hellenistic Uruk. The written documentation from Uruk at this time is particularly rich in the terminology relating to different parts of the house: numerous detailed urban property descriptions permit us to study the spatial organization of the house complex in the context of its immediate neighborhood. We can also make use of prosopographical data

relating to the owners and their neighbors. Problems include the impossibility of making any kind of statistical extrapolation as to which ownership/residence scenarios were the most common — we can simply illustrate the range of possibilities. Also, we have to bear in mind the scarcity of archaeological evidence for contemporary housing at Uruk that we might use as a control,³¹ although there is no real reason to suspect that the form of the housing differed significantly from that of other cities or from that of the Neo-Babylonian period.³² Despite a general strong degree of continuity with the Neo-Babylonian and Achaemenid periods, there are nevertheless some notable changes to be taken into account: in the Hellenistic period the oldest son no longer received a preferential share in the paternal estate (McEwan 1984, p. 227), there are signs of a substantial improvement in the economic position of women (Baker forthcoming), and, with regard to the property documents, the size of a house was no longer given in the tablets as a matter of routine.

When the cuneiform tablets from Hellenistic Uruk mention more than one sector of the same house, they do so in a fixed order, beginning with (1) the internal roofed space, progressing to (2) the internal unroofed space (courtyard) and any outbuilding located within it, and finally to (3) the semi-public space of the (privately owned) alley serving the house and linking it to the public space of the city's street network:

1. internal roofed space
 - 1.1. living suite (*bīt šadī* etc. = the main room/suite on a specific side of the house, directly accessible from the courtyard)
 - 1.2. its *dulbānu* (meaning uncertain)³³
 - 1.3. its bedroom (*bīt erši*, mentioned only very rarely but always in association with a specific main room/suite)
2. internal unroofed space
 - 2.1. courtyard (*tarbašu*)
 - 2.2. outbuilding (*asuppu*, always located within the courtyard)
3. semi-public space
 - 3.1. alley (*mūšû*, lit. “exit”; a blind alley, privately owned and shared between neighbors where necessary. Some houses were, of course, directly accessible from a public street, but where an alley served the house then it, or a share in it, was always the last named part of the house complex)

This case study concerns the transmission and transformation of a property through four generations of the Šumāti family. The property in question was situated in the Adad Temple district of Uruk. We are dealing either with two adjacent houses or with a double-courtyard house (cf. figs. 16.5–6). In each house the courtyard, located in the northeast corner, was enclosed on only two sides, west and south. I refer to these houses (or house sectors), which are treated in the tablets as one complex, as the “northern sector” and the “southern sector.” The transmission history of the property complex is summarized in the following paragraphs.

³¹ See Kose 1998, p. 380, fig. 232, for the small area of Seleukid housing excavated in squares U/V 18.65.

³² The continuity in conventions governing the written descriptions of houses tends to support this, as does the fact that at Babylon, Merkes, some of the Neo-Babylonian houses remained in use through to the Hellenistic period.

³³ CAD D 49 s.v. *dalbānu* (*dulbānu*) suggests “corridor, alley, passageway.” Such an interpretation is plausible, based on the identification of a textually attested *dulbānu* with a passageway under the stairs in the Rēš temple of Hellenistic Uruk (Baker 2013, p. 31). However, in the context of a first-millennium house it is hard to see what *dulbānu* might have referred to.

1st Generation (Reconstructed; before 180 B.C.; fig. 16.11)

Anu-aḥḥē-iddin owned the entire house complex; it had a street to the south and a blind alley along most of its eastern border (NB: according to the texts, the alley was roofed).

2nd Generation (Reconstructed; before 180 B.C.; fig. 16.12)

The double-courtyard house was inherited by four sons of Anu-aḥḥē-iddin: two sons shared the northern sector, and the other two sons shared the southern sector. Each son took a share of the courtyard belonging to the sector in which his share was located:

Northern sector:

- | | | |
|-----------------|----------------------|------------------------------|
| (1) Sumuttu-Anu | east(-facing) suite | + larger share of courtyard |
| (2) Ubār | north(-facing) suite | + smaller share of courtyard |

Southern sector:

- | | | |
|-----------------|----------------------|------------------------------|
| (3) Rīḥat-Anu | east(-facing) suite | + larger share of courtyard |
| (4) Nidinti-Anu | north(-facing) suite | + smaller share of courtyard |

3rd Generation (180–168 B.C.; figs. 16.13–14)

The whole house was divided up between six cousins, the grandsons of Anu-aḥḥē-iddin. This is recorded in the inheritance division document VS 15 39 // 40 // 49, written in 180 B.C.³⁴ The northern sector was shared between two cousins and the southern sector between four further cousins (two pairs of brothers). In the tablet the house is described and measured as ten individual quadrilateral plots, corresponding to the four shares of the previous generation as follows (fig. 16.13):

Northern sector:

- | | |
|---------------|--|
| (1) plots 1–3 | share of Anu-aḥḥē-iddin son of Sumuttu-Anu |
| (2) plots 4–5 | share of Illūt-Anu son of Ubār |

Southern sector:

- | | |
|----------------|--|
| (3) plots 6–8 | share of Iqīšaya & Anu-ab-ušur, sons of Rīḥat-Anu |
| (4) plots 9–10 | share of Anu-aḥḥē-iddin & Rīḥat-Anu, sons of Nidinti-Anu |

Some twelve years after the division, Anu-aḥḥē-iddin sold his share (plots 1–3) outside of the family, to a member of the Aḥḥūtu family (tablet VS 15 30, written in 168 B.C.; see fig. 16.14). Assuming that the buyer — or a tenant of his — actually took up residence, then the northern sector would now have been shared between unrelated individuals (Illūt-Anu and the new owner/tenant of the adjoining share).

³⁴ There are three extant exemplars. The tablets are not duplicates; they present the same information, but in a different sequence. Probably each heir took

a copy, and in each case his own share was described first.

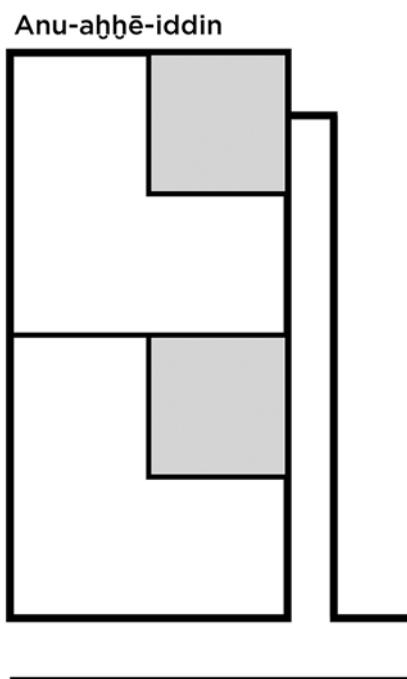


Figure 16.11. Schematic reconstruction of the house described in VS 15 39, first generation (before 180 B.C.)

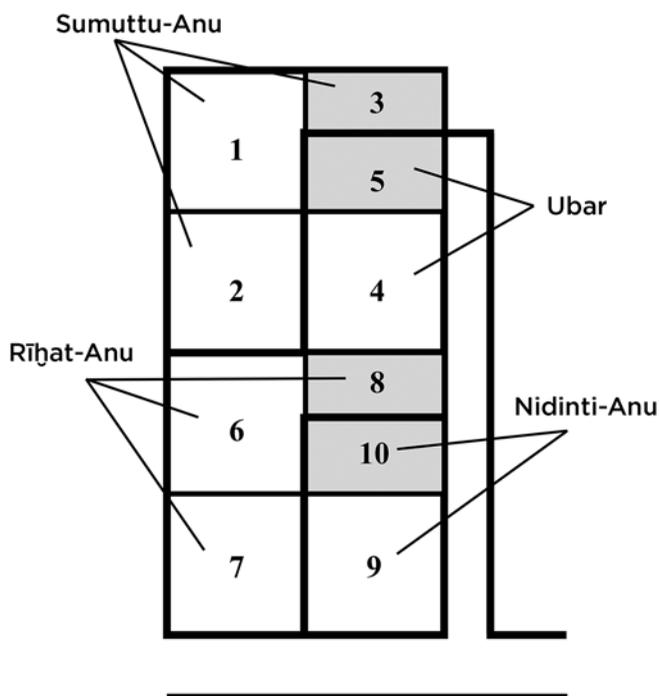


Figure 16.12. Schematic reconstruction of house described in VS 15 39, second generation (before 180 B.C.)

4th Generation (Partially Reconstructed; 151 B.C.; fig. 16.15)

A division was recorded on tablet YOS 20 78 (151 B.C.) between Nidinti-Anu son of Iqīšaya, and Rīḥat-Anu and Anu-aḥḥē-iddin sons of Anu-ab-ušur. (The division between three cousins implies that their fathers, the brothers Iqīšaya and Anu-ab-ušur, had shared the property without ever carrying out a formal division.) Thus, out of the four sons (second generation) of the original owner Anu-aḥḥē-iddin, the descendants of only one, Rīḥat-Anu, now had a stake in the inherited property (although some descendants of another, Nidinti-Anu, were still present). (We cannot tell whether the sons of Sumuttu-Anu and Ubar had died without heirs, or whether they had sold out to Iqīšaya in transactions which are now lost.) Although the first share (plots 1–3) had been sold out of the family during the previous generation, it seems to have been brought back into the family by Iqīšaya (third generation) at some point (documentation of this is lost), since it now formed part of the share of his son Nidinti-Anu. Iqīšaya had also acquired plots 4–5 from his cousin, Illūt-Anu son of Ubar. Like his brother Iqīšaya, Anu-ab-ušur had taken steps to enlarge his own share by acquiring an adjacent house to the east, on the other side of the alley. The alley itself was now truncated since its northern part was now apparently incorporated into the northern sector, whereas previously it had formed part of its eastern boundary (it had adjoined plot 4 and part of plot 5). The various shares were now distributed as follows:

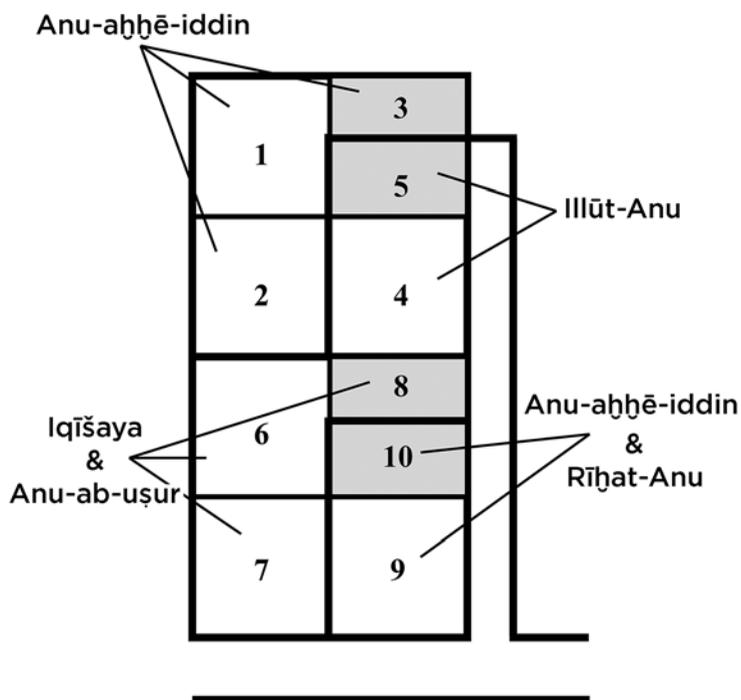


Figure 16.13. Schematic reconstruction of house described in VS 15 39, third generation (division implemented in 180 B.C.)

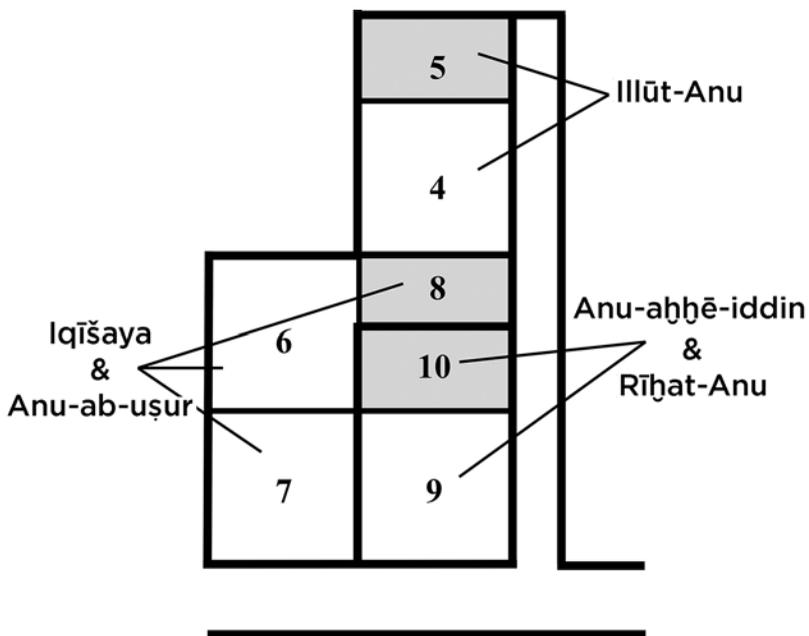


Figure 16.14 Schematic reconstruction following sale of part of house recorded in VS 15 30, third generation (168 B.C.)

Northern sector:

(1–2) plots 1–5 Nidinti-Anu son of Iqīšaya

Southern sector:

(3) plots 6–8 Anu-aḥḥē-iddin son of Anu-ab-ušur

[(4) plots 9–10 “sons” (unnamed) of Anu-aḥḥē-iddin (3rd gen.), not part of current division]

(5) new house Rīḥat-Anu son of Anu-ab-ušur

The physical transformation of the house over time is summarized in figure 16.16, and the family stemma is shown together with lines of descent and/or property transmission in figure 16.17. The transmission history of this house complex and the details contained in the tablets enable us to determine the approximate amount of living space allocated to the various heirs of generations 3 and 4; presumably each served as head of his own (simple) family household:

Northern sector:

2 × bīt šadî + larger share of courtyard:

(plots 1–3) 62 sq. m Anu-aḥḥē-iddin (3rd gen.)

bīt iltāni + smaller share of courtyard:

(plots 4–5) 46 sq. m Illūt-Anu (3rd gen.)

2 × bīt šadî, *bīt iltāni* + courtyard (now incorporating part of former alley):

(plots 1–5) 130 sq. m Nidinti-Anu (4th gen.)

Southern sector:

bīt šadî, *bīt pāni* + larger share of courtyard:

(plots 6–8) 72 sq. m Iqīšaya and Anu-ab-ušur (3rd gen.)

(plots 6–8) 96 sq. m Anu-aḥḥē-iddin (4th gen.)

NB: the size discrepancy between the third and fourth generations is unexplained; it may be related to the reconfiguration of the alley.

bīt iltāni + smaller share of courtyard:

(plots 9–10) 57 sq. m Anu-aḥḥē-iddin and Rīḥat-Anu (3rd gen.)

(plots 9–10) — unnamed sons of Anu-aḥḥē-iddin (4th gen.)

new house 72 sq. m Rīḥat-Anu (4th gen.)

According to Neo- and Late Babylonian house surveying conventions, these measurements would represent not only roofed space (as in Old Babylonian practice), but the entire perimeter of each share, including the walls. Miglus (1999, p. 184) observed that walls might occupy 50 percent or more of the total area of a Neo-Babylonian house, compared with 30–40 percent in Old Babylonian, so we must adjust our figures downward accordingly if we wish to represent the available living space. On the other hand, each courtyard occupied roughly one-third of its house (sector), despite being enclosed by rooms on only two sides. At ca. 34 square meters (northern sector) and 45 square meters (southern sector), they both fall within the known size range for the courtyards of excavated Neo-Babylonian houses, and also the proportion of the total house area that they occupy is within the attested range (Miglus

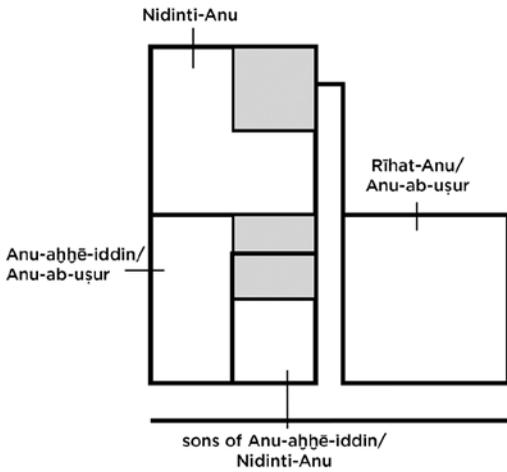


Figure 16.15. Schematic reconstruction following inheritance division recorded in YOS 20 78, fourth generation (151 B.C.)

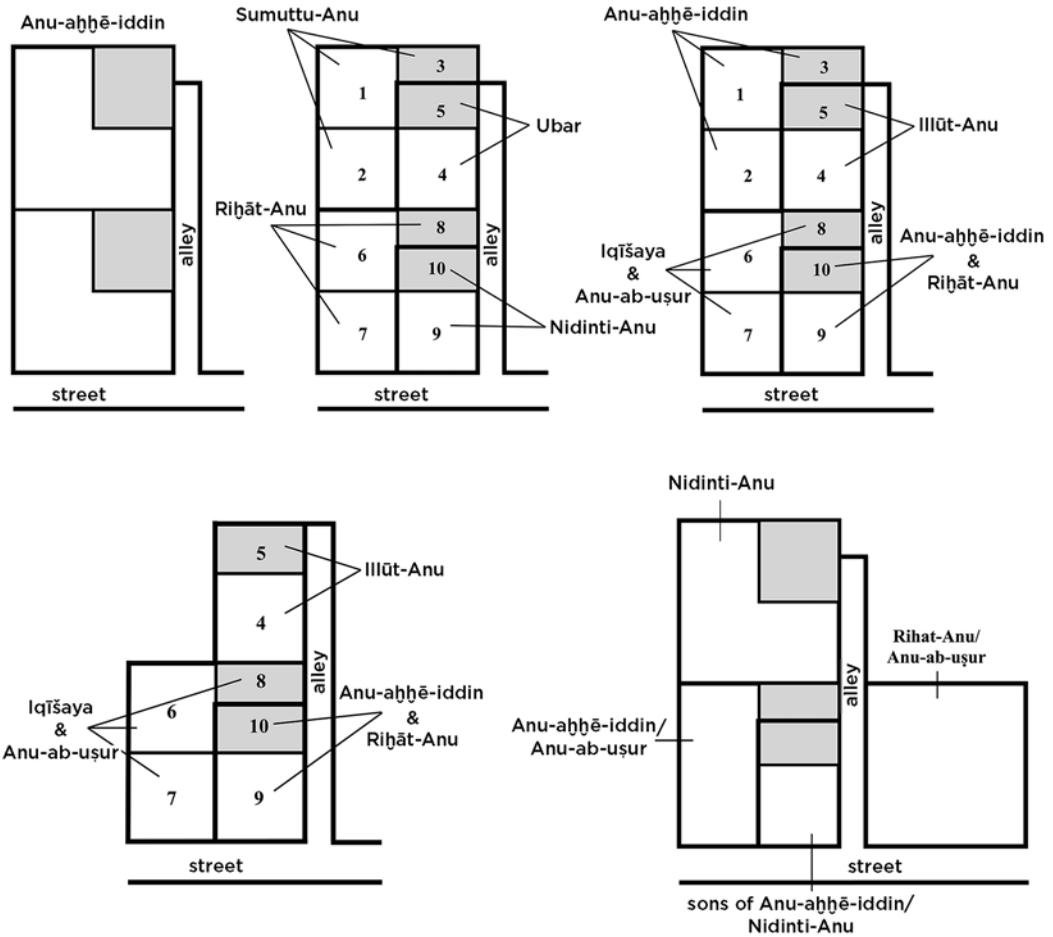


Figure 16.16. Overview of transformation of house and its ownership history through four generations

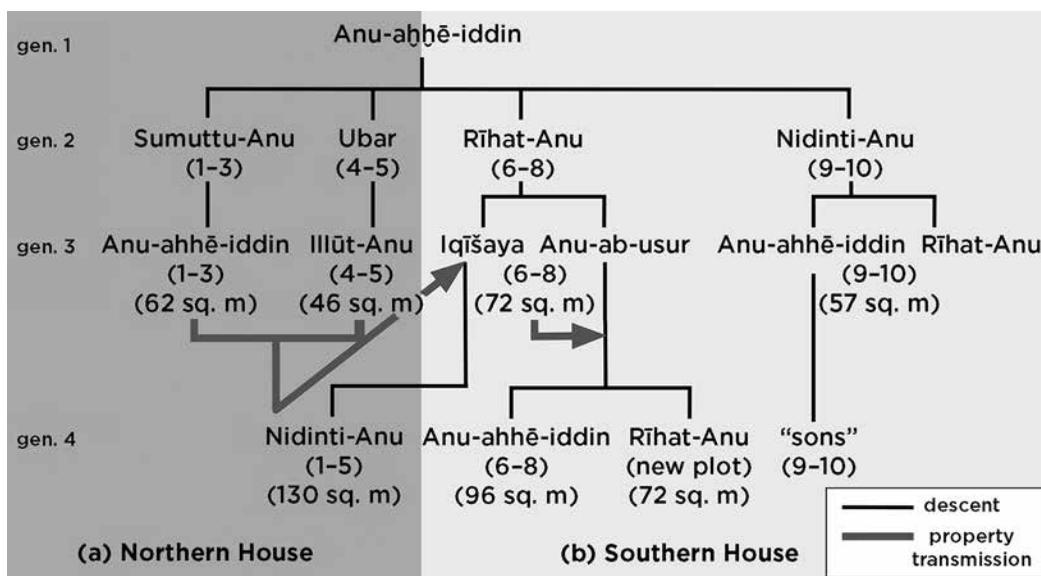


Figure 16.17. Šumāti family stemma showing transmission of property

1999, p. 342, table 28). This confirms the importance attached to courtyard space, even in relatively small houses with a lower roofed area and/or fewer rooms.

At this point it is worth making a few general observations. The size of the entire original house complex was about 238 square meters. This corresponds very well to the average size (ca. 240 sq. m) of house typically occupied by members of the middle-ranking temple personnel during the Neo-Babylonian/early Achaemenid period (sixth and early fifth centuries B.C.), based on excavated examples from Uruk and Babylon (Baker 2011b, p. 543). Bearing in mind that the house complex was originally in the hands of one man — Anu-ahhē-iddin — who was almost certainly a temple prebendary himself (his descendants were, and these offices were passed down from father to son), we are potentially witnessing a considerable degree of continuity over several centuries as regards the basic living circumstances of people belonging to this stratum of society.³⁵

We may compare the house of this case study with a property described in tablet VS 15 50 (lines 11–18), written in 178 B.C. This property comprises a house and unbuilt plot, situated in the Adad Temple district of Uruk (as in the house discussed above), and measuring 239 square meters in total (fig. 16.18). The property formed part of the inheritance share of Nidinti-Anu, a member of the Aḥḥūtu family, that is, a temple-related family that belonged to the Urukian élite.³⁶ In this case, the entire house was apparently in the hands of one man, and none of the neighbors can be identified for certain as a relative of his (none of them is among the other heirs named in the division tablet). Since the house itself is not being divided up, there is no information given as to its internal spatial organization. Moreover, according to this same division tablet, Nidinti-Anu also inherited another house measuring

³⁵ Note that the house discussed above in Case Study 2, which may well also have belonged to a temple prebendary, was of a similar size.

³⁶ On the Aḥḥūtu family, whose members included some of the very highest-ranking officials at Uruk, see most recently Monerie 2012.

about 687 square meters in a different part of the city, the Lugalirra Temple district. Much of this division tablet is unfortunately lost, but given that this one heir (out of a total of seven) received two houses, including a very large one, it is clear that the entire estate in this case was very much bigger than that of the Šumāti family discussed above. This presumably reflects the higher social status of members of the Aḫḫūtu family, whose ranks included high officials within the civic and temple community. Comparison with the Šumāti family house discussed above illustrates the difficulty of using house size alone as an indicator of household size and complexity, since we are dealing with two house complexes of practically identical size, but their conditions of ownership/occupation were completely different, as was the status of their owners.

Discussion and Conclusions

For the first time it is possible to determine with some confidence how the Babylonians of the first millennium B.C. called different parts of their houses, and to identify these sectors on the ground plans of excavated dwellings. Detailed study of textually documented scenarios for the shared ownership and use of houses provides vital context for understanding how the relevant terms were applied in everyday use. This close correlation of the terminology with known architectural forms helps us to understand the principles governing the allocation of living space within the extended family in circumstances that necessitated shared occupation.

I have focused especially on architectural units that formed self-contained suites and could be made into separate living spaces as the need arose. Since each suite of this kind was accessible directly from the courtyard, it could easily be closed off for the sake of privacy

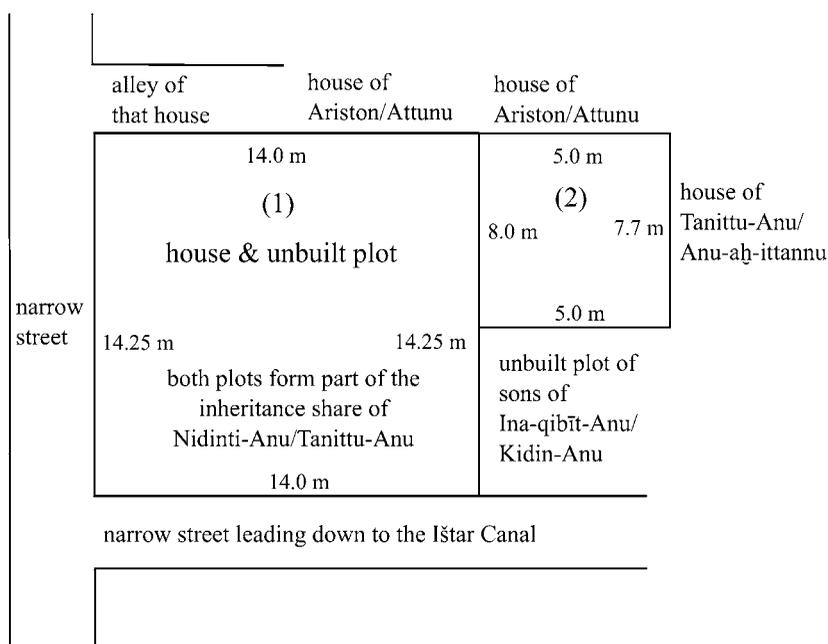


Figure 16.18. Schematic reconstruction of the house described in VS 15 50, lines 11–18 (178 B.C.)

by simply shutting the door (cf. Bianca 2000, p. 77, writing of “houses within the house”). There is some archaeological evidence to suggest that when houses of this period were physically divided into separate living suites, kitchen facilities remained in communal use (Baker 2010, pp. 189–90, 192–93), and in two cases the kitchen was located in a room that we now know corresponds to a *bīt amurri*.³⁷ There are many examples in the cuneiform tablets of suites being assigned to individuals under varying circumstances — whether through inheritance, dowry, marital gift, widow’s settlement, rental arrangement, etc.³⁸ — and so it seems reasonable to suggest that such a suite formed the standard minimal living space normally available for allocation to an individual or a simple family unit when a house had to be shared between members of an extended family.³⁹ (Of course, more than one suite could be allocated to an individual or family, as demonstrated by Case Studies 1 and 3.) I noted above that in the southern sector of House IV, Merkes, it is possible to identify a *bīt iltāni* measuring about 65 square meters and a *bīt amurri* of 52 square meters. Units of this size range occur often in the corpus of textually documented “houses” of known size, which lends support to my contention that the allocation or transfer of these architectural units as living space lies behind a fair number of the extant legal transactions. This is not to say that a typical courtyard house, conceived as comprising four such sectors, would normally accommodate four simple family units. In fact, division of a house between four parties is rarely attested in the written documentation: where possible, strategies were adopted to counteract the unwelcome effects of excessive fragmentation (see below). I am simply arguing that when a house was divided up for shared ownership and/or occupation, a suite of this kind was, under normal circumstances, the basic unit of division. It is no coincidence that areas of 5 and 6 Babylonian reeds (ca. 61.25 and 73.50 sq. m, respectively) are the most frequently occurring “house” sizes in the texts, since a house sector of this size would be equivalent to one of these suites. Occasionally this is made explicit in the written sources, for example, the tablet TuM 2/3 2 (Borsippa, 493 B.C.) involves a 5-reed *bīt šūti* (south-facing suite) given as dowry. Similarly, in the British Museum tablet BM 33092 ([Babylon], 564 B.C.) a *bīt iltāni* (north-facing suite) is given by a man to his wife; it forms part of a 20-reed (ca. 245 sq. m) house. In this latter case it can be assumed that the *bīt iltāni*, as the largest suite containing the main living room, occupied somewhat more than a quarter (61.25 sq. m) of the house’s total area.

The great antiquity of the courtyard house in the Near East has often been noted by scholars of traditional Arabic-Islamic housing, with particular reference to the AH quarter of Old Babylonian Ur.⁴⁰ Similarly, in his study of the Old Babylonian housing at Ur, Brusasco draws attention to strong similarities in design between the Ur houses and the traditional “oriental houses” of modern Iraq (see Brusasco, this volume). Using a space syntax approach, he situates these within the wider context of Eurasian societies that shared broadly the same patterns of residence and inheritance, comparing them with houses in African society based on “a matrilineal system with matrilocal residence and lateral inheritance and relative

³⁷ Similarly, for the Old Babylonian houses Brusasco (2004, p. 143) distinguishes between living room suites, on the one hand, and facilities such as kitchens, stairways, lavatories, and workrooms which were accessibly directly from the central courtyard, on the other hand.

³⁸ For details, see Baker forthcoming.

³⁹ There are also textually attested instances where parts of houses were rented by outsiders.

⁴⁰ E.g., Hakim 1986, p. 95 with fig. 25; Bianca 2000, pp. 56–58; Ragette 2003, p. 52. For an account of the excavations at the AH site at Ur, see Woolley and Malloy 1976, chapter 2 and plan on pl. 124.

equality and lack of tension.”⁴¹ The Babylonian housing of the first millennium has not yet been examined from such a perspective; in the present study I have adopted a different and — I hope — complementary approach that focuses on matching the Babylonian terminology with known architectural forms and on analyzing the resulting scenarios in the light of contextual information drawn from the contemporary written sources. The outcome of this process on the one hand highlights regularities in how the Babylonians conceptualized domestic spatial organization, and on the other hand it reminds us of the unending variation in domestic living arrangements.

Despite the significant differences from housing of the earlier second millennium highlighted above, the configuration of the typical Neo-Babylonian house nevertheless betrays a concern for family privacy that has very close parallels with its Old Babylonian counterpart as well as with the traditional housing of the Islamic world.⁴² Nor are the available comparanda limited to the ancient and traditional housing of the Middle East, since the Babylonian houses bear comparison with other courtyard house traditions in antiquity. For example, many of the key features which Lisa Nevett identifies in what she terms the “single entrance, courtyard house,” based on her study of fourth-century B.C. houses at Olynthos (with parallels at other Greek sites; see Nevett 1995 and this volume), are also found in the typical Babylonian house of the first millennium B.C. Once again, the shared features are particularly those which served to promote domestic seclusion: a single door from the outside; the blocking of direct visual access to the house’s interior, and the use of an open courtyard to control access to different parts of the house. Nevett concludes that these measures served to regulate social relations, in particular by restricting contact between the women of the household and unrelated male visitors. In Babylonia domestic seclusion was promoted not only by the configuration of the house itself, as detailed above, but also often by the use of blind alleys leading into the heart of the residential blocks.⁴³ These served as semi-public space, being owned (jointly, where necessary) by the occupants whose house(s) they served.⁴⁴

Another respect in which it is worth considering the Babylonian evidence in a cross-cultural perspective concerns the textual references to shares of houses: what exactly did this mean in real terms for the inhabitants of those houses? What were the potential problems posed by dividing up houses repeatedly, and what measures were taken to mitigate them? The phenomenon of fragmentation is attested in other ancient societies that have produced comparable corpora of everyday documents, for example, in medieval texts from the Cairo Genizah, house fractions as small as 1/48 are attested (Goitein 1983, pp. 82–83). Clearly, such small shares are most unlikely to have corresponded to actual units of living space, and it

⁴¹ Brusasco 2004, p. 150. For a more detailed account of his work on Ur, which draws on the cuneiform tablets found within the houses as well as on the archaeological evidence, see Brusasco 1999–2000.

⁴² Bianca 2000, pp. 77–80; Ragette 2003, pp. 75–77. See also Fentress 2000, pp. 21–22, who links the configuration of the traditional Arab house, especially the use of the central courtyard to control activities and communication, and the bayonet entrance which screened the courtyard from sight, with the patriarchal family whose members were subordinate to the male head of the household.

⁴³ The terminology reflects the perspective of the inhabitant, not the visitor, since the word for a blind alley (*mūšû*), also often used to refer to the house entrance itself, is formed from the verb “to go out.” Similarly, Brusasco (2004, p. 152) notes that both the Ur houses and the Islamic houses were conceived “from the inside outwards.”

⁴⁴ The textual evidence shows that blind alleys are under-represented in the excavated housing areas of the first millennium B.C. (Baker 2007, p. 70). On this extension of domestic space into the semi-private space of the street network, cf. Abu-Lughod 1987, p. 168 n. 83.

is assumed rather that they functioned as monetary units. Similarly, fractions of houses are attested in the papyrological sources from Ptolemaic and Roman Egypt (see Muhs, this volume; also see, e.g., Hobson 1985; Muhs 2008; Rowlandson and Takahashi 2009, p. 121), and these must also often have represented spaces so small that they could not realistically have been apportioned as living space. These houses (e.g., those at Ptolemaic Hawara studied by Muhs) are not all of the courtyard type, so they are not necessarily directly comparable with the Babylonian ones, but nevertheless it may be instructive to compare the various strategies adopted to mitigate the undesirable effects of repeated division, a phenomenon generally associated with partible inheritance. According to Brian Muhs, one strategy adopted at Ptolemaic Hawara was to use “virtual” fractions whereby houses were only divided in theory, not in practice (Muhs 2008, p. 188). The typical Babylonian courtyard house of the first millennium B.C. lends itself very well to division since, as noted above, the principal suites around the central courtyard were normally self-contained and the available living space could easily be divided up without recourse to physical modification.⁴⁵ However, there are no written references to actual house shares smaller than one-fourth (smaller shares in ancillary structures are attested, albeit very rarely). It is clear from this that the Babylonian house shares were always “livable,” that is, they referred to an actual share in living space and never developed into the tiny “unlivable” shares attested in the Cairo Genizah and in the Roman Fayum,⁴⁶ whose value lay not so much in their utility but in the fact that they could be converted into money.

There are a number of possible reasons for the differences between Babylonia and Egypt in this respect. One is the Babylonian practice of assigning a preferential share to the oldest son (although by the Hellenistic period — which has produced much of our written evidence for the shared ownership/occupation of houses — this was no longer done).⁴⁷ Another factor may be that in Greco-Roman Egypt sons and daughters inherited equally, whereas in Babylonia only sons enjoyed a right of inheritance. Dowry was a potential means by which daughters could share in their paternal estate; however, the documentation indicates that only a minority of dowries actually contained any urban property (Roth 1991–93, p. 26 n. 109). Also, the properties owned by women in first-millennium B.C. Babylonia were significantly smaller than average (Baker forthcoming). These factors clearly worked to limit the degree to which houses might become fragmented,⁴⁸ but of course ultimately much depended on the size of the paternal estate in relation to the number of surviving male heirs. In Case Study 1

⁴⁵ Such modification, when it did take place, was implemented primarily by blocking doorways and/or creating new ones, so as to alter circulation patterns; see Baker 2010. When the term “party wall” (Akk. *amaštu*) occurs in the documents it tends to feature as a wall dividing two different shares, that is, it normally refers to a wall within a house rather than to an external wall shared between neighboring owners.

⁴⁶ Hobson 1985, p. 225 (referring to shares as small as 1/27).

⁴⁷ On Neo-Babylonian inheritance, see Oelsner, Wells, and Wunsch 2003, pp. 938–40; for inheritance in Hellenistic Babylonia, see McEwan 1984.

⁴⁸ Another reason why fragmentation never developed in Babylonia to the extreme degree that it did in Egypt may be the scarcity of land available for house building in Egypt, since agricultural land was at a premium. The houses of the Fayum typically had a much smaller footprint, and tended to extend vertically rather than horizontally, with often two or even three stories (Muhs, this volume). The Babylonian houses were considerably larger on average, and upper stories were rather uncommon, as noted above. Moreover, although urban land was certainly at a premium in Babylon during its heyday in the sixth century B.C., in general the pressure on space in urban Babylonia was not so great as to inhibit extended family households from fissioning.

(YOS 6 114) I discussed an inheritance division of a considerably larger than average house shared between four heirs. Despite the necessity to share (assuming these men did actually occupy the quarters they inherited), their living conditions would have been very different from those of, say, the occupants of a house like the one described in tablet AO 17648 if it had to be shared between four heirs. It goes without saying that such circumstances radically affected the possibilities for designating specialist activity areas within the house. The heirs themselves, or their descendants, could counteract fragmentation by buying out one another's share(s) or by other forms of mutual adjustment; this was quite a common strategy in the first millennium B.C., as it had been in the Old Babylonian period (see Stone 1981 for a case study from Old Babylonian Nippur). The sheer range of different household scenarios attested in the texts makes it difficult to extract quantitative data for the study of household demography since it is not possible to determine how representative any particular situation was.⁴⁹ On the other hand, this same variability opens up enormous possibilities for further research into modeling the household cycle and investigating processes of transformation within urban residential neighborhoods.

Abbreviations

AO	siglum for objects in the Musée du Louvre, Paris (Department of Near Eastern Antiquities)
BM	siglum for cuneiform tablets in the collections of the British Museum (Department of the Middle East)
TuM 2/3	see Krückmann 1933
VS 15	see Schroeder 1916
YOS 6	see Dougherty 1920
YOS 20	see Doty 2012

⁴⁹ For this reason I have attempted elsewhere to present a series of “benchmark” dwelling sizes, each associated with a known family scenario or with a specific social group or class (Baker 2014, pp. 18–21).

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Reconstructing Houses and Archives in Early Islamic Jēme

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This paper examines evidence for houses and archives in Early Islamic-period Jēme (Medinet Habu, Egypt) dating from the eighth century A.D. in order to better understand how they functioned. Despite the fact that both the archives and the houses from the site have been studied extensively, neither has been examined within their full archival or papyrological context. As will be demonstrated in this paper, the archives from the site have not been fully understood and this has implications for interpreting not only house ownership at Jēme, but also how houses were divided through families. First, this paper will look at how archives can be reconstructed in Egypt and other regions, before turning to Jēme in the Early Islamic period and then concentrating on one of the archives. It will then turn to looking at the houses themselves and how the papyri can be used to better understand them. While it is not possible to associate a particular surviving house with any texts, they provide us with an idea of the type of house that was described. Finally, the terminology used in house archives from the site will be compared to other Greek- and Coptic-language house texts in order to determine how the house terms compare. The purpose of this is to understand how this material fits into what we know about the Early Islamic period.

Reconstructing Archives in Egypt

As this author has observed elsewhere (Vorderstrasse 2013), while the study of archive reconstruction has occurred over a long period in other fields of papyrology, Coptic and Arabic papyri have not been subject to the same intensive scrutiny. The presence of archives in Coptic papyri is well known and Sarah Clackson was one of the first papyrologists to use museum archaeology to determine the provenience of papyri. Museum archaeology is the study by which archives are reconstructed on the basis of the time of their discovery. If they are found in archaeological excavations, then this is straightforward (provided that the material has been correctly recorded). On the other hand, many papyri do not have a secure provenience and it is therefore necessary to use museum archaeology to reassemble the archives. If the papyri were collected by known travelers to Egypt or collectors of antiquities, one can use information about when items were acquired in Egypt or purchased to begin to establish the time when the papyri were actually found (Vandorpe 1994; Clackson 2004; Muhs and Vorderstrasse 2008).

* I would like to thank the audience members for their helpful comments in the presentation of this

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In the case of papyri concerning houses, it is necessary to trace the house through time rather than the owners. The houses can and do change owners through time and therefore the same people mentioned in papyri do not necessarily form an archive. Rather, by tracing the house and its neighbors, as well as when the papyri were found, we can come to a better understanding of when different archives were actually acquired and which papyri in fact belong together. The reason for saving such house archives was so that the owners could prove that they had clear title to the house (see Muhs, this volume). This meant that the house could then be sold if necessary. If an owner could not prove clear title, there was always the possibility that someone else might dispute the ownership of the property in court. Such disputes could go on for literally centuries, as the New Kingdom property dispute of the lawsuit of Mose has demonstrated. Therefore, the owners in the case of any dispute could use sale or inheritance contracts. The last known owner of the archive is the last known property holder. The archive may also contain other documents that are not immediately evident as part of the archive, such as marriage contracts of neighbors or other documents.¹

Jēme in the Early Islamic Period

The site of Jēme is located at Medinet Habu, the mortuary temple of Ramesses III, on the western bank of the Nile at Thebes (modern Luxor). The west bank of Thebes is a rich archaeological landscape and by the early Islamic period had been the site of pharaonic tombs and mortuary temples that continued to be used into the Greco-Roman period and subsequently in the Early Byzantine and Early Islamic periods. Settlements, monasteries, and hermitages occupied both pharaonic and Greco-Roman monuments.² The town of Jēme had been built in and around the mortuary temple of Ramesses III that was constructed around 1150 B.C. (fig. 17.1). The monument had remained in continuous use although its significance changed through time from a site of cultic importance to one where houses were constructed, already starting in the Twenty-fifth Dynasty.³ The number of houses seems to have fallen in the Late Period (sixth–fourth centuries B.C.) and continued in the Ptolemaic period, but settlement of Jēme particularly increased in the Roman period perhaps because of the protection afforded by the enclosure wall. This continued through the Roman into the Early Byzantine and Early Islamic periods, with a peak of occupation between A.D. 600 and 800 (fig. 17.2). While Jēme may have been an important town in the Theban area in the Byzantine and Early Islamic periods, it was not a major settlement in the larger landscape of Early Islamic Egypt. It was under the control of the *pagarch* or emir who was based in the larger and more important town of Armant, which was located 15 kilometers south on the west bank of the Nile.⁴

This and other sites in the area are traditionally seen as being inhabited by Coptic Christians and therefore they are usually referred to as being “Coptic.” The term is a cultural one

¹ Gardiner 1905; Brown 1970, p. 13; Husson 1983, p. 13; Pestman 1983, pp. 281, 283, 291, 293; Martin 1994, pp. 569–70, 573; Pestman 1997, pp. 8, 10; Muhs 2005, pp. 170–71, 175–76; Vorderstrasse 2013, pp. 298–92.

² Lecuyot 1992; Lecuyot 2000; Wilfong 2002, pp. 1, 4–6; Römer 2004–05, p. 80; O’Connell 2007, p. 245; O’Connell 2010, p. 253; van der Vliet 2010, pp. 149–51.

³ Hölscher 1954, pp. 1–10; Wilfong 2002, pp. 1, 3; O’Connell 2007, p. 245; Teeter 2010, p. 1.

⁴ Hölscher 1954, pp. 3–10, 14–16, 34–35; Steinwenter 1967, pp. 9–11; Till 1962, pp. 234–35; Timm 1984, pp. 152–82; Wilfong 2002, p. 7, no. 26; Wilfong 2003b, p. 188; O’Connell 2007, p. 245

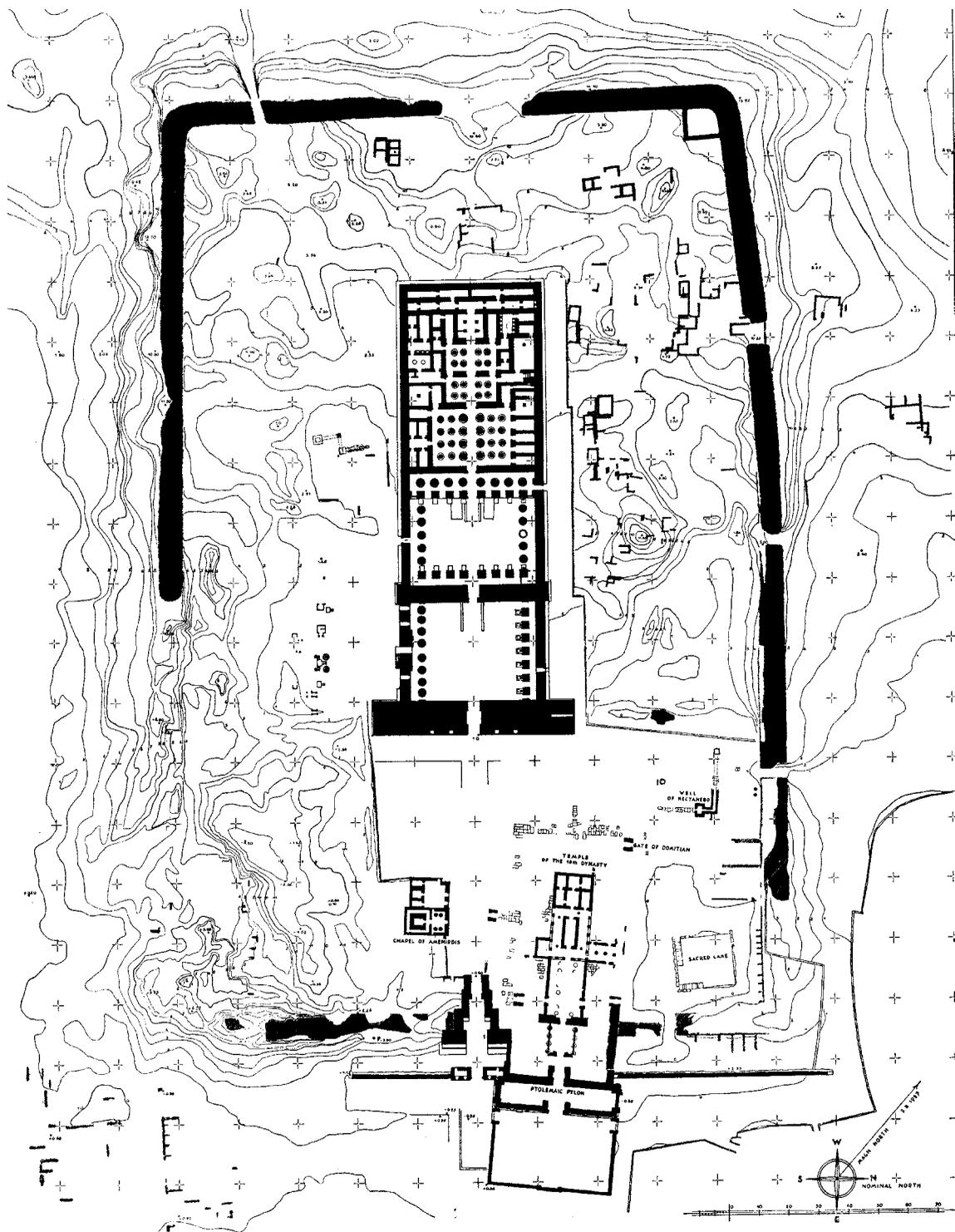


Figure 17.1. Ground plan of Medinet Habu (after Hölscher 1934, pl. 1)

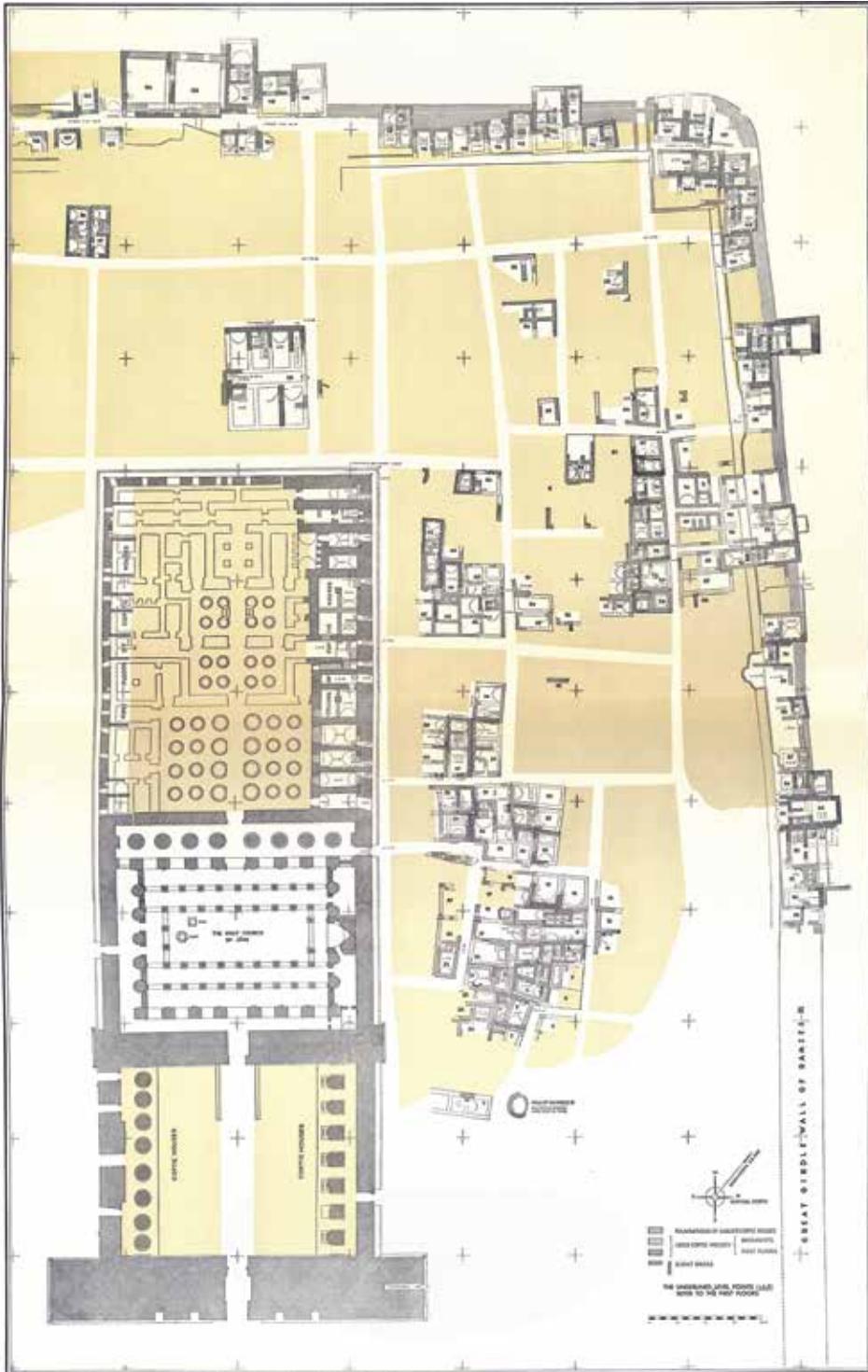


Figure 17.2. Map of the “Coptic” settlement of Jeme in the Ramesside temple of Medinet Habu (after Hölscher 1934, pl. 32)

that obscures the fact that the site was clearly a part of Early Islamic Egypt. There has often been a disconnect between “Islamic archaeology” and “Coptic archaeology” in Egypt, and “Coptic” is an elastic term that is used for a variety of centuries in Egypt and its definition varies according to the author (Wilfong 2002, p. xx; Mikhail 2004, pp. 971–72). Essentially the term “Coptic” can be used to describe material culture dating to after the Christianization of Egypt in the fourth century until about the eighth or ninth centuries, thereby covering what is known as the “Late Antique” period or the Late Roman/Early Byzantine and Early Islamic periods (Wilfong 2002, p. xx; Wilfong 2003b, p. 188, no. 63).

Nevertheless, some authors are now starting to specify this period as “Early Islamic” (Papaconstantinou in press; Vorderstrasse 2013, pp. 304, 308–09). This article, building on my earlier work, prefers to see Jēme not solely as a Christian Coptic-speaking settlement but rather as a settlement within Islamic-period Egypt that happens to be inhabited by Christians who spoke Coptic. Indeed, while Thebes is often seen as a bastion of Christian Coptic culture in Islamic Egypt and is usually seen in isolation from the events taking place in the rest of Egypt in this period, that is actually not the case even if legal traditions continued from previous periods (MacCoull 2009, pp. xxi–xxiii). A seventh/eighth-century Arabic document from Jēme has been recently published, for instance, which records the sale of a house between an Arab-speaking woman in Jēme who was deceased and a man with a Coptic name. The witnesses listed in the document include two with Arabic names (Ḥasan ibn ‘Abdallāh and Sa’īd ibn Sa’d) and one who is called non-Arab who has a Coptic name (Yuḥannis Philotheos). In addition, there are unpublished Arabic ostraca from the site (Kaplony-Heckel 1992, p. 165, no. 3). All of this points to the presence of Arabic speakers in the village (Liebrenz 2010). Further, Arabic ostraca have been found at the nearby monastery of Phoebammon (Deir el-Bahri) (Godlewski 1986, p. 140, nos. 17–19) and the verso of KRU 78 which concerns the monastery of Phoebammon is written primarily in Arabic (Turaev 1903, pp. 95, 99, pl. 4). This argues that the region was not as culturally isolated from the rulers as one might have assumed. Therefore, we should see the site as being a part of Islamic Egypt, albeit a majority Coptic-speaking Christian one.

Terry Wilfong, however, characterizes settlement in western Thebes as simply continuing the material culture from the Greco-Roman, Byzantine, and to a lesser extent, pharaonic periods (Wilfong 2002, p. xx). He sees the apogee of the settlement being in the eighth century, but by the 780s, the town was “entirely abandoned.” He cites archaeological evidence found by Uvo Hölscher, the excavator of the site, that the town was deliberately abandoned because the wooden doors were missing from the buildings at site and doorways were entirely walled up (see Hölscher 1954, p. 38). Indeed, Wilfong categorically states that there is no “significant activity” in western Thebes after A.D. 785 due to the suppressions of a tax revolt against the Abbasids by Diḥya ibn Mus’ab. Both he and Włodzimerz Godlewski discount later evidence such as the Coptic stela from the Ramesseum that dates to the late ninth century, and tenth–thirteenth-century graffiti at the monastery of Phoebammon (Deir el-Bahri), which Godlewski believes comes from pilgrims visiting the abandoned ruins of the monastery rather than being proof of further activity there.⁵

⁵ Hölscher 1954, p. 38; Godlewski 1986, pp. 76–78, 144–45; Wilfong 2002, pp. 107, no. 25, 151–54; O’Connell 2007, p. 258. For a historical discussion of the revolt, see Kennedy 1998, pp. 78–79. For more

on the family of Diḥya, who was descended from the Umayyads, see Ahmed 2007, p. 440; Ahmed 2011, p. 70, no. 317.

Archaeological evidence points to occupation in western Thebes not only in the seventh–eighth centuries, however, but also later in the Islamic period.⁶ At Theban Tomb 32, for example, the excavators suggest there was occupation in the tomb from the Early Islamic period until at least the eighteenth/nineteenth centuries (Kárpáti 1998, pp. 11–14; Kákosy and Schreiber 2003, p. 209). Therefore, the evidence tends to argue against the desertion of the region after the eighth or ninth centuries A.D., a view that is based primarily upon the Coptic textual evidence.

When one turns to assessing the occupation of Jēme in the Early Islamic period, one encounters a number of difficulties. The Oriental Institute under Uvo Hölscher conducted the excavations in 1927–1932 over a series of six seasons.⁷ Excavation techniques have obviously changed since then and while Hölscher mentions the stratigraphy, he does not provide a lot of information about what he found. Further, it is clear that the excavations did not retain all of the objects. Hölscher clearly only retained a fraction of the pottery and hardly any glass. It is clear that the excavators only illustrated (and presumably retained and recorded) whole or nearly whole objects (Hölscher 1954, pp. 71, 74–78, pls. 40:31–33, 48) rather than that certain categories of objects, such as glass, were not common at the site (Wilfong 2002, pp. 14–17). Some objects, furthermore, were not fully studied in the final publication. Items that came to the Oriental Institute Museum in Chicago could be re-analyzed (Teeter 2003; Wilfong 2003b; Teeter 2010), but other objects that remained in Cairo have not been studied. The coins, for instance, were only described in fairly general terms while the Coptic ostraca that were returned to Egypt from Chicago, discovered in the basement of the Egyptian Museum in Cairo, have apparently been sent to the Coptic Museum (Hölscher 1954, pp. 37, 50; Krause 2010, p. 76).

There is also the problem that even prior to Hölscher's excavations at the site, it had been extensively mined for *sebakh* (for similar problems elsewhere in Egypt, see Picardo, this volume). This meant that by the time Hölscher started his work at the site, much of it was already gone before the excavations and the stratigraphy was extremely disturbed. Despite these problems, there were still some houses that were quite well preserved because the *sebakh* diggers were not interested in this mudbrick. Nevertheless, not only did they dig into the houses and below their foundations in search of *sebakh*, but they also removed buildings when necessary, meaning that much of it had been destroyed by the time that it was excavated.⁸ The *sebakh* activities may also explain why he did not find any Ptolemaic-period remains even if the period is well represented in the papyri. It is possible that they were in the part of the temple that was mined in the nineteenth century (Römer 2004–05, p. 105, no. 151, with references). Hölscher described the ruins as “merely a waste of ruins, barrenness, hopelessness and decay” (Hölscher 1934, p. 1).

⁶ Leblanc 1984–85: p. 60; Feucht 1985, nos. 203, 228, 231, pls. 52–53; Myśliwiec 1987, pp. 178–79; Seyfried 1990, p. 184; Assmann 1991, p. 236; Meyer 1996; Rose 1996, pp. 173–74; Strudwick 1996, pp. 116, 121; Kárpáti 1998; Lecuyot 2000, pp. 128–29, no. 33; Bavay 2010; Simony 2010, pp. 171, no. 61, 173, no. 69, 181.

⁷ Hölscher 1934, p. 2; Teeter 2003, pp. 1–2; Teeter 2010, p. 1. Teeter, in both publications, gives the date of the excavations as occurring from 1926 to 1933. This is based on the fact that a survey of the site was conducted in 1926, even though excavations did not

begin until later in 1927. The Medinet Habu expedition ended in 1933 with the division of the finds. Krause states that there was a Philadelphia Museum excavation at Jēme (Krause 2010, p. 76), but no such excavation exists. It is possible that he may mean the Philadelphia Museum expedition to Dra Abu Naga, but this is not clear. For an overview of the archaeological work in western Thebes, see O'Connell 2010. ⁸ Hölscher 1934, pp. 1–2, 4, pl. 32; Hölscher 1954, p. 45; Teeter 2003, pp. 1–3; Wilfong 2003b, p. 188; Römer 2004–05, p. 80, no. 4.

When he began to excavate, Hölscher found that settlement at Medinet Habu was quite extensive in the Roman period, far more so than in the previous Achaemenid and Ptolemaic periods. The entire temple area was almost filled by the third century A.D. but the Roman-period houses were not well preserved because the cellars of the Early Byzantine/Early Islamic houses cut into them and the activities of the sebakh diggers destroyed them. Hölscher found a fairly well-preserved group of Roman buildings north of the temple of Ramesses III. He identified at least two building levels⁹ dating to the Roman period, which he defined as being 30 B.C.–A.D. 395, sometimes including divisions between Earlier, Middle, and Late periods, although the dates for the individual periods are usually not given. The houses from the earlier period were poorly preserved and had thin walls, while the houses in the higher stratum had thick walls (1.0–1.5 m).¹⁰

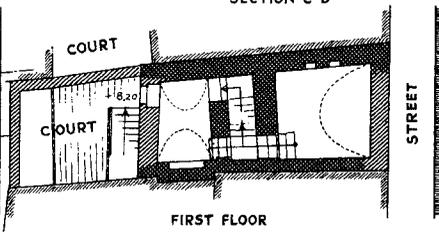
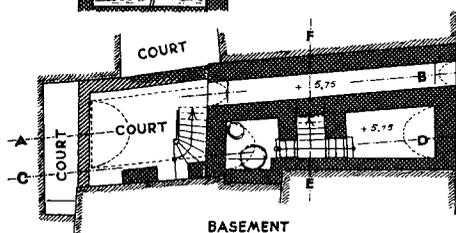
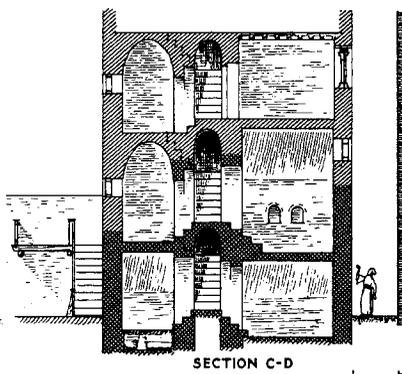
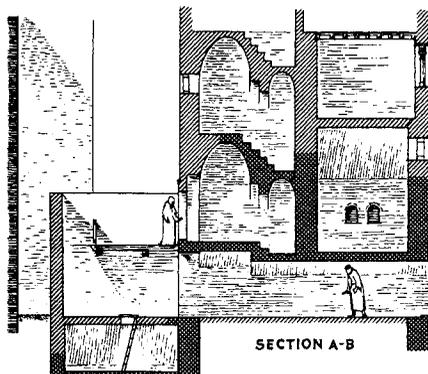
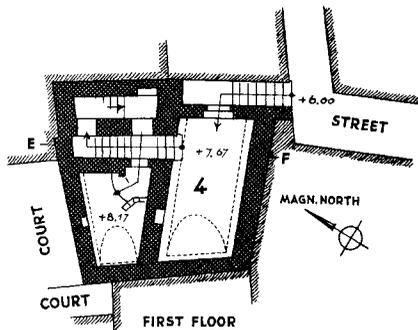
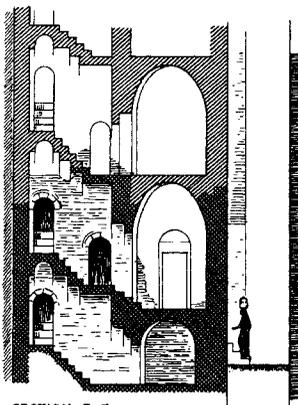
The buildings documented from the Roman period did not continue into the Early Byzantine/Early Islamic period. Indeed, the houses changed to adapt to a much more crowded settlement and one no longer sees the wide houses with thick walls of the previous period (figs. 17.2–5). The Late Antique town covered an area of at least 11 hectares at the time of its largest extent in the seventh and eighth centuries. The inhabitants used, as the earlier residents of the precinct had, the pharaonic-period buildings of the mortuary temple as a framework around and into which to build their town. In addition, there were houses outside the mudbrick enclosure wall. The buildings were built from mudbrick and the excavations found about 100 examples organized in large blocks (*insulae*). Through time, increasing numbers of houses were crowded together and the streets were narrowed. Some houses had multiple doorways that Wilfong suggests could have been condominiums, but the doorways may have changed due to the continuously rising levels of the streets, which were between 1.5 and 1.8 meters wide; some alleys were only 95 centimeters wide. It is likely that it would have been very dark (Hölscher 1954, p. 45, fig. 54; Wilfong 2002, p. 9 and map in fig. 2; Wilfong 2003b, p. 188). In describing the town, Hölscher states: “It must have had a large number of inhabitants, probably some tens of thousands, closely penned together, wretched and dirty, as became the oppressed conditions of the Copts” (Hölscher 1934, p. 1, pl. 32, shows a photograph of the houses).

The houses themselves were multi-story (although these tend not to be well preserved) with two or three stories with a central staircase and rooms on either side. There was usually a cellar below the ground floor as well. The courtyards were often absent or narrow and the houses themselves were also probably quite dark, since the windows tended to be few and located high up in the building. Additionally, the entrances to the house were usually very narrow (60–80 cm wide only) and the stairs were also narrow and steep, again 60–80 centimeters wide.¹¹ Hölscher described the last settlement as being no later than the ninth century A.D. (Hölscher 1934, p. 1). The dating of the period, which Hölscher defines as the “Coptic period,” is between A.D. 395 and about 800. It is divided into two periods: earlier Coptic and

⁹ Hölscher suggests that the lower strata houses “could” be mid-first to mid-second century A.D. and that the upper strata were mid-second to mid-fourth century.

¹⁰ Hölscher 1934, pls. 5, 10, 12, 14–15, 33; Hölscher 1954, pp. 36–37, 39, fig. 42, pls. 23D, 24A, 25; Wilfong 2002, p. 3; Teeter 2003, p. 3.

¹¹ Hölscher and Nelson 1931, pp. 51, 53, fig. 33; Hölscher 1954, pp. 38, 45–46, 49–51, figs. 52–53, 55, pl. 29 (29A is reproduced here as fig. 17.4), 30–31, 41–44; Wilfong 2002, p. 11.



COPTIC HOUSE №8

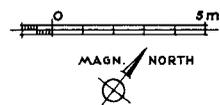


Figure 17.3. "Coptic" houses from Medinet Habu (after Hölscher 1954, pl. 41)



Figure 17.4. Photograph of “Coptic” houses at Jēme (Oriental Institute Museum Photo 44231/Negative 29481; published previously in Hölscher 1954, pl. 29A)

later Coptic (*ibid.*, pls. 10, 32, 54). He suggested in 1931 that the first phase dated from the third to the fifth century and the second phase from the sixth to the eighth century (Hölscher and Nelson 1931, p. 51).

Jēme Legal Papyri and Reconstructing Archives

Houses are attested in many documents from Jēme/Medinet Habu, including house sales, wills, and loans. Many of these texts in turn belong to archives. Although these texts are well known and have been studied



Figure 17.5. Photograph of a “Coptic” house at Jēme (Oriental Institute Museum Photo 14260/Negative 29418; previously published in Hölscher 1954, pl 31A)

frequently, the actual archives from which they come have not been well understood. The texts are known to be from “archives” but the question is which archives and what texts should belong together. Not all the archives will be considered here, but several will provide an idea of some of the types of texts that are known.

There are a variety of individuals in Jēme who acted as moneylenders and houses (or parts of houses) were sometimes used as security.¹² In CLT 10, for example, Maria the daughter of Martha puts up her portion of a house for security in exchange for a loan. The house would remain in the possession of the lender until it was repaid, or kept by the lender if the debt could not be repaid (Schiller 1932, pp. 80–83; Cromwell and Grossman 2010). In KRU 16, Shenetōm son of Joseph with John and his wife Rachel “sells” to Senuthius son of Phoebammon his wife’s house in order to clear their debt (Crum 1905, pp. 194–95, no. 415; Till 1954, pp. 100–02). Clearly, although the document is supposed to be a sale, it is really a confirmation that the debt cannot be repaid and that Senuthius son of Phoebammon is the rightful owner of the house, should there be any dispute in the future.

It is clear from the fact that some of these loans find their way into large archives of moneylenders that these debts could not always be repaid and remained in the possession of the moneylenders. As Brian Muhs has noted in this volume, houses increasingly were seen as investments in Egypt through time and in this period that is evident given the number of times they are attested in the papyri and used as collateral for debt and seem to be bought as investments.

In addition, it is clear that individuals living next door acquired some of the houses, probably because they wanted to expand their property. This is not surprising, given the small size of houses available in the town. In the Arabic sale document from the site mentioned above, Šanūda (Shenute in Coptic) buys part of the house that is next door to him, but the text does not make it clear precisely what he owned next to the house he bought. Although Boris Liebrecht suggests that the writer may have either accidentally omitted the word house (*bait*) or perhaps intentionally did not use it twice for stylistic reasons (Liebrecht 2010, pp. 301 [Arabic text], 302 [German translation], 309 [commentary]), there is no evidence that the property next door was a house.

In another instance, neighbors who did not live next to each other but did live on the same street, married each other, lent each other money, and ultimately acquired the house of their relative. The phenomenon of neighbors marrying each other has been well attested in earlier periods (see Muhs 2005 and this volume) and in Jēme this occurred in one of the largest and most studied archives from Jēme: the Archive of Pisenuthius son of Senuthius. There has been considerable scholarly discussion as to whether or not this and other texts relating to Medinet Habu were actually found together at the site of Deir el-Bahri in Thebes in the 1850s, where the monastery of Phoebammon was located, or if the archives from Jēme were found in the town. The assumption has generally been that the papyri were found together in a box in the 1850s (Godlewski 1986, pp. 54–55; Wilfong 2002, p. 49; Cromwell 2007) that initially was said to only contain Greek and Coptic papyri from the monastery, thought to be Deir el-Bahri/monastery of Phoebammon (Goodwin 1859, pp. 237–38). In 1863, Charles Goodwin stated that Jēme papyri were discovered together in a box at or near Thebes and

¹² For an overview of this phenomenon in the Early Islamic period in general, see Papaconstantinou in press. For a list of moneylenders from Jēme, see Pa-

paconstantinou 2010, pp. 640–46. For a study of an individual female moneylender from the town, see Wilfong 1990; Wilfong 2002, pp. 117–49.

that they were lodged in the monastery of Phoebammon for safe-keeping (Goodwin 1863, pp. 447-48). This has been connected to reports of the discovery of a box that contained hieroglyphic, hieratic, and Demotic papyri in a tomb of a Coptic monk at Deir el-Medina or an unnamed location (Vassalli 1867, pp. 145-46; Maspero 1882, p. vi). Frederic Kenyon, on the other hand, simply stated that the monastery of Phoebammon documents in the British Museum were found together in the ruins of a monastery in 1856 (Kenyon 1893, p. 231).

While more recent scholars dismissed the idea that all the contents attributed to the box were found together, they have primarily accepted the idea that the monastery of Phoebammon and the Jēme/Medinet Habu papyri were found together. They argued that the monastery served as a store for documents from the nearby village of Jēme, even if they were not all found together in the same library.¹³ Other scholars have argued that the papyri come from Medinet Habu itself, including Hölscher (Hölscher and Nelson 1931, pp. 50-51; Cromwell 2007, p. 61). A. Arthur Schiller, who after initially accepting the traditional theory about the provenience (Schiller 1932, p. 3), then believed only the monastic papyri were kept at the monastery, while the Jēme material was stored in the town (Schiller 1951, pp. 328-29).

When the acquisition dates of papyri are examined, however, it is clear that the two finds cannot be connected. The monastery of Phoebammon papyri were all collected in the 1850s (when dates of acquisition can be specifically determined) and date to the seventh/early eighth century, while the Jēme/Medinet Habu texts that were supposed to be stored in the monastery were not collected at that time. The archive of Pisenuthius son of Senuthius was collected in the early 1860s and dates throughout the early and middle eighth century (Cromwell 2007; Cromwell 2013b; Vorderstrasse forthcoming). While the lack of papyrus finds at the excavations of Medinet Habu has been used to argue that papyri could not be from there (Cromwell 2007, p. 61), this is not necessarily the case. When Hölscher finally began excavating the site of Medinet Habu, the site had already been greatly disturbed and clearly if the papyri had been stored in a house, that house would have already been excavated by local workmen. Further, another possibility is that the papyri were actually stored in a central storage depository in the village. In the absence of a definite findspot, it is difficult to know where the site was. Interestingly, there were houses in the monastery of Phoebammon that were owned by individuals who lived in Jēme. In KRU 19, Hello son of David assigns a house to his children that he had bought within the monastery to replace another sold by him to Kosmas son of Joseph (Crum 1905, p. 195; Till 1954, pp. 103-05).

The archive of Pisenuthius son of Senuthius seems to have been collected in the early 1860s and must therefore be considered separately from the monastery of Phoebammon texts that were all collected in the 1850s. Traditionally, the documents from the archive of Pisenuthius son of Senuthius have not been considered together, but rather have been thought to belong to different archives. This is because it has generally not been recognized that British Library Pap. CI recto and verso (KRU 35 and KRU 115) belong to the two different families who were connected by marriage. As the two families' archives run concurrently before Isaac son of Abraham and Elizabeth married Tsone daughter of Germanos, the two halves of the archive are considered separately to prevent confusion (see family tree, fig. 17.6). Recently, Jennifer Cromwell reconstructed the half of the archive belonging to the heirs of Germanos (Cromwell 2013a) and the entire archive (Cromwell 2013b).

¹³ Winlock and Crum 1926, p. 10, no. 3; Godlewski 1986, pp. 54-55; Wilfong 2002, pp. 20, 49; Cromwell

2007, pp. 61-62; Cromwell 2013a, p. 134; Cromwell 2013b, p. 230.

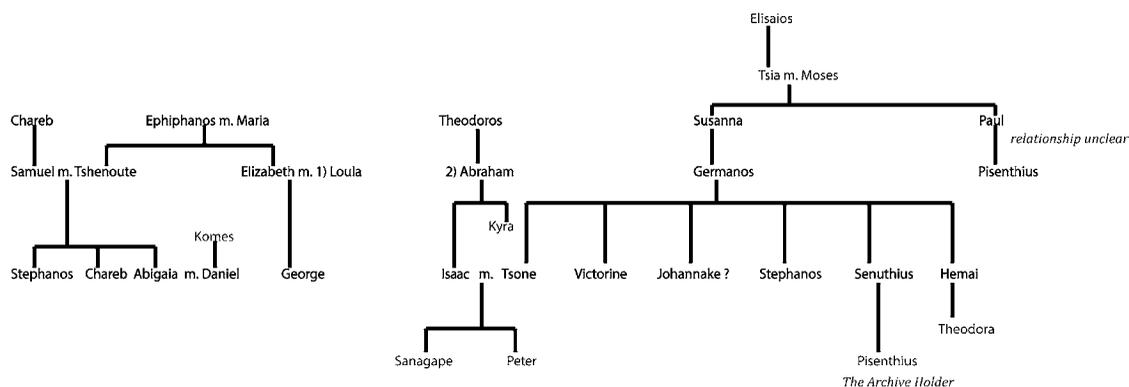


Figure 17.6. Family tree of the archive of Pisenthius son of Senuthius

The legal dispute between Elizabeth and her niece Abigaia, the daughter of her dead sister Tshenoute, has been studied in considerable detail (Schiller 1952, pp. 335–43; Wilfong 2002, pp. 47–66). When Elizabeth’s mother Maria died, her house on Kulol Street was divided between the two surviving heirs: Elizabeth and her niece Abigaia, who presumably received her dead mother’s portion (KRU 35). The text and subsequent reconstructions suggest that the house on the Kulol Street was divided exactly in half vertically, specifying common areas including the staircase, outside door, and entrance hall and stating that it was possible for someone to build in their portion and build their own staircase (see figs. 17.7–8).¹⁴ In her will (KRU 68), Elizabeth then proceeded to leave her portion of the house to her second husband Abraham when she died, which would then go to her children by her second marriage, Isaac and Kyra, disinheriting her son George by her first husband.¹⁵ Other texts in the archive do not deal with the house specifically but rather concern the inheritance of Elizabeth as a whole and difficulties between Elizabeth and her son George who she wanted to disinherit and after her death between the disinherited George and his half-siblings (Wilfong 2002, pp. 64–66).

Elizabeth’s son Isaac married Tsone, the daughter of Germanos, whose family also had a house on Kulol Street. It is the texts concerning Isaac and his sons Sanagape and Peter that form the key to connecting the two families together. Isaac goes into debt to Senuthius (KRU 58) son of Germanos, who is his brother-in-law, and promises to hand over his new house on the Cistern (*UHI*) Street¹⁶ if the debt is not paid. On the verso of this text Isaac’s son Peter seems to have continued the debt for the same house with Senuthius, his uncle, presumably after Isaac died (Crum 1905, p. 201; Till 1964, pp. 139–40; Cromwell 2013b, p. 215). One assumes that Peter was not able to pay back this loan and the house went into his uncle Senuthius’ hands and thereby into the hands of Pisenthius.¹⁷

KRU 115, on the other hand, is a document of security where Senuthius stands surety for his brother-in-law Isaac and Isaac’s other son, Sanagape (Crum 1905, p. 205; Till 1964, p. 195;

¹⁴ Crum 1905, p. 197; Schiller 1952, pp. 336–39; Till 1954, pp. 111–14; Wilfong 2002, pp. 50–58, reconstruction fig. 4; Römer 2004–05, pp. 88–89.

¹⁵ Crum 1905, p. 187; Schiller 1952, pp. 339–40; Till 1954, pp. 177–83; Wilfong 2002, pp. 58–62.

¹⁶ Thus not his share in the house on the Kulol Street that had belonged to his grandmother Elizabeth.

¹⁷ This interpretation differs from Cromwell 2013b, pp. 215, 230–31.

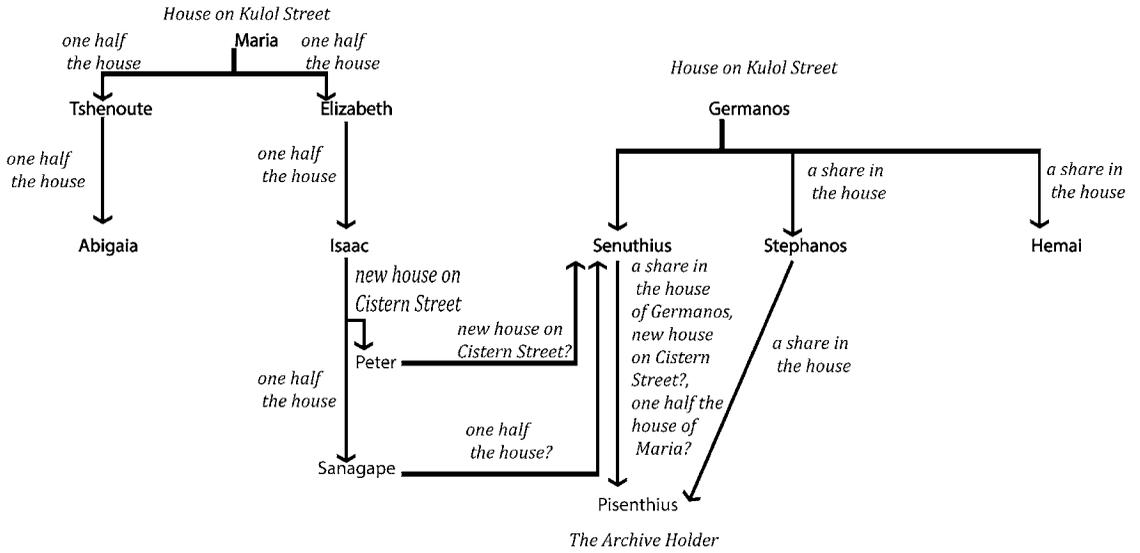


Figure 17.7. Family tree showing how the houses were inherited

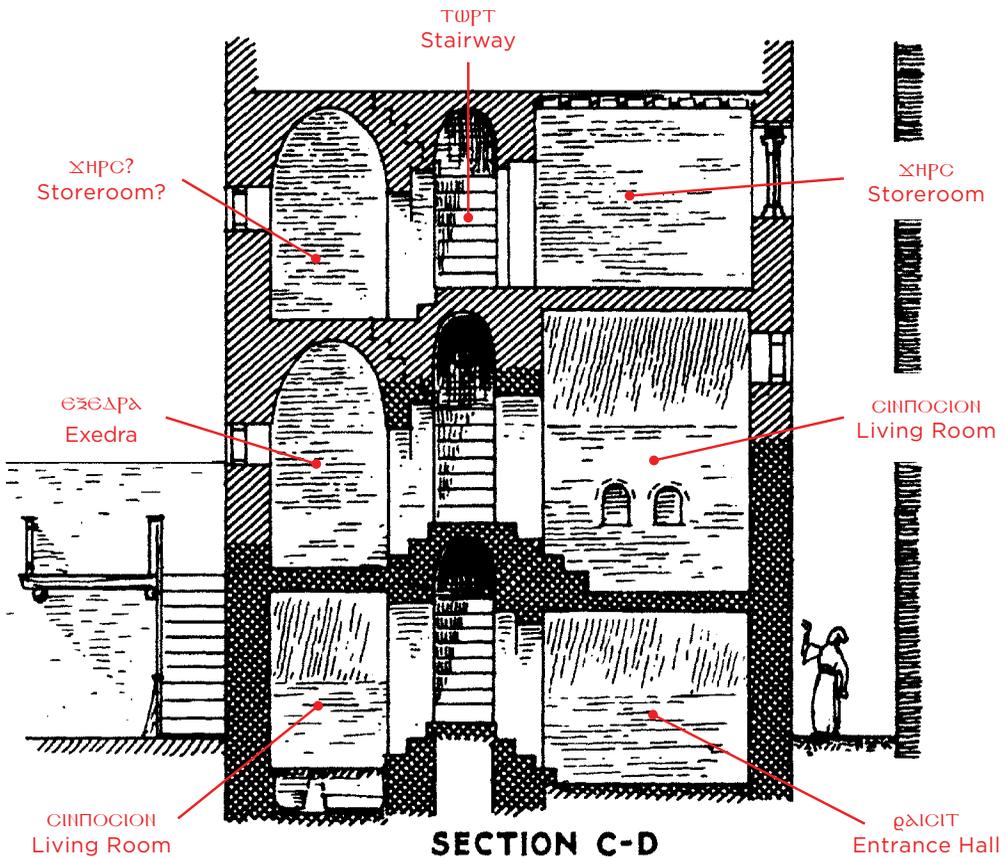


Figure 17.8. Possible distribution of the rooms mentioned in the house held between Abigaia and Elizabeth on Kulol Street (after Hölscher 1954, pl. 41, and Wilfong 2002, fig. 4)

Cromwell 2013b, pp. 215–16, 230–31). Cromwell thinks this may have been the resolution to the outstanding debt owed by Isaac to Senuthius and therefore how the property went into the hands of Senuthius, although she cannot explain why it is Sanagape and not Peter who is involved (Cromwell 2013b, pp. 230–31). If, however, this document relates to another loan, in this case involving half the house in Kulol Street, this could explain why the documents concerning this house also ended up in the hands of Senuthius. One possibility is that Isaac died, leaving his debts behind. He may have divided the inheritance, leaving the new house on Cistern Street to his son Peter¹⁸ and to Sanagape the half of the house of his grandmother Elizabeth, although this is less clear from the surviving evidence. Therefore, it is the sons of Isaac not Isaac himself who could not repay the loan, which therefore explains why all these documents concerning two separate houses were in the hands of Senuthius, who presumably became the new owner.

Further, this document re-uses KRU 35 (mentioned above), which directly links the two archives together. Some scholars suggested that Isaac son of Abraham mentioned in this archive and Isaac son of Abraham who is Senuthius' brother-in-law were the same person, but Walter Till never made the connection between the two archives (Till 1954, p. 81) and Cromwell was initially not clear if they were the same person or not (Cromwell 2013a, pp. 132–33) but later concluded, "this relationship seems certain" (Cromwell 2013b, p. 218).

The other part of the archive concerns Susanna and the children and grandchildren of her son Germanos, including Senuthius and his son Pisenuthius, the archive holder (see fig. 17.6). Susanna's will, which is preserved in the archives in two copies (see below), not only seemed to be concerned about making certain her grandchildren, the children of her son Germanos, inherited, but also that the children of her brother Paul were not able to make any claims. She left to her sons Hemai, Senuthius, and Stephanos the house she had inherited from her grandfather and mother that was on Hak Street. She left to her daughters her part of the house that she inherited from her father (KRU 66 and 76).¹⁹ Although most of the archive concerned immediate members of the family, Senuthius and his son Pisenuthius also had a will from Tbasbes daughter of Apa Viktor and Thrabonia (KRU 70). In this will her "father" Senuthius (who is actually the priest Senuthius) and his son Pisenuthius received her house with the exception of a room in the house where Tbasbes lived, which she and her mother had sold to Tsone daughter of Leontios. It is not entirely clear why they would have sold the room in the house to Tsone, except that she had rebuilt a wall that had collapsed. This seems to have been an important point and presumably explains why the text repeats this fact twice (Crum 1905, p. 186; Till 1954, pp. 185–88; Cromwell 2013b, pp. 215, 224). It may have been that Tbasbes could not afford to repair the house and that Tsone had the resources to do so. Regardless, it shows that different families actually did live together in the houses in Jēme, even if they were very small.

The rest of the archive concerns Senuthius and his son Pisenuthius and other members of the extended family. Two of these relate to Pisenuthius son of Paul (KRU 10), who was involved in a property dispute with the brothers (Stern 1884; Till 1964, pp. 102–06; Cromwell 2013a, pp. 137–38; Cromwell 2013b, p. 214). Then Pisenuthius sold half his house to Hemai and Senuthius (KRU 21). This text, however, is not specific about the various rooms in the

¹⁸ And thereby explaining why Peter goes into debt again to Senuthius and is mentioned in this papyrus without his brother Sanagape.

¹⁹ Stern 1884, 1888; Crum 1905; Till 1954, pp. 158–69; Schaten 1997; Cromwell 2013a; Cromwell 2013b, pp. 215, 224.

house (Steindorff 1891; Till 1964, pp. 120–23; Cromwell 2013a, p. 138; Cromwell 2013b, pp. 215, 224–25), presumably because this was not important. It is probable that Pisenthus son of Paul was actually a cousin, the son of Susanna's brother Paul, but this cannot be proven (Cromwell 2013b, p. 217).

KRU 39, which dates to A.D. 748–759, confirmed Senuthius' share of the house that was divided between Germanos' heirs. Senuthius received entire or parts of rooms and specifies that certain areas, including the entrance hall and stairs, were held jointly (Crum 1905, p. 198; Till 1954, pp. 124–26; Cromwell 2013a, p. 138; Cromwell 2013b, pp. 215, 222, 224). Another text (KRU 40) written at around the same time confirmed the share in the house held by another one of the brothers, Stephanos and what he received, including once again parts of rooms and entire rooms (Revillout 1876, $\overline{\text{ϩ}}\overline{\text{ⲛ}}^{\text{ⲁ}} - \overline{\text{ϩ}}\overline{\text{ⲟ}}$; Till 1954, pp. 127–28; Cromwell 2013a, p. 138; Cromwell 2013b, pp. 215, 222–23, 231).

In 759 (KRU 20), Stephanos sold to Pisenthus son of Senuthius his share of the house and the various rooms, but it also notes the new construction in the house by the other brother, Hemai (Crum 1905, pp. 188–89; Till 1964, pp. 118–20; Cromwell 2013b, p. 215).²⁰ This explains why the confirmation of the share of the house held by Stephanos (KRU 40) is in the archive. Presumably when his share of the house was sold Stephanos handed over the document that proved he had clear title to the house to his nephew. It shows that the archive holder is Pisenthus son of Senuthius, because he can be identified as the last known archive holder.

The reason that the archive became as large as it did was presumably because of the dispute. It is evident in cases where there had been no dispute, it was simply sufficient to state that the seller had inherited the house or bought the house from someone else. In some cases, the ownership of the house would be given going back even further. In the archive of Senuthius son of Aaron, for instance, Senuthius buys a whole house (KRU 14; Crum 1905, p. 190; Till 1964, pp. 110–13). The description of the house sale states that the seller had inherited it from his father, who had bought it from another woman. It was important to establish clear title, therefore indicating that the seller had the right to sell the house and there would be no other claimants to it in the future, but the previous sales documents do not always appear in the archives.

Another large archive that documents houses in Jēme is that of Christodouros son of Daniel, although this archive has received far less attention. The majority of the papyri in this archive belong to his father, Daniel son of Pachom, who clearly lent money to other residents in Jēme (Papaconstantinou 2010, p. 640). The most interesting document from this archive for this article concerns the will in which Daniel son of Pachom bequeaths his house to his son Christodouros, a house that was left to him by his father (KRU 71). Daniel's married daughters Katharon and Mariham will have no claims on the house. The neighborhood, however, is interesting because it lists the neighbors in the area and almost all of them are members of the family: in the north is the house of Daniel's daughter Katharon and her son Athanasios, while in the south is a new house that Daniel built (Crum 1905 p. 188; Till 1954, pp. 188–91). He then gives a house to his daughter Mariham and her husband Papnute (KRU 116; Crum 1905, p. 188; Till 1954, pp. 212–13). The purpose of writing KRU 71 appears to be that Daniel wanted to prevent his son from inheriting a house that could be divided between

²⁰ For a reconstruction of the house, see Römer 2004–05, fig. 3. See also fig. 17.9.

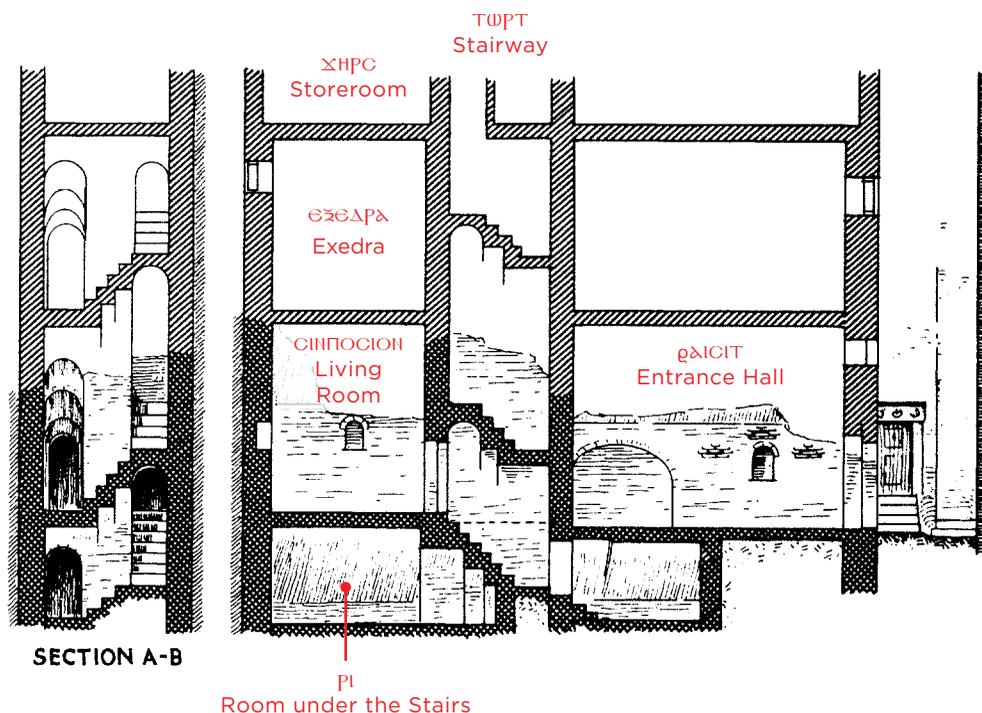


Figure 17.9. Possible distribution of the rooms mentioned in the house of the heirs of Germanos on Kulol Street (after Hölscher 1954, pl. 42, and Römer 2004–05, fig. 3)

him and his sisters (Daniel's daughters). Daniel clearly wanted his daughter Mariham, at least, to inherit an entire house by herself and he made certain that she would do so.

The reason for writing KRU 71 is likely to prevent all the disputes that we see in other houses in Jēme. This document ensured that Christodouros would inherit the entire property himself, just as KRU 116 ensured that Papnute and Mariham would have another house, although they were required to live in it. Further, it is evident that the family all lived in close proximity to each other. The archive holder appears to be Christodouros, who himself lends a solidus to a debtor, apparently continuing the family practice of lending money, clearly demonstrating that the family of Koloje documented by Wilfong were not the only family of moneylenders in Jēme (Wilfong 1990; Wilfong 2002; Papaconstantinou in press, pp. 9, 20).

It is clear from the Jēme papyri that at least some houses were physically split between the two parties, despite their relatively small sizes. This is something that is suggested in the Teshlot papyri as well.²¹ The same is true of the courtyards of these houses, which again could be split into fractions and then sold. In such situations, it is permissible to build on the courtyard, make additions, or tear it down, even if one only owned a fraction of it (P KRU 6, BL 4872 Richter 2010, pp. 137–38; KRU 9, MacCoull 2009, pp. 62–63). It was common to own shares of houses rather than a whole house, but it is not clear how these various owners used the houses and whether or not individuals who shared in the houses all lived there together

²¹ Green 1983, p. 74. The translation for line 12 is, however, problematic.

or separately (Huebner 2013, pp. 40–41). But in some cases it does not appear that the rooms could have been lived in by the individuals who owned the houses. In CLT 7, for example, Menas son of Athanasius, acting as an agent for his brothers, sells the room underneath the stairs to the south to two brothers, Severos and Daniel son of Samuel. This house, which they inherited from their mother, is located in a house that does not belong to any of the transacting parties. The text notes that they shall acquire it, administer it, and keep it and then can leave it and have possession forever (Schiller 1932, pp. 64–71).

As this text makes clear, people can own even very small portions of houses. It is clear that other people wish to acquire these rooms, even if there is only one, and are interested in buying them, probably as investments. In addition, the papyrus does not state that any of the rooms are held in common that would be needed to use to reach this part of the house, as is mentioned in other archives (see above). This argues that if rooms are to be held in common it will be mentioned in the documents and that such arrangements may not have been the rule but rather the exception.

House Terminology in the Papyri

The archives from Medinet Habu contain a number of terms for parts of houses in the texts which have been discussed at length. These include words whose meaning is fairly obvious, such as staircase (*TΩPT*) and entryway (*QAEIT*) (Wilfong 2002, p. 51; Römer 2004–05, pp. 98–100, nos. 98–99). Others are more vague and problematic, however, such as *συμπόσιον* and *ἐξέδρα*. *Συμπόσιον* is transliterated in Coptic in a variety of ways (Förster 2002, p. 769) (table 17.1) and while it originally referred to a dining room, Genevieve Husson and others have argued that it likely lost its meaning through time and was a word used for a room that had multiple purposes, not only dining, but also sleeping and living. The fact that there are multiple *symposia* in both the Coptic and Greek sixth-century Patermouthis archive from Syene and the later Coptic Jēme papyri would seem to confirm this assumption (Husson 1983, pp. 267–71, 319–20; Husson 1990, pp. 125, 127; Clackson 1995, pp. 102, 105; Saradi 1998, pp. 34–36). In the Early Byzantine period, it is primarily attested in Upper Egypt and Oxyrhynchus, while in the Early Islamic period the term is largely confined to Upper Egypt (Schiller 1961, pp. 194–95, 197–98; Husson 1990, p. 127). It may therefore not be coincidental that the formulae in the Coptic deeds of transfer were the same in Thebes, Syene, and Edfu (Schiller 1961, p. 196).

Nevertheless, some scholars continue to insist that the term should be translated as “dining room,” even when multiple rooms are present (Alston 2002, p. 112; Wilfong 2002, p. 51; Daniel 2010, pp. 116, 187, 198, no. 44, tables 8.1–8.2; Urbanik 2013, pp. 160–62). Robert Daniel suggests that a reason that multiple “dining rooms” appear in texts such as the Patermouthis archive is because they were not houses at all, rather that they were inns or banquet halls. He argued that as a commercial and military center, Syene would have had inns where soldiers and individuals involved in trade, such as boatmen, would have stayed (Daniel 2010, pp. 198–200). This does not take into account, however, the fact that the Patermouthis texts refer to houses and not inns and multiple *συμπόσια* appear in other texts that are located in other Egyptian towns.

The word *ἐξέδρα* is more common in the Byzantine and Early Islamic periods in both Greek and Coptic papyri (Alston 2002, p. 112). It is transliterated as “*ΕΞΕΔΡΑ*” in Coptic texts (Förster 2002, p. 269). First originating in the Ptolemaic period (Husson 1983, pp.

Table 17.1. Συμπόσιον in documents of the Greek and Coptic Byzantine and Early Islamic periods

<i>Term</i>	<i>Text</i>	<i>Place</i>	<i>Date</i>
συμπόσιον	P. Oxy. 44 3203	Oxyrhynchus	400
συμπόσιον	SB 12 11225	Unknown	425–450
συμπόσιόν	P. Oxy. 16 1957	Oxyrhynchus	430
συμπόσιον	P. Oxy. 71 4832	Oxyrhynchus	436
συμπόσια	P. Oxy. 8 1129	Oxyrhynchus	449
συμπόσιον	P. Yale 1 71	Oxyrhynchus	456
συμπόσιον	PSI 3 175	Oxyrhynchus	462
συμπόσιον	P. Oxy. 20 2270	Oxyrhynchus	5th–6th c.?
συμπόσιον	P. Oxy. 50 3600	Oxyrhynchus	502
συμπόσια	P. Lond. 5 1722	Syene	530
συμπό]σιον	P. Harr. 2 238	Oxyrhynchus	539
συμποσίου, συμπόσιον	P. Münch. 1 8 = P. Lond. 5 1857	Syene	540
συμποσίου, συμπόσιον	P. Lond. 5 1734	Syene	Mid-6th c.
συμ[ποσί]ο(υ), συμπο]σί[ο]υ	P. Lond. 5 1723	Syene	577
συμπόσιον	P. Lond. 5 1724	Syene	578–582
συμποσίου	P. Münch. 1 9	Syene	585
συμποσίου	P. Münch. 1 11	Syene	586
συμποσίου	P. Münch. 1 12	Syene	590–591
συμποσίου	P. Lond. 5 1733	Syene	594
ϢΥΜΠΟϢΕ	Coptic Text 1 Paternouthis = ST 181	Syene	Late 6th/early 7th c.?
συμπόσιον	P. Bodl. 1 45, <i>Varia Coptica</i> 5	Apollonopolis Magna	ca. 610
ϢΥΜΠΟϢΙΟΗ	KRU 35	Jēme	7th/8th c.
ϢΙΗΠΟϢΙΟΗ	KRU 48	Jēme	First half of 8th c.
ϢΗΠΩϢΙΟΗ	KRU 76	Jēme	First half of 8th c.
ϢΥΜΠΟϢΙΟΗ	KRU 42	Jēme	740–741
ϢΙΗΠΟϢΙΟΗ	KRU 39	Jēme	749/750
ϢΙΗΠΟϢΙΟΗ	KRU 26	Jēme	Middle 8th c.
ϢΔΗΠΩϢΙΟΗ, ϢΔΠΩϢΙΟΗ	KRU 20	Jēme	759

Table 17.2. ἑξέδρα in documents of the Greek and Coptic Byzantine and Early Islamic periods

Term	Text	Place	Date
ἑξέτραν	P. Oxy. 44 3203	Oxyrhynchus	400
ἑξέδρας	SB 1 1477	Arsinoites	4th–7th c.
ἑξέδρας	SB 12 11225	Unknown	425–450
ἑξέδραν	P. Oxy. 7 1037	Oxyrhynchus	444
ἑξέδραν	PSI 5 466	Oxyrhynchus	518
ἑξέτραν, ἑξέτρας	P. Wisc. 1 8	Oxyrhynchus	561
ἑξέδ[ραν]	P. Cair. Masp. 3 67309	Antinoopolis	569
ἑξέδρας	P. Lond. 5 1768	Hermopolis	6th c.
ἑξέδρας	P. Flor. 1 13	Hermopolis	6th/7th c.
ἑξέδραν	CPR 8 69	Herakleopolis	6th/7th c.
ἑξέδρα, ἑξέδρα	SB Kopt 3 1401	Hermopolis	8th c.
ἑξέδρα	CPR 4 114	Ashmunein	7th c.
ἑξέδρα	O. Crum 147	Jēme	7th c.?
ἑξέδρα	O. Crum 144	Jēme	7th c.?
ἑξέδρα	O. Crum VC 15	Theban region	7th/8th c.
ἑξέτρα	O. Crum VC 16	Theban region	7th/8th c.
ἑξέδραογ, ἑξέδραογ	KRU 35	Jēme	7th/8th c.
ἑξέδρα	O. Crum VC 14	Theban region	7th/8th c.
ἑξέδραν	SB 6 9154	Herakleopolis	601–800
ἑξέδραν	P. Erl. 73	Herakleopolis	604
ἑξέδραν	P. Stras. 6 600	Hermopolis	609–654
ἑξείδραν	SB 18 13320 = P. Mich. 13 665	Aphrodites Komes (Antaiopolites)	613–641
ἑξέδρα(ας)	SB 22 15263	Arsinoites Polis	634
[ἑ]ξέδραν	SB 6 9462	Herakleopolis	657 A.D.
ἑξέδρα	CPR 4 29	Herakleopolis	8th c.
ἑξέτρα	O. Crum VC 13	Theban region	8th c.
ἑξέδραν	P. Ross Georg. 3 56	Herakleopolis	707 A.D.
ἑξέδρα	KRU 24	Jēme	First half of 8th c.
ἑξέδρα	KRU 42	Jēme	740/741
ἑξέδρα	KRU 43	Jēme	748/749
ἑξέδρα, ἑξέδρα	KRU 39	Jēme	749/750
ἑξέδρα	KRU 40	Jēme	749/50
ἑξέδρα	KRU 20	Jēme	759
ἑξέτρα	P. Krause 5.25*	Bawit	850

* See reference in Förster 2002, p. 269.

73–77; Saradi 1998, p. 32), the term does not necessarily mean that it is an open semicircular veranda or alcove that can be identified in classical architecture but rather it can be locked (Daniel 2010, p. 148, 152–53, no. 14, 155–57, 184, 186, 198, no. 44). It is difficult, however, to assume that the houses and the words for rooms in these houses stayed identical through time, even if the same terms are attested over the centuries. The word ἐξέδρα is attested in Middle Egypt (Hermopolis, Herakleopolis, Antinoopolis, Oxyrhynchus, Anatiopolites), and the Fayum (Arsinoites) following the geographical distribution of earlier papyri.

Normally, συμπόσιον and ἐξέδρα do not appear together in texts. P. Oxy. 3203, which dates to 400, documents a lease between a Jew and two anchorite nuns concerning an ἐξέδρα. At the end of the lease, there is a summary of its contents, where the lease of the ἐξέδρα is referred to as a συμπόσιον. The editors of the text note that the word is being “subsumed” and that the description is “inconsistent.” Helen Saradi, however, argues that the two names for rooms are becoming interchangeable (Saradi 1998, p. 34). While in some cases the word may be interchangeable, this is not always the case, and at Jēme both terms appear. Nevertheless, it is evident that particular cities have their own expressions for houses (Husson 1990, pp. 126–27). In this instance, it looks as if ἐξέδρα and συμπόσιον usually mean a room in a house and that the term συμπόσιον is usually found in Upper Egypt and Oxyrhynchus, while ἐξέδρα is generally found in Middle Egypt and the Fayum although it is also attested at Jēme.

Conclusion

The town of Jēme is an important town in Egypt during the Early Islamic period because of the archaeological and textual evidence from the site. Despite the fact that the site is often characterized as being “Coptic” and therefore not considered as part of Early Islamic Egypt, it is clear that the region cannot be seen as isolated from the rest of the country in this period. The region continued to be inhabited throughout the Islamic period and it is clear that there were Arabic speakers at Jēme who participated in the activities of daily life, including buying houses. Houses are often mentioned in the documents and many of these are part of larger archives. The houses are bought, used as security for loans, sold, and form the objects of dispute, as well as being inherited. Some of the houses are physically divided and there are specific rules for how one accesses the rooms, while others have a less clear division and accessibility. These rooms have names that originally came from Greek and had specific meanings which gradually became lost and used to refer to living rooms in general. They can also be geographically specific. Further careful study of these archives and houses will doubtless reveal more about life in Upper Egypt in the Early Islamic period.

Although one cannot place the papyri from Jēme back into the houses that they describe, it is nonetheless possible to come to important conclusions by integrating both the archaeological and textual evidence from the site. It is clear from the texts that houses could be divided and that whole or parts of houses could be used as security for loans and sold to relatives, neighbors, or other individuals whose relationship to the seller is not that clear. Despite the many activities that involve these houses and the fact that they were divided, the excavations indicate that the surviving houses were in fact very narrow and small and the town was very crowded. The crowded small houses do, however, represent the final phase of occupation at the site and may be the culmination of the house sales and divisions rather than how the town initially started out in the Early Byzantine period. The preservation of the surviving material is not sufficient to make this determination, but it is clear that the

houses changed from the Roman to the Early Islamic period, which may be a result of the overcrowding at the site. It is possible that further excavations of the last remaining part of the town may shed further light on this issue of the development of the town of Jēme.

Abbreviations

- CLT A. Arthur Schiller, ed. *Ten Coptic Legal Texts*. Metropolitan Museum of Art, Department of Egyptian Art, Publications 2. New York: Arno, 1932.
- CPR 4 W. Till, ed. *Corpus Papyrorum Raineri*, Vol. 4: *Die koptischen Rechtsurkunden der Papyrussammlung der Oesterreichischen Nationalbibliothek*. Vienna: n.p., 1958.
- CPR 8 P. J. Sijpesteijn and K. A. Worp, eds. *Corpus Papyrorum Raineri*, Vol. 8: *Griechische Texte V*. Vienna: Hollinek, 1983.
- KRU W. E. Crum. *Koptische Rechtsurkunden des achten Jahrhunderts aus Djēme (Theben)*. Leipzig: Zentralantiquariat der Deutschen Demokratischen Republik, 1912.
- O. Crum W. E. Crum, ed. *Coptic Ostraca from the Collections of the Egypt Exploration Fund, the Cairo Museum and Others*. London: Egypt Exploration Fund, 1902.
- O. Crum VC W. E. Crum, ed. *Varia Coptica: Texts, Translations, Indexes*. Aberdeen: The University Press, 1939.
- P. Bodl. 1 R. P. Salomons, ed. *Papyri Bodleianae 1*. *Studia Amstelodamensia ad epigraphicam, ius antiquum et papyrologicam pertinentia* 34. Amsterdam: J. C. Gieben, 1996.
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- P. Lond. 5 H. I. Bell, ed. *Greek Papyri in the British Museum*, Vol. 5: Nos. 1647–1911; no. 1709 *Coptic, no. 1792 Latin*. London: British Museum, 1917.
- P. Münch. 1 A. Heisenberg and L. Wenger, eds. *Die Papyri der Bayerischen Staatsbibliothek München*, Vol. 1: *Byzantinische Papyri der Bayerischen Staatsbibliothek München*. 2nd ed. edited by D. Hagedorn. Stuttgart: B. G. Teubner, 1986.
- P. Oxy. *The Oxyrhynchus Papyri*. Published by the Egypt Exploration Society in the series *Graeco-Roman Memoirs*. London, 1898–2010.
- P. Ross Georg. 3 G. Zereteli and P. Jernstedt, eds. *Papyri russischer und georgischer Sammlungen*, Vol. 3: *Spättrömische und byzantinische Texte*. Tiflis: Universitätslithographie, 1930.
- P. Stras. 6 J. Schwartz et al., eds. *Griechische Papyrus der Kaiserlichen Universitäts- und Landesbibliothek zu Strassburg*, Vol. 6: 501–600. Leipzig: Bibliothèque nationale, 1971–1975.
- P. Wisc. 1 P. J. Sijpesteijn, ed. *The Wisconsin Papyri*, Vol. 1: Nos. 1–37. *Papyrologica Lugduno-Batava* 16. Leiden: Brill, 1967.
- P. Yale 1 J. F. Oates, A. E. Samuel, and C. B. Welles, eds. *Yale Papyri in the Beinecke Rare Book and Manuscript Library*, Vol. 1. *American Studies in Papyrology* 2. New Haven: American Society of Papyrologists, 1967.

- PSI *Papiri greci e latini*. Pubblicazioni della Società Italiana per la ricerca dei papiri greci e latini in Egitto. Florence: Anonima Libr., 1912–1979.
- SB *Sammelbuch griechischer Urkunden aus Aegypten*. Wiesbaden: Harrassowitz, 1915–.
- SB Kopt 3 M. R. M. Hasitzka, ed. *Koptisches Sammelbuch 3*. Mitteilungen aus der Papyrusammlung der Österreichischen Nationalbibliothek (Papyrus Erzherzog Rainer), N.S., 23/3. Munich and Leipzig: Saur, 2006.
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Social Conditions in the Ancient Near East: Houses and Households in Perspective

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As archaeologists, approaching the topic of houses and households is complicated because neither “house” nor “household” is easily defined, whether these are in the Near East or elsewhere. Archaeologically we normally identify houses by recovering single circulation patterns — a set of interconnected spaces accessible from the outside world. But the material most often used in our area, mudbrick, is extremely malleable, making changes in the organization of space very easy — especially in houses sharing party walls — greatly complicating interpretation. Doorways can be blocked, new doors created, and once open areas roofed with little trouble.

Anthropologically and archaeologically the functions of households have been understood to focus on production, consumption, and reproduction (Wilk and Ashmore 1988; Wilk and Rathje 1982; Netting, Wilk, and Arnould 1984; Tringham 1995), though these are often differentially preserved in the archaeological record. Except in unusual instances, such when it is possible to include in the analysis data from cuneiform records such as those from Old and Neo-Babylonian Mesopotamia (see the papers by Brusasco and Baker, this volume) or Egyptian papyri (papers by Muhs and Vorderstrasse, this volume), the archaeological record is largely mute on the subject of the residential structure of houses. We are better off when it comes to food production — hearths, stoves, and grinding stones are built-in features that often remain after the abandonment of the house. Consumption, however, can only be arrived at obliquely since it is the discarded animal bones, carbonized plant remains, and broken tools and implements that are most likely to be preserved, and in many of the urban societies studied by the participants of this symposium, took place at some distance from the residences.

Many of these issues are at least partly the result of the conflict between revisiting old excavations that uncovered broad areas of housing but failed to record many of the minutiae critical to understanding the lives of their inhabitants, and conducting new excavations that adopt the full range of techniques now available to the archaeologist but move much less dirt. Yet these more recent excavations have often not conducted many of the analyses common in other parts of the world such as flotation for the recovery of floral remains and micro-archaeological remains (which, in our experience at Mashkan-shapir, might include fragmentary unbaked clay sealings), the analysis of faunal remains, micro-morphological analysis, and other approaches likely to elicit details of household activities (Feder 2014, pp. 41–42; Scarre 2013, p. 33).

Context and Analysis

A complication when approaching the topic of this volume is that in order to understand houses, one needs a reasonably large sample. Often this involves working with data excavated in the past, as is the case for several of the articles in this volume. In addition to the absence of the samples best suited for understanding household archaeology, as outlined above, these were also selective in the data recorded, leaving out many details. This lack of detailed recording often inhibits our ability to determine the true context of the material recovered, yet for the full understanding of houses and households, context is everything. A solution to this problem — and one taken by many of the authors of this volume — is the analysis of old excavations together with new research in the same area. Nevertheless, the number of papers in this volume that refer to the use of modern analytic approaches such as micro-archaeology, micro-morphology, and/or faunal and floral analysis is surprisingly small. Most such references occur in the methodological papers by Peter Pfälzner and Lynn Rainville, which provide little data on actual excavated households, or the discussion by Aren Maeir, which focuses more on the method than on the houses. There are, however, exceptions, such as Adelheid Otto's lovely detail where the discovery of tiny foot bones found at the base of the main seating area of houses at Tell Bazi suggests that these had been covered by furs.

This is not to say that the absence of these approaches in older excavations is just passed over. For example, as Lisa Nevett attempts to understand the interaction of the genders at the abruptly abandoned House of Asklepios at Olynthos, she includes a lengthy consideration how much more she would have understood of the use of domestic space had at least some modern approaches been adopted when the house was excavated in the 1930s. The excavations at Olynthos were well ahead of their time in terms of the detail of their recording system, but they still threw away much that would have provided a clearer picture of localized patterns on consumption.

Another important issue in archaeology today which is sometimes given short shrift in these papers is the quality of the contexts excavated: how sure can we be that the debris that we recover from within ancient houses represents materials used during the lifetime of the house and its household, as opposed to post-abandonment disturbance? After all, when people abandon houses outside of conditions of war (Otto) or volcanic eruption (Dickmann), they usually take most of their belongings with them, leaving only the least movable behind. Moreover, abandoned houses do not necessarily remain completely unused: children may play in them, lovers may have trysts, or they might be used for trash disposal. Ironically, in this volume, it is the authors who are tackling the best preserved archaeological deposits — Jens-Arne Dickmann in his work on Pompeii and Adelheid Otto's excavations of the burned site of Tell Bazi — who express the most concern over context. The lack of such a discussion elsewhere is at times a source of confusion. For example, Nicholas Picardo describes a house that contained more than 2,000 unbaked clay sealings, but apart from occasional remarks relating to a discard area nearby, the site-formation processes that must have caused their distribution are largely ignored, leaving open the question of whether the residents really lived with sealings scattered all over the place, or if they were stored in containers now long decayed, or perhaps they represent post-occupational debris?

As noted above, the most detailed consideration in regard to context is Dickmann's discussion of Pompeii, the site most often considered to be pristine — indeed it is this condition that has led to debates over the “Pompeii Premise” (Binford 1981). His article begins with an

extensive investigation into all of the depredations of the House of Menander at Pompeii. These include both the removal — and in the process, dispersal — of objects by the inhabitants as the eruption ensued as well as the fifty-some looters' holes and the trenches that were excavated subsequently. He sees the contexts of the objects found as reflecting not the normal life of the villa frozen in time, but rather that life both jumbled during the panic associated with the eruption and depleted through subsequent looting.

Cross-cutting Themes

A number of themes are approached by multiple authors, and these are the subject of the remainder of these remarks. Major themes focus on the relationship between households and social relationships, and the identification of activity areas. Issues of site formation resulting in broad, or limited, distributions of in situ remains are often, but not always, discussed, as is the identification of spaces deliberately kept clean and those where trash was allowed to accumulate. More rare but still important are considerations of gendered spaces and the effect of class and status on the households under investigation.

Clean and Unclean

A key element of excavating houses is the identification of spaces that were kept clean, often to the frustration of archaeologists, compared with those where debris was allowed to build up. The plotting of these differences can speak to ancient concepts of public (dirty) versus private (clean) spaces, or of reception areas (clean) versus production areas (less clean) within households, and, of course, the thoroughly dirty discard areas. The most detailed discussion of this issue in this volume is by Felix Arnold, who specifically explores which spaces were kept clean and which were not in Elephantine. In this instance, ash from bread baking was allowed to accumulate, both in the bakehouse and in the courtyard, while the house itself was kept clean. But even in those areas that one might consider "dirty," only the ash, which is not subject to corruption, was allowed to accumulate while other food waste was deposited elsewhere. Some of the garbage does seem to have wound up in the streets, but Arnold notes that this was minor, suggesting that the inhabitants, much to the annoyance of archaeologists, must have had their rubbish dumps beyond the areas excavated. Similar conclusions were noted at Amara West (Spencer, this volume).

But in other towns this was, fortunately, not the case. At Tell Bazi, for instance, some refuse was found in shallow pits associated with food-preparation areas, allowing these remains to be directly linked to the household within which it was found. And even though most garbage was thrown into the streets, the main square, and over the side of the tell, the deposits in the streets can be associated, if not with a specific household, at least with a very small group of households. The violent destruction experienced at Tell Bazi means that we can be reasonably confident that these trash areas represent the normal condition of the site. The same should also be the case at Olynthos, since it too was abandoned more or less instantly. However, Nevett puzzles over the large numbers of artifacts sometimes recorded from individual rooms within Olynthos, and wonders whether these might not indicate that that particular space had been vacant at time of the conquest and abandonment of the site. She stresses the difficulty of being able to separate primary, secondary, and de facto refuse

(see paper by Pfälzner) found in older excavations where the context is often not recorded — even at a site like Olynthos, which was one of the best-recorded sites of its time.

A more complicated issue is how to interpret the final resting place of unbaked clay sealings. Both Miriam Müller and Nicholas Picardo have recovered clay sealings associated with Egyptian households; Müller only a few and those mostly in the courtyard, but Picardo recovered a large number of sealings, apparently mostly from the house but also from the nearby street and refuse area. It is not clear from Picardo's paper whether the sealings found within the house could be associated with specific contexts, such as, perhaps, a wooden box now decayed, nor if this collection might allow a better understanding of the ways in which objects, including sealings, might have moved from their use context within the house to a discard context either within it or beyond its walls. Sealings would be ideal items for such a study since of all of the artifacts under discussion in this volume their very complexity suggests that they could unlock a broader understanding of the processes of storage and disposal in excavated houses. Clay analysis can attest to the number of sources for the clay used for sealing, motifs can be assessed, the use patterns of the seals and the objects to which they were attached can be identified, all of which can also be associated with the final resting place of the sealing. Were this pattern fully understood, it should have important implications for understanding the patterns of receipt, use, and discard practiced by the residents of the households involved — not just of sealed goods, but of all items that flowed through the establishment.

Activity Areas

Several papers in this volume investigate the spatial distribution of activities within domestic houses, all of which emphasize the ways in which ancient households adapted the spaces within which they dwelled to their own needs. This, of course, should not surprise academics with their penchant for creating studies out of spaces.

Two papers (Rainville and Maeir) stress the importance of micro-archaeology as a way of identifying what activities actually took place within domestic (or indeed non-domestic) structures. These are methodological articles, however, and do not provide data that speaks specifically to the theme of this conference — houses and households and their interrelationship.

Tell Bazi (Otto) and Pompeii (Dickmann) provide situations where the level of interference between the actions of our ancestors and the remains that they left in place has been minimized. But as Dickmann argues, the very crisis that caused the abandonments of these two sites undoubtedly resulted in some perturbation of the normal household contents. Given the large sample of houses, the excellent preservation due to the fire that destroyed Tell Bazi and associated cuneiform records, Otto is able to provide an extraordinarily detailed understanding of household norms in this Syrian village. Functions of features found in multiple houses, such as the beer vats, the benches in the main rooms of the houses, and the table-like altars at the end of many of the main rooms, could be understood through a combination of archaeological data, such as the linkage of “unusual” objects found associated with the altars with texts that mention the importance of gods and ancestors. Here, the combination of two complementary data sources — archaeological and textual — allow a nuanced and convincing reconstruction of life in this second-millennium B.C. north Syrian town.

This combination of written and archaeological data, though less direct, was also used by Heather Baker, who, even though not able to connect any one text with a particular excavated house, has succeeded in combining written and archaeological data to develop an understanding of how the Neo-Babylonians understood their domestic structures by describing the types of households that once occupied these houses. While she is not able to say that this family with this structure lived in this house (something that is often possible at Old Babylonian sites; see Brusasco, this volume), Baker's data do make it clear that we cannot equate excavated houses with single households. Instead, the texts make it clear that in many instances, multiple households, sometimes not even related to one another, shared one of these large structures.

This theme is also seen in Dickmann's paper on the Casa del Menandro at Pompeii. Although this was undoubtedly the residence of an important Pompeian family, Dickmann demonstrates that they were by no means the only household living in the house. In addition to the family itself, he identifies as many as six places occupied by slave families, groups who cooked, ate, excreted, and reproduced in discrete areas within the larger complex.

The issue of the use of space within houses is also reflected in the papers by Kate Spence and Lisa Nevett. Olynthos is a site somewhat similar to Pompeii and Tell Bazi, though in this instance it was abandoned as a result of a crushing defeat — a situation likely to have resulted in even more last-minute moving and removing of items as the population fled than was the case at Pompeii and Tell Bazi where the destruction was more immediate. Nevett (1999) had used the detailed locational record of the items abandoned in these houses to challenge the textually attested separation of the sexes within Greek houses and to explore whether this idea might not have been an idealized version of how the society had operated, reinforced by the conditions that pertained during the all-male drinking parties that were conducted in special-purpose rooms. Instead of finding female-associated items only in limited areas, the evidence suggests that women had access to all parts of the house. In Nevett's paper in this volume, she was able to investigate the atypical House of Asklepios in more detail thanks to the meticulous notebooks of the excavator, and reiterates a theme, also stressed by Otto and Dickmann, that to a large extent it was the panic that ensued at the moment of abandonment that is reflected, rather than the pattern of normative activities. Indeed, a major contribution of this conference should be the understanding that the data from even the best-preserved sites — those destroyed rapidly and violently — reflect as much the final panic as they do everyday activities.

The concern with the dichotomy between the ideal and the actual that is reflected in all the papers concerned with activity areas is perhaps best exemplified in Spence's nice analysis of household organization in Amarna. The ideal organization of domestic space is easy to determine in the larger houses, with their large reception areas and separate domestic areas. But the important point that she makes is not so much that the wealthy houses succeeded in reflecting ideal household organization, but rather the ways in which those living in more limited spaces adjusted their activities when faced with a less-than-ideal house. There, the formal, public part of the house remained largely unchanged, but it was the private, domestic arrangements that departed from the ideal, an indication that the public face of the household trumped the convenience of the members of the family.

Together, these studies indicate that even when working with data collected long before modern methods, an emphasis on built features over artifact distributions can be used to provide some of the details of how ancient households were used. Modern excavations can

supplement these data with analyses of micro-archaeological and micro-morphological data to improve on our understanding of the repetitive activities that took place in the various spaces within domestic areas and their implications for ancient conceptions of the use of domestic space.

Household Reorganization

All the ancient societies under consideration in this volume, with the exception of Israel and Rome, practiced partitive inheritance, where a paternal estate was divided among the sons (more rarely, daughters), although in some instances the eldest son received an additional preferential share. The death of the landowner, happening every generation (which, given the life expectancy of that time, would rarely have been more than every two to three decades), would have had a transformative effect on both the organization of the houses and the households they contained. In some instances, the inheritance documents can be directly associated with the houses involved (Brusasco), in others the link between written documentation and the archaeological remains of domestic structures is more indirect (papers by Otto, Baker, Muhs, and Vorderstrasse). If all the heirs were still living in the paternal house, the mudbrick walls of the houses would have allowed modifications in the circulation pattern to accommodate the needs of the new owners. If some had already set up independent households, they would have had to be compensated by any siblings who remained in the paternal house. Inevitably, the death of the house owner would have resulted in changes in the ways in which the spaces within the houses were used, including modifications to the locations of cooking facilities, the closing of some doors and the creation of new ones, or the division of a large house into multiple small ones. These activities are clearly reflected in the written documentation from Mesopotamia (papers by Otto, Baker, and Brusasco) and Egypt (papers by Muhs and Vorderstrasse). The linkage between family relationships and property-holding patterns as revealed by texts and the remains of domestic houses are more clearly associated in the Mesopotamian examples — whether or not the tablets were actually found within the houses — than in the case of Egypt. The division of a house at Tell Bazi is interpreted by Otto as the result of inheritance, and Baker is able to understand the types of spaces described in Neo-Babylonian inheritance through reference to the excavations of contemporary houses, even though private documents have not actually been found within these houses.

The greatest possibility for understanding how inheritance affected both house reconstruction and the households that lived in them comes from the Old Babylonian period in Mesopotamia, where each heir received a copy of the entire inheritance document and where family archives were kept within the home. Area AH at Ur has the largest expanse of excavated Old Babylonian houses, and indeed a substantial number of cuneiform tablets were recovered from them (Woolley and Mallowan 1976; Figula and Martin 1953). Paolo Brusasco uses some of these data to present a picture of life at Ur in the early second millennium, in a way that is not unlike my early work on Old Babylonian Nippur (Stone 1987). His approach, however, is different from mine in that he aims to analyze the houses within the context of verbal and non-verbal sign systems, ideas associated with the contextual approach to archaeology. I certainly agree that humans imbue most aspects of society with meaning, but I am neither sure that past meanings are easy to read, nor that meaning trumps expediency in either past or present. Let me provide some examples.

Old Babylonian inheritance documents provide the eldest son with an additional 10 percent share in the inheritance, along with the furniture necessary to maintain the family cult, an obligation that presumably necessitated additional expenditure. Brusasco uses this information to interpret residence patterns in Number 1 Store Street, using tablets dated some decades before Ur's abandonment to help his interpretation, though since these were found in a grave beneath the floor (Woolley and Mallowan 1976, pp. 138–39) it is far from clear that they refer to the last occupants of the house, which itself is one of the last to be built at Ur (*ibid.*, p. 137). Because the eldest son received the usual extra 10 percent share, Brusasco assumes that his share was the extremely large chapel suite, and, contradicting the wording of the text, confines the younger brother to a room smaller by a factor of 3 or 4, leaving the third room with access from the courtyard unassigned. This leads him to describe a very hierarchical social system whereby the younger son is dominated both politically and symbolically by the elder. His description of life in this house is ambiguous, vacillating from isolating each member in the rooms he thinks they inherited to interpreting most spaces as gender-neutral and multifunctional. The difficulty here, I think, is that even if the texts do indeed pertain to the final inhabitants of the house, divided ownership of parts of the house by no means implies that the entire extended family did not occupy the entire house, sharing the kitchen, courtyard, toilets, main living/reception room, and the chapel where their antecedents were buried.

Brusasco's paper includes a discussion of patterns of light and smells that was absent from the paper presented to the conference. Filling houses known primarily from their published plans with sight and smell is innovative, but Brusasco seems to imply that these were more than commonplace solutions to the need for light and cooking facilities, but rather were deliberately developed to impress visitors to the house. But did strangers really enter beyond the entrance chamber, with its water jar and doorways designed to impede vision into the house itself? And surely the patterns of light and dark that he portrays would have varied both over the seasons and the time of day. The idea of smell is certainly intriguing, but without a key, the yellow and green of the smell diagrams are difficult to interpret, and surely the latrines would have been a major, if undesirable, source of smell.

In short, Brusasco's paper seems to assume much more deliberation in design and intra-familial stratification than is clearly supported by the data. Within a dense residential district with shared party walls and partitive inheritance rules, house expansion and contraction would depend on the willingness of neighbors to buy or sell property through processes of negotiation and most often accommodation to less than ideal conditions, as is described in the other papers that consider these issues (papers by Otto, Baker, Muhs, and Vorderstrasse). The most intriguing part of his paper is the least developed — what did these houses smell like? Since today similar crowded urban neighborhoods without plumbing and sanitation are often strewn with garbage and odoriferous, it seems likely that many of the places we excavate would have been similar. Brusasco makes the important point that we need to think more about how the houses we excavate might have appeared to outsiders, and the physicality of these houses: their impact on the senses of both sight and smell.

The papers discussed so far have all been concerned with dynamic change within the life of households, albeit multigenerational ones. A much longer view is presented by Neal Spencer, as he examines the ways in which a small neighborhood in Nubia, originally anchored by a large magazine, changed over the course of six generations. Here we can see individual decisions, such as whether to incorporate the thick walls of the disused magazine for domestic

purposes or instead to make the effort needed to raze it to the ground; to build a completely new house or to adapt an old one. We can also trace their reactions to environmental change as residents coped with an increasingly dust-laden atmosphere, as well as political change as Egypt's power waned in Nubia, leaving the inhabitants to assimilate, at least in part, with the majority population of the area, as seen especially clearly in the cemetery.

Together, the papers considered for this section (Baker, Brusasco, Muhs, Otto, Spencer, and Vorderstrasse) force us to think about the dynamism of domestic areas as birth and death, marriage, divorce, and broader social and political affiliations constantly changed the spatial needs of our ancestors, leaving traces that we must work to understand within the archaeological record.

Gender, Class, and Status

The very definition of complex societies is based on the idea that people are not equal: that they are divided, not only by gender, but also by class and status. Today, class and status are very much linked to residence and household composition, and much of modern Western history has revolved around recent changes in gender roles. Archaeology allows a peek into how these social constructs impacted the lives of our ancestors, especially in early complex societies where class and status differences became more pronounced.

The papers in this volume run the gamut from the deliberate egalitarianism of the residents of Olynthos (Nevett) to the large slave-owning households of Pompeii (Dickmann). But the Romans were far from unique: the majority of the societies considered in this volume have attestations either of domestic slaves owned by private individuals or indentured servants. Since the two terms often seem to be used almost interchangeably, I consider together the role they played in ancient households by slaves and servants.

The most detailed investigation of the lives of those at the bottom of the social scale in this volume is Dickmann's analysis of the Casa del Menandro in Pompeii. He provides a very human analysis of the life of Roman slaves. Not only, as outlined above, does he identify the locations of slave households within the larger household, but his analysis of graffiti found in the parts of the house occupied by these groups testifies to their literacy, identifies the presence of children based on the height of the traces, and even provides evidence for a strong bond of friendship between two of the female slaves.

Servants and slaves, though present, were probably quite rare in the Old Babylonian period but more common in Neo-Babylonian times. Although not part of the paper published in this volume, elsewhere Baker (2010) makes it clear that many houses would have included resident slaves. Indeed it may well be that the striking differences in size between the Old Babylonian houses studied by Brusasco and those described by Baker (this volume) is because the latter housed not only large, extended families but also considerable numbers of slaves as well.

The term "servant" rather than "slave" dominates the discussion of ancient Egyptian households, and it is clear that at least the wealthy examples included dependent personnel in addition to the family itself. In her paper, Spence suggests that the entire concept of the Egyptian state was seen in household terms — though by no means suggesting any degree of equality. She stresses that the inclusion of dependents within the household results in the need to distinguish households — namely those who share a domain — from the family — those tied by kinship, while Miriam Müller argues in her paper that these dependents

would have been housed separately but within the same estate even as their requirements, such as food, would necessarily have been part of the household budget. Only obliquely in the case of Pompeii do these relationships come to life. There we can begin to understand what might have been the relationships between individuals not only unrelated but divided by status, but who nevertheless shared a household.

Issues of gender, class, and status underlie all aspects of the ancient households that are the subject of this volume. Today we understand that class, status, and even gender are slippery terms, concepts that may change their conceptualization over space, time, and point of view. It is therefore not surprising that identifying archaeological traces of these social distinctions proves to be so very difficult.

Conclusion

Miriam Müller must be congratulated for bringing together so broad a group of scholars on the topic of household archaeology. It is very reassuring that the field of Near Eastern archaeology, long focused on the excavation of monumental architecture and concerned with the life and times of the highest elites, has now at least partially shifted its attention to the rest of the society — the people who made the building of pyramids and ziggurats possible. Although, as noted at the outset, archaeologists studying the historic periods have been a little slow to adopt some of the methods now used routinely by our colleagues working in the Neolithic, the complexities of life in ancient Near Eastern cities have been showcased in this volume. Although most of the chapters are concerned with elite housing — or at least middle-class housing — the less fortunate creep in as slaves and servants in both the written and archaeological record. It is to be hoped that in the future, housing samples will include the more modest neighborhoods along with the wealthier, and will use all of the tools of our trade to fully engage with the denizens of these early cities.

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Multifunctionality and Hybrid Households: The Case of Ancient Egypt

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The papers focusing on ancient Egyptian case studies presented during the Ninth Annual Oriental Institute Seminar address a variety of issues that specifically highlight the common problem of conceptualizing the architectural evidence and the lived experience within domestic buildings. How much do the architectural remains really reveal about the use and function of different rooms within houses, and what can be learned about the people who actually occupied them? Questions like these open up the full spectrum of debate concerning the study of ancient households within the framework of their specific cultural setting. The following response discusses specifically the archaeological evidence from Egypt.

Private Domestic Architecture and Room Function at Amarna

In her contribution to the seminar, Kate Spence focuses on domestic structures from Amarna dating to the New Kingdom. The city of el-Amarna is one of the most frequently cited examples for ancient Egyptian urbanism. It was founded as a royal capital under the reign of Akhenaten and remained occupied for a relatively short period of time, which spanned less than one generation. Today, it can be considered as one of the most fully excavated urban sites in Egypt, where not only the full spectrum of official structures, temples, and palaces is known, but also much effort has been put into the excavation of domestic houses at the site (see most recently Kemp and Stevens 2010). Concerning its history of foundation and occupation, it has been debated to what extent Amarna should be considered the type-site for urban settlements in Egypt during the New Kingdom. The layout and organization of the houses have good parallels at other contemporary towns, which strongly indicates that the urban fabric and probably some of the urban experience is comparable to other towns and cities in Egypt despite the unusual founding history of this city (Kemp 1977). In her contribution to the seminar and this volume, Spence analyzes the experience of domestic space as the key to understanding how the various rooms within the domestic sphere were conceptualized. The Amarna houses are particularly suitable for such an investigation since there is a large sample of houses available from this site that are quite well known from an architectural point of view spanning the full spectrum of different sizes expected within an urban settlement (Tietze 1996; Borchardt and Ricke 1980). The architectural layout and overall organization of these houses have close parallels to domestic buildings from the preceding Middle Kingdom and throughout the New Kingdom, where they occur in planned settlements (e.g., Lahun and Abydos; see Bietak 1996b) but also in unplanned towns (e.g., Tell el-Dab'a; see Müller, this volume). More challenging is to link the various rooms to specific

functions and activity patterns, a task that has been hampered not only by excavation techniques that favored architecture over recording findspots of objects but also by the fact that abandonment processes can cloud the use and activities carried out in the rooms (Cameron and Tomka 1993). Spence emphasizes that it is increasingly evident that the architecture was not primarily structured around household activities and that the conception of the house's layout was not as strictly related to anticipated household tasks as frequently assumed. She bases this on the observation that traces for the various activities carried out by the inhabitants have been found in very different locations and show much variation from house to house. This indicates that the choice of using a space for a specific household task was primarily governed by the space available within the house and not necessarily its layout or the internal organization of its rooms. Spence points out that it is possible to see multiple layers in the use of space which is much more flexible, and often the particular purpose of a room depended much on personal choice, which sheds light on social practices. At the city of el-Amarna it is noticeable that cooking and food preparation took place outside when adequate space was available within the enclosed plots of the larger houses while it could also occur inside the building if sufficient space on the exterior was lacking, for example, in the houses of the Walled Village,¹ which was densely settled. In the latter case, inhabitants over time seem to have moved some cooking and storage activities to the communal chapels and attached rooms to the exterior of this village as it might have been more adapted to their interactions within the larger village community (Kemp 1987). On the other hand, further evidence for communal practices within the households comes from the evidence of shared resources such as mortars, grinding implements, and ovens (Samuel 1999).

Another important point made by Spence relates to the definition of “multifunctionality” in relation to the use of rooms. The concept of multifunctional rooms within ancient Egyptian domestic architecture is a much-debated topic and among the participants of the symposium this term was used in several different ways. Most participants used “multifunctionality” in relation to the information that can be retrieved from the archaeological evidence for numerous activities being carried out in the same room, suggesting that these spaces were intended for a variety of activities. This stands in contrast to our often modern (Western) preconception of each room being designated for one specific purpose only, that is, bedroom, kitchen, living and dining rooms. Another way to approach the concept of multifunctionality is from a social perspective. Spence strongly emphasizes that rooms should not be considered multifunctional because they were not conceptualized according to function in the first place, they were not functionally ordered. The fact that we can observe a variety of activities taking place in the rooms that differ from one house to the other suggests that they should not be strictly defined as “multifunctional” but instead room use was closely linked to social factors within the households as well as the overall scale of the house and the exterior space available. The owners made individual choices according to their preference where to conduct certain activities such as cooking, food preparation, manufacturing, weaving, etc. If that approach is correct, then we have to ask the questions, what was the primary motivation for the architectural layout and why is there such a marked repetition and continuity in the internal organization of these houses noticeable in different settlements situated in a variety of regions over a considerable time period covering at least 500

¹ Formerly called the “workmen’s village” at Amarna.

years? It is much more difficult to explain this phenomenon since there is little evidence about how houses were planned and conceptualized by the ancient Egyptians. Nevertheless, the fact that it is possible to make typologies of house layouts over time indicates that there was some kind of standard concept or expectation for at least the organization of core rooms, which were probably also dependent on social factors in addition to wealth and status of the head of the household.

One possible way to approach these questions regarding the ordering principles of domestic houses is closely linked to the representation and activities of the head of the household, which seem to be explicitly expressed and recognizable as has been suggested by Spence. These can be identified in recurring fixed installations and layout of rooms such as the presence of a central room (= reception room), master bedroom (often marked by a niche and usually flanking the central room to one side), and in some cases a private bathroom. Access diagrams additionally emphasize how the central room was the most important space in the house for representing the head of the household and seems to have been the most resistant to task-related compromises, which means this was hardly the space ever used for cooking, for example. The Amarna houses often feature columns and an elevated dais along the rear wall of the central room, which has been viewed as the seat for the head of the household when receiving guests. There is little in the architectural record that accounts for other fixed installations that would link a certain room to a certain function. Many moveable objects such as pieces of furniture must have existed but are of course not preserved in situ (Koltsida 2007, p. 136). A good example for the presence of movable installations within rooms comes from the much older palace complex of the governor at Balat in the Dakhla Oasis, which dates to the late third millennium B.C. Small limestone pillars that were used to support some kind of baldachin structure were found in several rooms within the residential core of the palace, the kind of installation of which usually no traces remain (Soukiassian 1997). These features were preserved due to exceptional circumstances, because the core of the palatial complex was destroyed by a conflagration and then abandoned. These finds further emphasize the residential and possible representative character of a room being part of the core units of an elite building complex. On the other end of the spectrum, Spence also refers to the remnants of weaving installations, traces of which were found in different rooms in the small houses of the walled village. This example further demonstrates that there was not a clear pattern in the use of rooms and personal choice seems to have been the decisive factor.²

However, in all these cases the overall size of the houses played an important role for decisions whether some activities were moved to the outside and limiting production/food-processing tasks were conducted within the interior. The current evidence for households and activity areas within houses is clearly following the rather logical trend that the smaller the habitable surface of the house was, including the available yard space on the exterior, if any, the more limited the choice of space for carrying out daily household activities. In this case it is also possible to detect a greater variety of traces left by these activities within a single room. Thus social practices were an important factor for the way activities had been organized within the domestic space.

² For example, the traces for weaving have been found in different parts of the houses at Amarna; see Kemp and Vogelsang-Eastwood 2001, p. 374, fig. 9.53.

Evidence for a Middle-class Settlement Quarter at Tell el-Dabʿa

Miriam Müller investigates in her paper the evolution of a distinct settlement quarter at the site of Tell el-Dabʿa through the late Middle Kingdom and Second Intermediate Period (1795–1640 B.C.). She is able to trace the development over several generations of a group of houses that were situated within discrete plots marked by thin mudbrick perimeter walls. The material culture associated with these houses sheds new light on the cultural mix of people having settled in the eastern Nile Delta originating from the Syro-Palestinian region. The city of Tell el-Dabʿa played an important role as a trading hub for the Egyptians and the eastern Mediterranean region (Bietak 1996a). The individual houses are typically Egyptian in layout and the basic features resemble those noted at Amarna during the later Eighteenth Dynasty. However, some foreign elements persist, such as the burials next to the houses, some of which were built directly against the exterior of the house, frequently on the side where the bedroom was located, in the form of a small chamber. Müller investigates specifically the question about whether it is possible to identify a rising “middle class” in relation to the inhabitants at the site, which she defines as a social group of people who were independent of the elite but who were able to obtain considerable income within the private economy and who also paid taxes to the central government. She points out that one of the reasons why it has been so difficult to identify this group within ancient Egyptian society is related to the fact that these people did not necessarily possess important administrative titles of any sort and remained somewhat invisible in the written record. Her meticulous analysis of the archaeological evidence — taking into consideration the architecture, the related finds, as well as the funerary evidence — allows her to develop a much more complete picture of the inhabitants than has been possible in comparison to many other sites in Egypt, which makes this data specifically suitable for further analyses related to household studies. The evolution of the five estates at Tell el-Dabʿa shows a gradual increase in house size over time; each estate consists of a central house and subsidiary buildings containing storage and food-production facilities occupying the exterior of the main building. The continuous enlargement of each estate, however, also indicates much continuity and stability concerning these family-owned properties. Over time, a growing tendency to move certain household activities to the exterior of the house can be observed, as well. This is also paralleled at Amarna, and the changing pattern of activity areas observed within the houses fits well to the points made by Spence, namely that these household activities are not linked to specific architectural layouts but reflect personal choice.

There is a marked tendency in relation to the social upward movement of these families who seem to have been involved in farming activities as well as trade, which seems to speak against a strong urban-rural dichotomy. It also suggests an emphasis on the representative aspects leaving the interior of the core house cleaner and creating a more comfortable environment for living. The remodeling efforts and extensions of the initial buildings over time clearly show the evolution of a stable community that was prospering in the context of an evolving urban town which acted as the most significant trade hub in the north of Egypt during this time. It is difficult to detect any of these trading activities in the household assemblages recovered during excavation except for imported pottery vessels and certain types of foreign objects such as some of the weapons provided as grave goods. Most of the finds associate the activities of the household to agricultural tasks. Müller attributes the fact that objects from the excavations in general do not provide compelling evidence about the status

of its inhabitants to the abandonment processes, which would have seen the removal of the more valuable objects. The almost complete absence of any administrative titles and inscriptions from this settlement quarter is striking and has not helped for a better understanding of the social status of the people living here. To some extent, this might also be linked to the overall preservation of the site and its architecture; the walls were in many cases only a couple courses of mudbricks high. Since stone is rare in the Delta region one cannot exclude that some potentially inscribed material such as doorjambs had been dismantled and taken away for reuse elsewhere.

Since the majority of the inhabitants were of foreign origin, the absence of writing can also be explained by the fact that these groups of immigrants did not come with their own writing system and Egyptian hieroglyphs linked to administration were only adopted by the highest-ranking elite (Quirke 2004a, pp. 186–88). There is no evidence for the use of writing in the private sphere by the town's inhabitants. The lack of inscribed material at the late Middle Kingdom/early Second Intermediate Period settlement at Tell el-Dab'a is certainly noteworthy, especially since this was a period that for the rest of Egypt left a rich repertoire in administrative records and sealings indicating a complex administrative system in place (see Picardo, this volume). As Müller concludes, the continuous increase in housing plot sizes and the development toward more elaborate and larger houses evidently shows the presence of a prospering neighborhood at Tell el-Dab'a, even if its exact social status is much more difficult to grasp for the above-mentioned reasons.

The Changes of Trash Disposal Patterns at Elephantine and Implications for the Evolution of Egyptian Society

In his paper, Felix Arnold focuses on patterns of trash disposal and the evolution of different practices over time using archeological data from the settlement of Elephantine, which provides an interesting example. This settlement is situated on an island location in the region of the First Cataract, an area that can be considered the southern border of Egypt for much of the pharaonic past. Here the conditions for settlement are much more spatially restricted in comparison to the sites of Amarna and Tell el-Dab'a,³ since Elephantine is an island within the Nile, and throughout its continuous occupation from the Predynastic period until Roman times, the habitable area was limited. Arnold demonstrates in his diachronic study that it is possible to observe the long-term evolution of trash disposal patterns within the settlement that changed from being dealt with inside the houses to an increasing effort in moving activities generating much waste toward the exterior and creating a more comfortable and cleaner environment inside. He links this observation to the growing sense of private space, which is a development that can be seen on different levels in the domestic sphere, particularly when comparing the evolution from the intermingling houses of the third millennium B.C. to the buildings consisting of multiple floors, signs for an increased verticalization of domestic space in the later periods of pharaonic and post-pharaonic period history. By the

³ At Tell el-Dab'a a number of *geziras* (sandy mounds formed naturally by the movement of the Nile channels) existed that were particularly suitable for settlement. Waterways as well as natural harbors

restricted the choice of settlement to some extent but not nearly as much as on the small island of Elephantine (Forstner-Müller et al. 2007).

Ptolemaic period, most food production and manufacturing activities were kept separate from the inside of the building and were moved into separate courtyards behind the houses away from the street. A further point Arnold makes in his analysis also fits well with the observations made by the other participants of the seminar. As outlined above, it has been extremely difficult to link specific functions to certain rooms within the ancient houses, and therefore most spaces seem to have been multifunctional, which, according to Arnold, means that the same room was used for different tasks and activities except for those with fixed installations such as ovens and quern emplacements. He also questions the information that can be gained from the archaeological deposits discovered within rooms, which could be deposited intentionally, incidentally, or accidentally, clouding a clear understanding of what happened inside these spaces.

The Link between Trash Deposits and the Function of Buildings Dating to the Third Millennium B.C.

The oldest structure Arnold refers to as an example for trash disposal patterns, House H150 of the early Eleventh Dynasty (ca. 2100 B.C.), is a rather extreme case for a building that saw a continuous buildup of ash deposits inside the main hall or courtyard over time, which led eventually to the complete infilling of this space. Dating as early as the First Intermediate Period, H150 is characterized by a large rectangular hall or semi-roofed courtyard in which two rows of octagonal wooden columns supported a roof construction on the southern part while the northern side was left unroofed and in which several large fireplaces with diameters of about 1.5 meters have been excavated (Dreyer et al. 2005, pp. 30–31; Dreyer et al. 2008, pp. 77–78). Although the complete architectural layout of this structure is not known due to later destructions, this hall was clearly the central room for large-scale food production and baking activities, which can be witnessed by the various cooking and baking vessels and installations, associated ceramics, and large amounts of ash deposits. Arnold questions the function of this building, which was first interpreted as a “palace bakery” that supplied the nearby governor’s residence with bread. He expresses an inclination to consider H150 as a “house” in which the central hall provides evidence for numerous household activities referring to the latest publication dealing with this structure (Dreyer et al. 2008, pp. 77–78). The initial interpretation as a palace bakery has been changed to house based on the observation that other activities than baking took place in this building, as witnessed by the large number of cooking pots that left traces for a wider range of food preparation activities in addition to bread baking.

I think for several reasons that this interpretation is not the most plausible one, but given the fragmentary state of the preserved evidence it is difficult to be certain about any further interpretation. H150 was located in the vicinity of the building complex identified as the governor’s residence (H2). It was first published as the main bakery linked to this palatial complex, which would explain the continuous deposit of ash, a phenomenon observed throughout pharaonic history. Large-scale and intense baking activities generate an enormous amount of ash, which to some extent was allowed to accumulate within certain parts of the building at a relatively fast rate. An even larger amount of ash was dumped in the neighboring street to the west, and farther east a mound of deposited ash accumulated in an area measuring 10 × 30 meters in the location later occupied by the temple dedicated to Khnum (Dreyer et al. 2008, p. 78). It is remarkable to see the continuity of H150 having

been used for bread baking and food production which remained in use for almost 300 years; the amount of generated ash in conjunction with the large fireplaces and other installations strongly indicates that this structure was more than just supplying a single household on the island with a staple food. Furthermore, the latest excavation of this structure which had the aim to further investigate its function resulted in the discovery of a large number of clay sealings. According to the impressed motives they date to the Eleventh Dynasty and the back-types suggest that they were used to seal the main entrance of H150 (Dreyer et al. 2008, p. 77). This adds further weight to the interpretation of this structure as some kind of larger production center being centrally administered. Archaeological evidence for large-scale production areas has also been found at other sites in Egypt, which could provide helpful parallels in order to put the evidence from Elephantine in a better perspective. For example, food production and manufacturing installations attached to the governor's palace complex have been excavated at Balat in the Dakhla Oasis dating to the late Old Kingdom/early First Intermediate Period (ca. 2300–2160 B.C.) (Soukiassian, Wuttmann, and Pantalacci 2002). Archaeological fieldwork has provided evidence for the existence of a distinct building complex or outbuildings identified as a kind of supply center that was separated from the core of the palace by a narrow corridor. The architecture of the individual units within this production complex resembles domestic structures but the excavations revealed that these units had a rather specialized function supplying the palace and several cult chapels with food. In none of the rooms was any comparable ash deposit found but the span of time when the palatial complex was in use was considerably shorter than that of building H150 at Elephantine. For example, the floor level of a bakery unit had grown of about 70 centimeters in height due to thick and continuous ash deposits around the fireplace that had been separated from other installations by a small wall that was regularly rebuilt in order to adapt to the rising floor level (*ibid.*, p. 103).

Further interesting evidence for domestic and institutional trash disposal patterns dating to the Old Kingdom can be found at the Western Town of Heit el-Ghurab at Giza (ca. 2580 B.C.). One of the large elite houses excavated here provides some interesting evidence for the dump of household waste. The open space between two large houses, House Units 1 and 2, was found to be filled with a considerable amount of trash that included a large amount of broken beer jars ("pottery mound"). The source of the pottery mound was identified as House Unit 1. From the stratigraphic record it is possible to deduce that most of this waste accumulated here when the walls of the southern portion of House Unit 1 had already started to disintegrate (Kawae 2009, pp. 88–89). Furthermore, the waste that was generated during the brewing and baking activities was dumped along the southern corridor of House Unit 1, but only when this part of the house had fallen into disrepair and was not in use anymore (*ibid.*, pp. 90–91). Ash also accumulated at an increased rate within the interior rooms of the house in the area specifically designated as a bakery (Lehner 2011, p. 132, fig. 13.1). The finds from the pottery mound emphasize the presence of larger-scale food production in the vicinity but also that administrative tasks were carried out here, since the deposits within the pottery mound contained a significant number of broken clay sealings (Nolan 2010). Neither House Unit 1 nor Unit 2 had any obvious architectural features that would classify them as purely administrative structures, which shows clearly that architecture alone does not necessarily reveal much about what kind of activities would have been carried out in the interior. Another consideration in this respect relates to the possible social status of the inhabitants of House Unit 1. The substantial amount of faunal remains that were also found

in the pottery mound deposit indicates that the diet of the inhabitants seems to have been marked by a large amount of high-quality meats which was typical for the elite sector. This can be witnessed by cattle bones, especially from young animals, in addition to bones from wild species indicating that the inhabitants in this part of the town had certain hunting privileges (Redding 2007). Elite status of the inhabitants of House Unit 1 is further confirmed by the size of this building complex, which covers about 400 square meters. It could be characterized as a villa or large estate in this respect. As a conclusion for households dating to the third millennium B.C., the example from the Western Town at Heit el-Ghurab provides two important insights: household trash was discarded in open spaces to the exterior of domestic buildings if space was available. Spaces within the interior of the house were used for waste deposits once they had fallen out of use. Certain areas of the house that were specifically designated for food production saw an increased deposit especially of ash while the rest of the house was kept clean (Lehner 2011, pp. 131–33). This is comparable to the evidence for the late Middle Kingdom and Second Intermediate Period houses at Elephantine where a small room identified as “oven room,” usually located in the northern corner of the house, was specifically designated for cooking and baking, and was marked by ash deposits and blackened walls (von Pilgrim 1996a, p. 210).

Evidence for Administrative Activities in Private Houses

House H70, which is discussed in depth in Arnold’s paper, also provided evidence for a larger sealing deposit (Siegelverschlusskonvolut 17). He mentions the discovery of a scarab that had been buried in one of the rooms “for safekeeping” and interpreted this as evidence for administrative tasks being carried out by the inhabitants. Studies on scarab seals such as the recent publication by Daphna Ben-Tor have emphasized that scarabs were not only administrative tools but could also be used as amulets (Ben-Tor 2007, p. 5). In this respect, the precise meaning of the scarab seal found inside H70 must remain inconclusive as evidence for administrative activity. Furthermore, the archaeological context of many of the sealing deposits from Elephantine and the direct link to sealing activities carried out by the inhabitants of the houses remains difficult to establish, as it has not been possible to directly associate occupation levels with sealing finds. In most cases these constitute secondary trash deposits (*ibid.*, p. 7). The four largest deposits within the Middle Kingdom settlement quarter at Elephantine, among them the deposit of 209 seals from House H70, have all been interpreted as trash deposits that cannot be linked to the occupation of the respective buildings in which they were found — they were deposited only once the buildings had been abandoned (von Pilgrim 1996a, p. 254). Therefore any possible involvement of the inhabitants of H70 in economic transactions as witnessed by the sealing deposits or any related trash disposal patterns must be treated with caution.

The Evolution of Domestic Architecture at Elephantine

In his analysis of the houses of the Middle Kingdom and Second Intermediate Period, Arnold emphasizes that there was a tendency to transform open interior courtyards to roofed halls by the Second Intermediate Period, which would also support an increase in cleaner spaces along the interior of the house. The long-term evolution during the chosen time frame of several houses at Elephantine seems to confirm this trend but there is so far no conclusive

data that would suggest that this was part of a nationwide phenomenon constituting a general trend in the evolution of domestic architecture in Egypt by the early second millennium B.C. (see, for example, the contemporary archaeological evidence from Tell el-Dab'a; Müller, this volume).

The houses that were excavated in the western town quarter at Elephantine and whose evolution over time has been studied by Cornelius von Pilgrim belong to the smaller category of houses, varying between 40 and 230 square meters of floor space (von Pilgrim 1996a, pp. 189–205). The two predominant house types, the so-called three-row houses (40–97 sq. m) and the slightly larger courtyard houses (100–230 sq. m) are typical for this provincial town situated on a spatially restricted island location. It is difficult to compare them to many of the contemporary structures from other parts of the country, most of which are larger in size and formed part of settlements that had been founded along the desert edge (e.g., Lahun, Wah-Sut). The latter were clearly not influenced by the same geographical parameters. Even the settlement of Tell el-Dab'a, which constitutes an example for a dynamic urban center with a variety of houses built on different scales, does not really show any clear parallels to the houses at Elephantine.⁴ This might be linked to regional differences as well as geographical features in addition to the overall size and social status of the inhabitants (von Pilgrim 1996a, p. 205 and no. 577).

Spatial Restrictions and Trash Disposal Patterns

The dynamic interactions among inhabitants at Elephantine can be witnessed by the use of vacant housing plots for communal cooking and storage activities but also for waste disposal, which can be traced on the island from at least the First Intermediate Period onward, as the example of H150 has already demonstrated. Furthermore, it seems to be a recurring phenomenon to dump trash in abandoned or unused parts of the settlement that were situated conveniently close to the respective houses. There is little evidence for the deposition of waste on the more distant shores of the island. Even formerly sacred space was not safe from being filled up by such deposits once the temple had fallen into ruins. For example, the dismantled temple dedicated to Khnum was covered by large amounts of refuse deposits during the sixth and seventh centuries B.C.

Concerning the evolution of house layouts, Arnold also emphasizes that there is a noticeable increase in verticality toward the later pharaonic period, which is in fact a widespread tendency also known from many other settlements in Egypt and not particularly typical for Elephantine alone. Building houses with multiple floors had the advantage in being more efficient in using restricted settlement space with a growing population but certainly also helped to keep interior living space cleaner as most of the food production activities, animal stalls, and storage facilities were relegated to adjacent courtyards on the exterior. Although the streets could have been another obvious solution for waste disposal, they did not yield significant traces of evidence for such activity at Elephantine, though dumping in the streets seems to have been a common phenomenon elsewhere. For example, evidence for trash being buried in pits within the street is well attested for the Ptolemaic-period settlement

⁴ Contra von Pilgrim 1996a, pp. 189–99. The parallels from Tell el-Dab'a do not match the scale and func-

tion in comparison to buildings from Elephantine and should be used with caution.

quarter at Buto, a major town situated in the northwestern Delta region (Hartung et al. 2009, p. 138). Even though the available settlement space was relatively restricted on the island of Elephantine, waste disposal occurred in the vicinity of the houses while some of it might have been discarded into the river or along the riverbanks as Arnold suggests, although no such deposits have yet been excavated. Thus, the overall picture given by the various archaeological examples from Elephantine that have been presented here demonstrates that the disposal of household waste in the vicinity of the buildings was the rule with the intention of keeping the interior deliberately clean. Based on Elephantine's specific location and characteristics, the gradual progression over time from unclean interior spaces to an increase in the use of exterior spaces for household activities that generated much waste might not be as strong an indicator for changes in waste management as Arnold suggests. As mentioned above, H150 is certainly not an example for a typical Eleventh Dynasty domestic structure and the way in which the ash was deposited over a considerable amount of time is linked to other considerations than being part of expected household activity patterns. I would argue that the location of H150 and its albeit few architectural details centering around the columned hall (some of the columns were preserved in situ, the wood having been protected against termites by the ash) make an interpretation as food-production center a much more plausible explanation than using this as an example for regular household activity and its implication about trash disposal patterns.

The Case of Administrative Households at the Town of Wah-Sut at Abydos

Further investigations into the character of domestic households have been conducted by Nicolas Picardo, whose paper focuses on the so-called hybrid households that were part of the settlement of Wah-Sut at Abydos. This town was a state-planned settlement of the Middle Kingdom that was inhabited by people involved in the mortuary cult for Senwosret III's tomb complex situated in the vicinity dating to about 1850 B.C. This mortuary complex consists of the actual royal tomb, a mortuary temple along the valley edge, and a vast production area immediately to the south of it (Wegner 2007b; V. E. Smith 2010). Picardo's study addresses an important issue, one that other participants of the seminar have also touched upon, namely that it is difficult to identify buildings that were used solely for administration according to the architectural features. This is even more surprising since ancient Egyptian culture is well known for an extremely elaborate administrative system, but there seems to be almost no evidence for purely administrative buildings (see, for example, the cases discussed by Kate Spence on Amarna, this volume). On different scales and through different time periods, administrative activity was carried out in buildings that also served other purposes and usually had a residential component, too. In this respect, the houses at Wah-Sut constitute an excellent case study for hybrid households that were domestically orientated but part of an institutionalized setting. Picardo was able to carry out some fieldwork at House E, which is one of the smaller mansions (545 sq. m) south of the so-called mayor's residence, Building A. He uses the finds in relation to the architectural layout as a starting point to analyze the domestic as well as institutional spheres. Such a house was not only the venue for the typically expected household activities, but the inhabitants and their behavior were shaped by their affiliations to national institutions, both spheres affecting the identity and status of the head of household and his dependents. Picardo provides a useful conceptual framework of

introverted versus extroverted identities, which are a good angle for further investigations of House E and its inhabitants. The building was occupied through the late Middle Kingdom, a time marked by a complex administrative system known through the large amount of administrative titles and huge discards of broken clay sealings (S. T. Smith 2001). Evidence for such deposits have been found along the exterior refuse areas closely linked to activities conducted in House E; closer analysis of this material provided some interesting insights into the economic dealings of this household. The frequency with which repetitive sealing motifs occur clearly sheds light on the presence and continuation of the sealer's activity in this building. Picardo emphasizes that the large number of sealings also showed unique motifs that could be a marker for private economic interactions, which seem to have been imbedded within this predominantly state-run town. He concludes that part of societies' economic activities could have been much more embedded within personal and informal networks than previously thought. The sealing practices observed for House E suggests that there is evidence for both formal and informal dynamics within the household and this distinction between the official administrative activities and private exchanges might have been an important feature that characterizes the households in a state-foundation like Wah-Sut. Another concern of the members of these households seems to have been the preservation of titles and status over several generations, which can be deduced from the recurrence of names and titles linked to House E. Picardo recognizes the presence of three officials whose names he tries to link to sealings found in the nearby mortuary temple. This is a difficult undertaking that has not yet provided fully conclusive results but certainly deserves consideration when trying to gather more precise data about the inhabitants within a specific house at Wah-Sut. In fact, such investigations are only possible at sites like this town, since there is an extremely close link between the official administrative system and private households, typical for towns that were founded and supported by the central state. However, this could also have the effect to cloud many of the unofficial economic transactions (see Muhs' comment on the New Kingdom evidence from Deir el-Medina, this volume). Wah-Sut, while similar in layout and main constituents as Lahun, has the advantage of having been a recent excavation where a lot of attention has been paid to stratigraphy and findspots in connection with the architectural layout providing a deeper level of understanding for the occupants of such state supported communities predating the New Kingdom.

The Evidence for Households in New Kingdom Nubia

A final archaeological example for the study of households comes not from the heartland of Egypt proper but from the periphery in Nubia. Recent fieldwork at the settlement site of Amara West, situated north of the Third Cataract, provides additional insights from a marginal region dominated by the Egyptians specifically during the New Kingdom and its interaction with the indigenous populations. Neal Spencer and his team have excavated two discrete settlement areas at Amara with the aim to investigate the evolution of this town from its initial foundation to the final occupation by the end of the New Kingdom (ca. 1077 B.C.). He highlights changes and alterations on the macro and micro level, events such as the large-scale leveling operations affecting most of the ancient town, including the largest residence and other domestic dwellings (Spencer 1997). This had much impact on the later development and layout of this settlement. During the Nineteenth and Twentieth Dynasties, parts of the town started to spread extra-muros, where new areas were settled by larger

“villas” which, apart from the overall size, do not seem to reflect a major social change in comparison to the inhabitants in other settlement quarters in terms of installations and material culture. Additional data from excavations in the nearby cemetery as well as results from geological analyses are integrated by Spencer into establishing a better picture of the inhabitants at Amara. In general, the physical health of people seems to have been rather poor. Since Amara was founded on an island close to the northern riverbank, the town was to some degree protected but also restricted in its development. The geological investigations focusing on the river channels provide evidence that shortly after the foundation of this town the northern channel dried up, which must have had serious repercussions in terms of water supply for the inhabitants, who made efforts to reactivate this channel.

Comparable to the neighborhood studied at Tell el-Dab^{ca}, a certain degree of hybrid culture should be expected for these communities, and though on a different temporal scale, astonishingly similar behavior can be observed. The architectural layout of the houses is closely modeled on and conforming to contemporary Egyptian standards; the mixed ethnicity of the inhabitants is mainly recognizable in the mortuary culture. Spencer notes only one building at Amara that exhibits Nubian traditions. It is marked by a round layout and was probably a kind of community building that was also equipped with cooking facilities. Apart from these examples, little evidence from within the houses reveals a strong presence of Nubians in this town. Ceramic evidence for Nubian vessels is predominantly linked to cooking pots which make up about 10 percent of the whole pottery assemblage; the rest was typically Egyptian, including some foreign imports such as Mycenaean stirrup jars. In this respect, it is worth mentioning that significant amounts of Nubian pottery in settlements situated along the Nile valley in Egypt have been discovered during excavations. For example, at Tell Edfu, which was an important regional center in the second Upper Egyptian nome, there is a noticeable increase in Nubian cooking pots at the end of the Second Intermediate Period into the early New Kingdom (Ayers and Moeller 2012, p. 107), which makes one wonder whether this should be interpreted as an increase in Nubian inhabitants at Edfu, or a sign for something else, such as an increase in exchange and trade relations.

In any case, the new excavations at Amara West will be a good starting point for further investigations into cultural intermingling but also the possible factors, political and environmental, that influenced the evolution of an Egyptian foundation in Nubia. Spencer clearly shows that the new archaeological evidence from this settlement provides a much more complex picture about its inhabitants than the usual concept of temple-towns often applied to these sites (Kemp 1972). His study is following the trend we have seen with many papers at this seminar that promote a bottom-up approach to the investigation of ancient societies.

Conclusion

In conclusion, the archaeological evidence dealing with Egyptian houses and households presented by the various participants highlights several important issues. Most of the papers address the common problem of multifunctionality for the use of domestic space that makes it impossible to identify any one room specifically designated for a single function. In this respect it is interesting to note that there is a marked difference in the definition of “multifunctionality” as it was expressed by Kate Spence in comparison with the papers by Miriam Müller and Felix Arnold. The former uses a conceptual approach linked to social experience and decision-making of the inhabitants while the latter apply multifunctionality

to the observation that there is evidence for numerous household activities being carried out in a single space. Closely linked to this discussion is also the fact that it is impossible to distinguish administrative space on purely architectural grounds. As a result of the evidence presented in the papers by Nicolas Picardo and Felix Arnold, it becomes very clear that administrative tasks, whether on a private or official level, could be carried out in buildings that had primarily a residential character. As a consequence it is possible to make a case for the presence of so-called hybrid households that combine official and private functions under the same roof. The notion of strictly public and administrative architecture per se, as most of us are familiar with from the Greco-Roman world, did not really exist in pharaonic-period Egypt.

Another line of inquiry followed in the contributions by Miriam Müller and Neal Spencer deals with the phenomenon of cultural entanglement in relation to the nature and ethnicity of the inhabitants within a given settlement quarter. It comes as a surprise that the two sites being discussed here, Tell el-Dab'a and Amara West, which are located exactly at the opposite ends of the country, show very comparable evidence in the archaeological record. The former is marked by an influx of foreigners from the Levant while the latter is a case for an Egyptian settlement in the heartland of Upper Nubia. In both instances there is good evidence for the presence of non-Egyptians living in these towns and constituting a significant component of the inhabitants. While domestic architecture is primarily Egyptian in style and layout, it is the funerary evidence that shows a much more hybrid culture revealing the mixed ethnicities of the inhabitants. It would be interesting to continue this line of investigation on the evolution of social practices, cultural assimilation, and entanglement which has been recently addressed by Paul van Pelt (2013) and Bettina Bader (2013).

By comparing the contributions focusing on Egypt with the other regions of the Near East that have been presented during this seminar, it becomes evident that one of the priorities for Egyptian household archaeology lies in the application of micro-archaeological approaches in addition to the more traditional excavation techniques which can shed more light on the function of specific activity areas identified from the floor levels. The integration of textual evidence with archaeological data has been increasingly applied to evidence from Egypt while the use of theoretical models in addition to new field techniques and technologies remain rare. Some of this is also hampered by the fact that it is currently very difficult to export samples to laboratories outside of Egypt. Nevertheless, it is also important to acknowledge that the interest in ancient households has started to become much more popular over the past ten years and the scientific community is more inclined than ever to investigate the Egyptian civilization from a bottom-up approach in contrast to the traditional focus on the state and kingship as well as elites sectors of society.

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A Mesoamerican Perspective on Old World Household Studies in Complex Societies

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Household archaeology is an advancing field that is enhancing scholarly understandings of the past in all regions of the globe. The contributors to this volume successfully show productive ways in which micro and textual approaches to household archaeology are contributing to studies of Old World archaeology and the study of complex societies more broadly.

As a Mesoamerican household archaeologist I am a bit of an outsider to the regions covered by the case studies in this volume. This vantage point allows me to use this discussion paper to address the synergy that is being created across the field of archaeology as household studies are taking a central role in developing interpretations in each world region that allow a space for cross-regional discussions of social life and its consequences for society. How do the micro-worlds of individuals and their households affect broader-scale structures of human societies?

As Miriam Müller discusses in her *Introduction* to this volume, Mesoamerica is the world region attributed as the early leader in the development in the field of household archaeology (also see Allison 1999; Robin 2003; Rogers and Smith 1995; Steadman 1996). As a graduate student at the University of Pennsylvania in the early 1990s, the decade after the inception of the field, I took a graduate seminar on household archaeology with one of the pioneers of the field, Wendy Ashmore, but the course had a nickname — “too much Maya.” Too much Maya was the nickname of the course because almost all of the household readings were from Maya archaeology, since that is where so much of the early household research was being done. The current volume is a testament to the coming of age of household archaeology as a field central to any world region.

When I first began studying household archaeology in the early 1990s it was new, it had few practitioners, and most importantly it was quite controversial (Wilk and Rathje 1982; Wilk and Ashmore 1988). Nobody knew where household archaeology was going. Within Mesoamerica household archaeology, at its inception, it had as many detractors as attractors. A few years before I entered graduate school, Olivier de Montmollin had published an influential piece that had everyone shaking their heads and wondering (de Montmollin 1988). Household archaeology, he argued, was mired in the micro. It would not stand the test of time. One house was like another house was like another house and the micro-worlds of their inhabitants were of no consequence to understanding the broader questions of human societies that archaeologists were interested in understanding. Mesoamericanists, he argued, had micro-vision, they cared about tiny details in ways that only Mesoamericanists could. They were blind to big-picture questions and thus were pioneering a subfield of no import that no sensible archaeologist outside of Mesoamerica would ever be able to relate to.

How exciting then in historical context is the current volume of Old World household archaeology studies. What a relief to those of us Mesoamericanists who have always embraced the promise of household studies, to see that we are certainly not alone in understanding the vast effects micro-activities can have.

In organizing this volume Miriam Müller attends to and fruitfully combines two dimensions of household studies in archaeology: textual analyses and micro-archaeological techniques (the latter Müller defines as scientific techniques that enable archaeologists to examine micro-remains of human activities). In so doing Müller and the volume participants bring into concert humanistic textual analysis and scientific micro-technologies, illustrating how archaeologists can play an important role in bridging larger cross-disciplinary divides in scholarly research. As archaeologists are challenging themselves to ask and answer questions about ancient people and their lives previously considered beyond the realm of archaeological knowledge, they are creatively bringing together humanistic and scientific approaches, that allows archaeology to be at the forefront of research that is bridging the intellectual divide between humanistic and scientific knowledge (Robin 2001).

To answer humanistic questions about the lives of ancient people, archaeologists are increasingly making use of new and existing scientific methods to complement archaeological, art historical, and textual analyses. Many lines of micro-analysis were incorporated by conference participants along with textual and macro-archaeological approaches, highlighting the utility of incorporating multiple lines of evidence (Robin 2013; Wylie 1992). Soil chemistry, micro-artifact analysis, paleoethnobotany, zooarchaeology, magnetometry, and paleodeposits are particularly highlighted in the papers by Felix Arnold, Lynn Rainville, Adelheid Otto, Aren Maeir, and Neal Spencer. This multidisciplinary research bridges the divide between the humanities and sciences. It enables archaeologists to propose answers to questions previously considered beyond the realm of archaeological knowledge — questions about people's lifecycles and life histories, and their perceptions of the world.

Within this broader multidisciplinary approach, household studies have been a springboard for peopling the archaeological past, because although it is not always possible to locate actual people in the archaeological record — through their human remains, images, or texts — archaeologists can excavate the places where people lived, thereby inferring their presence, roles, and relations in the past.

The springboard of household archaeology also allows us to gain a more democratic view of people in the past, by providing a means to investigate all people's lives in the past from rich to poor, men and women, free and slaves, and so on. In my own research I have found that household archaeology is particularly useful for understanding the roles and relations of under-represented groups in the past, such as ordinary people and women (Robin 2006, 2012, 2013). This opening up of the past to explore the full range of the people who inhabited the ancient world is amply demonstrated in this volume, particularly in the papers by Jens-Arne Dickmann, Miriam Müller, Lisa Nevett, Neal Spencer, and Lynn Rainville.

A society's textual record often focuses on the grand events of history and is often written by and for elites, who were also often men. Such records can leave out the histories of ordinary people and others; when written records do discuss ordinary people, they often do so from an indirect perspective. But everyone in the course of their day-to-day life leaves some material and spatial traces in the archaeological record that can be identified through household archaeology. Household archaeology can provide the missing social information to understand the past. Household archaeology can reveal the *hidden transcripts*: the social

perspectives developed by members of society through their lived experiences, which are omitted from *public transcripts*, the overt and public representations of social life inscribed in the texts, art, and architecture of society's dominant groups (Scott 1990).

A focus on household archaeology underscores the crucial role that archaeologists can play in reconstructing the lost voices of traditionally neglected social groups. Rather than being a part of the anonymous masses, in Michel de Certeau's (1984) writing on everyday life, the ordinary person doing ordinary things is the one who is the "common hero" of human history.

To conclude this discussion, I present some of my own research findings in household archaeology that provide a Mesoamerican complement to the case studies presented in this volume. Between 2002 and 2010, I conducted research at the ancient Maya farming community of Chan in Belize (fig. 20.1; Robin 2012, 2013). The Chan project was a multidisciplinary archaeological research project, bringing together a team of over 120 foreign and local archaeologists, botanists, geologists, geographers, chemists, computer scientists, artists, students, workers, volunteers, and local community residents from Belize, the United States, England, Canada, and China.

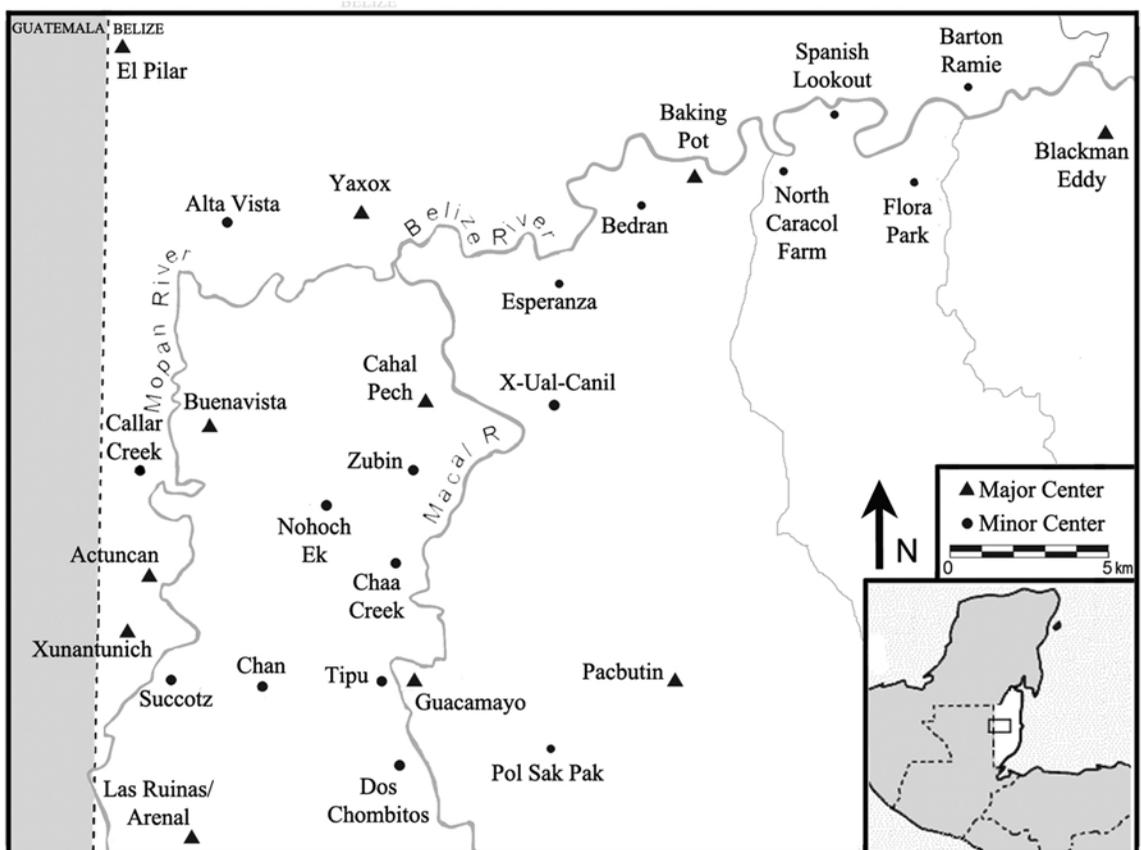


Figure 20.1. Map of the Belize River valley and Maya area showing the location of Chan (map by Elizabeth Schiffman)

I sought out the farming community of Chan as a place of investigation because Chan was a community with a 2,000 year occupation history, lasting from 800 B.C. to A.D. 1200, a time period that spans the major chronological periods of ancient Maya society: the Preclassic, Classic, and Postclassic periods. Unremarkable in terms of community size or architectural elaboration, Chan nonetheless flourished while the fortunes of nearby major Maya civic centers waxed and waned. Research at Chan was aimed at investigating the everyday lives of ordinary Maya farmers and the impact farmers had on Maya society. A key question I asked was, given that 2,000 years is a long period of time, what did Chan's residents do to facilitate the longevity of their community?

To address this and other questions I designed a household archaeology-focused project at Chan. Initially we mapped the 3.2-square-kilometer area of the community and recorded the 274 households and 1,223 agricultural terraces that surround Chan's community center (fig. 20.2). We then undertook full-scale area excavations at a 10 percent sample of households that represented the temporal, socioeconomic, and vocational variability within the community. In addition to household archaeology we excavated all buildings in Chan's community center. This research collected roughly half a million objects of Maya farmers' daily lives, one of the largest archaeological samples from a Maya farming community. Additionally, scientific techniques of soil chemistry, paleoethnobotany, human bone, animal bone, obsidian sourcing, radiocarbon dating, and micro-artifact studies expanded our data set of household and daily life.

The substantive research findings of the Chan project document that Chan was home for a diverse array of ancient Maya people, from farmers to craft producers, diviners, and community leaders. Exploring residents' households reveals a socially, politically, intellectually, and technologically vibrant community that researchers might not have initially envisioned given the scale of architecture and settlement at Chan (fig. 20.3). Chan's residents innovated conservation-wise agricultural technologies and forest management strategies. A mature, closed-canopy, tropical forest maintenance strategy, terracing to avoid erosion and maximize water infiltration, knowledge of sustainable agriculture established over centuries and passed down generation after generation, and the use of local resources are some of the environmentally effective strategies developed by Chan's farmers and local craft producers that enabled the community to endure. Extremes of wealth and power were avoided within the community, as all residents from the humblest farmer to the community leaders had access to a similar range of exotic items and lived in perishable houses with similar outward appearances. Ritual and political practices within the community incorporated all residents and focused on the community as a whole, rather than individual community leaders.

This long-term stability contrasts with that of the opulent Maya civic centers with their towering temple pyramids that form the usual focus of Maya archaeological research. Avoidance of extremes of wealth and power, more equitable distribution of goods, consistency in health, and communal focus of ritual and politics are some of the socially effective strategies established by Chan residents. The sustainable forest management practiced at Chan is distinct from the more extractive practices seen at the larger Maya civic centers where royals culled the mature forest across the Classic period. The consistent presence of a low degree of biological stress in the Chan skeletal population indicates persistent good health at Chan. This contrasts with what is seen at larger Maya civic centers, where residents' health declined by the end of the Classic period as indicated by increasing degrees of biological

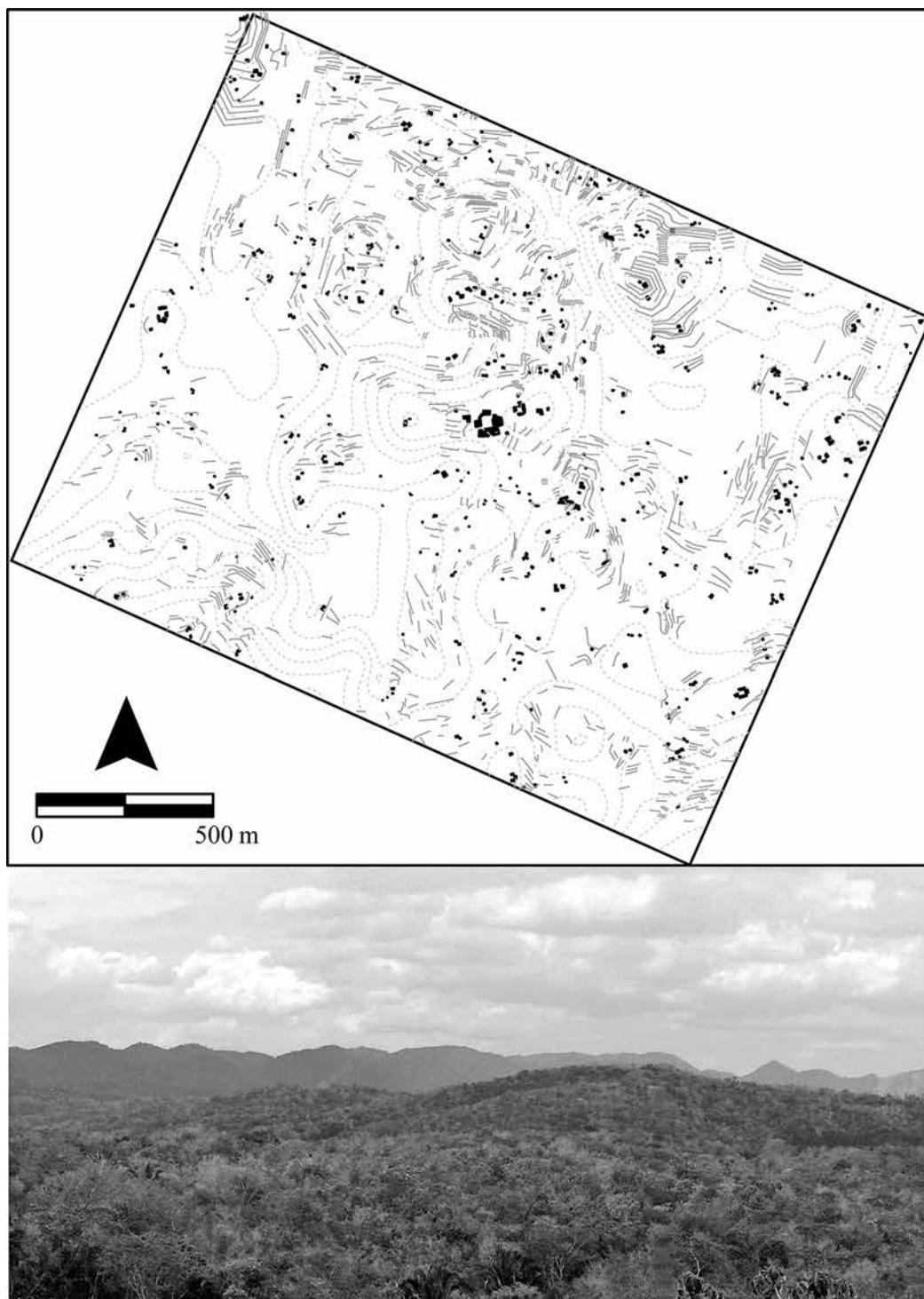


Figure 20.2. Top: Topography, settlement, and agricultural terraces at Chan. Black squares are mounds, gray linear features are agricultural terraces. Ten-meter contour interval. Bottom: Chan's hilly terrain. Photograph taken from the Central Group looking south (photo by James Meierhoff)

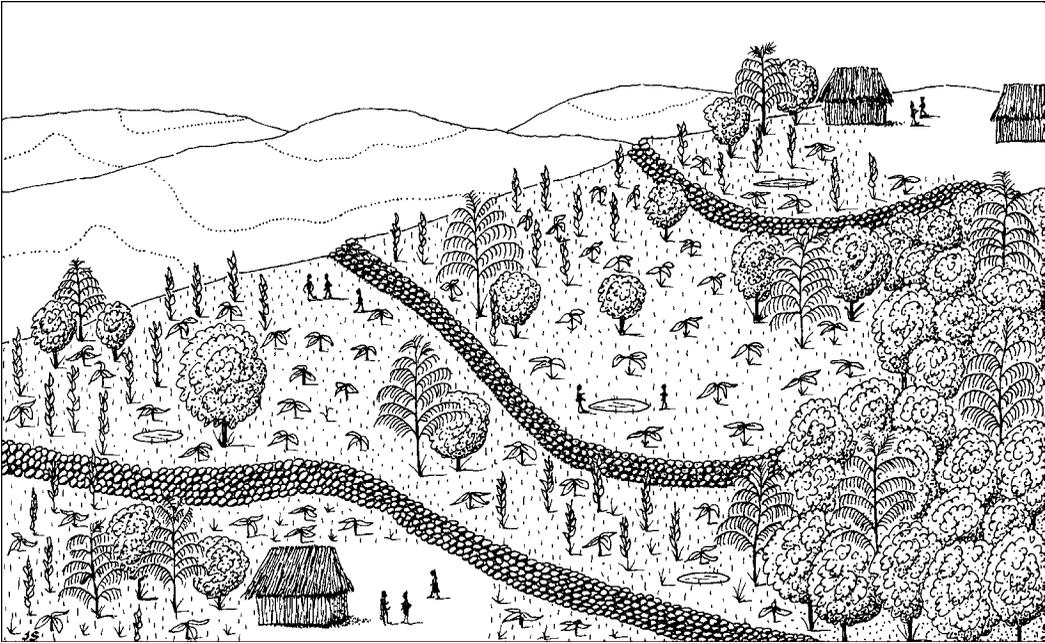


Figure 20.3. Idealized reconstruction drawing of farmsteads at Chan (illustration by Jack Scott)

stress (Haviland 1967; Healy 2004). It is perhaps unsurprising that the health of the forest and human health went hand in hand at Chan.

The research findings from the Chan site would not have been articulated in the absence of detailed household archaeology and attention to micro-analyses. At the 10 percent sample of households excavated at Chan, horizontal excavation with attention to intra- and extramural spaces was undertaken. Excavations in extramural space around houses and plazas indicate that these seemingly empty spaces were vibrant locations of daily work, ritual, and political activity. The details of community-level specialization and agricultural production at Chan would not have been identified without full-scale household excavations. The excavation of households provides significant information about the organization of society; without such investigations, our understandings of the social, economic, religious, and political organization of a complex society are limited (Robin 2012, 2013).

Although organic remains were not preserved at Chan and the preservation of carbonized remains is quite poor, taking 10-liter soil samples for flotation from every excavation lot allowed paleoethnobotanist David Lentz and his colleagues to identify a diverse range of forest species at Chan and the forest conservation practices of Chan's farmers (Lentz et al. 2012). Soil chemical testing of plaster floors revealed usage patterns specific to domestic, ritual, and administrative uses of space (Robin, Meierhoff, and Kosakowski 2012). Micro-artifact analyses revealed the traces of practices that sweepers had missed with their brooms (Cap 2012). Bioarchaeological analyses of human bone identified the consistent presence of a low degree of biological stress in the Chan skeletal population, which indicates persistent good health at Chan (Novotny 2012). Analyses of faunal remains identified dietary patterns consistent with fauna that thrive in mature forests (Blackmore 2012).

In the absence of household research at Chan it would be easy to assume that its humble farming households were inconsequential in broader Maya society. But the Chan research, drawn from systematic household studies at a seemingly unremarkable farming community, shows the potential richness of daily life and the social and environmental innovations that can be developed across people's daily lives that can have a profound effect on the constitution of their societies. Household archaeology at Chan offers an important lesson from the past about human societies, particularly in the matter of understanding social and economic sustainability.

This brief synopsis of a decade of household research in the Maya area, seen in conjunction with the detailed Old World case studies in this volume, gives a sense of some of the critical potentials of household archaeology: to understand everyday life, to understand ordinary people and other neglected groups in society through analysis of their homes, to understand that the things people do in their daily lives are deeply connected to and relevant for understanding broader ongoing in society.

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