## HOUSEHOLD STUDIES IN COMPLEX SOCIETIES (MICRO) ARCHAEOLOGICAL

## AND TEXTUAL APPROACHES

edited by

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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-Dab<sup>c</sup>a 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 thoughtprovoking 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

Anatolia	Mesopo	tamia	Years B.C.	Leyant	Egypt
			10000	Pre-Pottery Neolithic A	
Aceramic Neolithic			8000	Pre-Pottery Neolithic B	
Ceramic Neolithic	Jan Has San Ha	rmo suna tarra daf	6000	Pottery Neolithic Period A Pottery Neolithic Period B	Neolithic
Chalcolithic	UL	aid	4300	Chalcolithic	Predynastic Period
	South: Uruk	North: Tepe Gawra	3300	Early Brown I	Naqada I-III
Early Bronze Age I A-B	Protoliterate Jemdet Nasr		3000	Larry bronzer	
	Early D	ynastic I	2900		Early Dynastic Period
			2800	Early Bronze II	bynastics 1-2
	Early Dy	nastic II	2700		
Early Bronze Age II A-B			2600		
	Early Dy	nastic III	2500	Early Bronze III	Old Kingdom Dynasties 3–8
			2400		
Early Bronze Age III	Akkadia	n Period	2300		
A-C	Gutian Dynasty	Period: of Lagash	2200	Intermediate Bronze Age (Early Bronze IV / Middle Bronze I)	First Intermediate Period
	Ur III I	Jynasty	2100		Dynasties 9–10
Assyrian Colonists (Middle Bronze 1-111)	lsin-Larsa		2000	Middle Bronze I (Middle Bronze IIA)	Middle Kingdom Dynasties 11–12
and the state of the			1900	Constant of Consta	
	Old Assyrian Period	Old Babylonian	1800		and the second second
Old Hittite Kingdom (Middle Bronze IV- Late Bronze IIA)	e IV- Middle Period IA) Assyrian Period	Period	1700	Middle Bronze II–III (Middle Bronze IIB–C)	Second Intermediate Period Dynasties 13-17
	i er lou		1600		
			1500	Late Bronze I (Late Bronze IA-B)	New Kingdom Dynasties 18-20

Anatólia	Mesopotanta	Years B.C., A.D.	Levant	Egypt
New Hittite Kingdom	Kassite Period	1400		
(Late Bronze IIA-B)		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	Iron II	
Phrygians (Iron II)	Neo-Assyrian Empire	800	(iron IIA-C)	
Lydians		700		
(Iron III) Carians CImmerians	Neo-Babylonian Empire	600	Iron III	Late Period Dynasties 26–31
Achaemenid Empire		500	Achaemenid Empire	1st Achaemenid Period
		-400		Dynasty 27 2nd Achaemenid Period Dynasty 31
Hellenis	tic Period	300	Hellenistic Period	Greco-Roman Period
Attalid Period Seleucid Period		200	Seleucid Period	Ptolemaic Period
		100		
Roman Period		0	Roma	n Period
	Parthians	100		
	Sassanians	200		
Byzantine Period		300	Byzant	ine Period Coptic Period
		400		
		500		
Islami	c Períod	600	Islam	ic Period

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

Adelheid Otto, Johannes Gutenberg University at Mainz\*

## 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

<sup>\*</sup> I am grateful to the Oriental Institute of the University of Chicago, to the German Archaeological Institute in Berlin, and especially to Miriam Müller, for

inviting me to participate at this extremely stimulating conference.



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.<sup>1</sup> 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).<sup>2</sup>

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

<sup>&</sup>lt;sup>1</sup> Faunal- and floral-turbations, cultural and non-cultural disturbance processes are described in Schiffer 1987, pp. 206-09.

<sup>&</sup>lt;sup>2</sup> 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 в.с., (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.<sup>3</sup>

The great interest of the Weststadt lies in is 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.<sup>4</sup> 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)

<sup>4</sup> 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.

<sup>&</sup>lt;sup>3</sup> 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.

No more than seventy-five houses existed in the Weststadt, of which fifty have been excavated.<sup>5</sup> 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.<sup>6</sup> 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

<sup>&</sup>lt;sup>5</sup> 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.

<sup>&</sup>lt;sup>6</sup> These same practices have been observed in the constructions of the local people who live today in the villages of this region.



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.<sup>7</sup> 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.<sup>8</sup> 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.<sup>9</sup>

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

<sup>&</sup>lt;sup>7</sup> 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).

<sup>&</sup>lt;sup>8</sup> 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.

<sup>&</sup>lt;sup>9</sup> 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 *tan-nour* 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 firedogs,<sup>10</sup> 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.<sup>11</sup> 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,

<sup>&</sup>lt;sup>10</sup> Very much in the same way as the elder women at the village of Banat-Bazi do the cooking today.

<sup>&</sup>lt;sup>11</sup> 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.<sup>12</sup>

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,"<sup>13</sup> and yet another part was kept in a cooking pot in a storage room. But apparently not every

<sup>&</sup>lt;sup>12</sup> 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). <sup>13</sup> The veneration of "the gods" ( $il\bar{a}n\bar{u}/il\bar{u}$ ) and "the dead" ( $m\bar{e}tu/etemmu$ ) — according to the documents

from Emar and Ekalte — 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.<sup>14</sup>

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.<sup>15</sup>

### 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

<sup>&</sup>lt;sup>14</sup> 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.

<sup>&</sup>lt;sup>15</sup> 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 Sallaberger, 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.<sup>16</sup> 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.<sup>17</sup> 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.<sup>18</sup> 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.<sup>19</sup> 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.

<sup>&</sup>lt;sup>16</sup> 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 maidservant; 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).

<sup>&</sup>lt;sup>17</sup> 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).

<sup>&</sup>lt;sup>18</sup> 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.

<sup>&</sup>lt;sup>19</sup> 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.<sup>20</sup> At the end of the juridical act the text mentions that "the *hukku*-bread has been broken and the table anointed with oil. The brothers have received 1 shekel of silver."<sup>21</sup> 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.

purchased the house from Belu-li'mi, son of Abdu-

Da, owner of the house, for 1/2 mina of refined sil-

ver, the full price. He has received the silver and is

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

<sup>&</sup>lt;sup>21</sup> Emar text RE 20 (Beckman 1996), Sale of House:"... Iphur-Dagan, son of Abda, son of Kapara, has

ttling satisfied. The *hukku*-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."

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# 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.<sup>22</sup> 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

<sup>&</sup>lt;sup>22</sup> 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.



Figure 3.9a. Ideal typical house and inventory



Circulation

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 live. 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.<sup>23</sup> 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.

<sup>&</sup>lt;sup>23</sup> 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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