THE SOCIAL AND SYMBOLIC ROLE OF EARLY POTTERY IN THE NEAR EAST

A THESIS SUBMITTED TO
THE GRADUATE SCHOOL OF SOCIAL SCIENCES
OF
MIDDLE EAST TECHNICAL UNIVERSITY

BY

BURCU YILDIRIM

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR
THE DEGREE OF MASTER OF SCIENCE
IN
THE DEPARTMENT OF SETTLEMENT ARCHAEOLOGY

JULY 2019

Approval of the Graduate School of Social Sciences

Prof. Dr. Tülin Gençöz
Director

I certify that this thesis satisfies all the requirements as a thesis for the degree of Master of Science.

Prof. Dr. D. Burcu Erciyas
Head of Department

This is to certify that we have read this thesis and that in our opinion it is fully adequate, in scope and quality, as a thesis for the degree of Master of Science.

Assoc. Prof. Dr. Çiğdem Atakuman
Supervisor

Examining Committee Members

Assoc. Prof. Dr. Marie H. Gates	(Bilkent Uni., ARK)	
Assoc. Prof. Dr. Çiğdem Atakuman	(METU, SA)	
Assoc. Prof. Dr. Neyir K. Bostancı	(Hacettepe Uni., ARK)	
Assoc. Prof. Dr. Ufuk Serin	(METU, SA)	
Assoc. Prof. Dr. Yiğit H. Erbil	(Hacettepe Uni., ARK)	

I hereby declare that all information in this document has been obtained and presented in accordance with academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all material and results that are not original to this work.

Name, Last name: Burcu Yıldırım

Signature :

ABSTRACT

THE SOCIAL AND SYMBOLIC ROLE OF EARLY POTTERY
IN THE NEAR EAST

Yıldırım, Burcu
Ms., Department of Settlement Archaeology
Supervisor: Assoc. Prof. Dr. Çiğdem Atakuman

July 2019, 166 pages

The aim of this thesis is to investigate the social and symbolic role of the earliest pottery in the Near East which flourished during the Neolithic Period. This dissertation provides a comparative analysis of the earliest ceramics and the relationship of pottery form and technology to the plaster and figurine technologies. As early as the 9th millennium BC, the skilled use of ceramic technology and control of fire was evident in the production of lime plaster, as well as anthropomorphic and zoomorphic figurines in the region. Therefore, the question of "why the production of pottery had to wait for another two-thousand years", is an intriguing one. The results of the study demonstrate that the emergence of pottery is a "symbolic technology" that is deeply embedded in the earlier Neolithic belief and ritual. Pottery restates a relationship between "the human body" and "the house", as an alternative to the pre-existing Early Neolithic relationship that was formed between "the dead", "the house" and "the communal buildings". As such, pottery must have been an important agent in the negotiation of new social relations in the new economic context of agriculture. Whereas its form evoked familiar ancestral concepts, its portability and use facilitated new types of relations. In this context, the reason why pottery was such a late introduction in the Near East may not be due to a lack of

knowledge, instead, the reason is more likely to be cultural one, which requires a further contextual evaluation of the shifts in social structure and belief.

Keywords: Near East, Pottery Analyses, Social processes, Symbolic Use, Display Imagery

ÖZ

YAKINDOĞU'DA ERKEN ÇANAK ÇÖMLEĞİN
SOSYAL VE SEMBOLİK ROLÜ

Yıldırım, Burcu
Yüksek Lisans, Yerleşim Arkeolojisi Anabilim Dalı
Tez Yöneticisi: Doç. Dr. Çiğdem Atakuman

Temmuz 2019, 166 sayfa

Bu tez çalışmasının amacı, Yakındoğu'da görülen Erken Neolitik çanak çömleğinin sosyal ve sembolik rolünü incelemektir. Bu tez çalışmasında, Yakındoğu'da bulunan ilk çanak çömlekleri karşılaştırmalı olarak inceleyerek, bölgede çanak çömlek kullanımının gelişim aşamalarını değerlendirilmektedir. Daha da önemlisi, çanak çömlek formlarının ve teknolojisinin, alçılama ve heykelcik teknolojileri ile ilişkisi incelenmektedir. MÖ 9. binyılın başlarında, pişmiş toprak teknolojisinin ve ateşin nitelikli kullanımı Yakındoğu'da bulunan insan ve hayvan şekilli heykelciklerde gözlemlenebilir. Aynı zamanda, kireç sıva üretiminde de benzer teknikler kullanılmıştır. Bu nedenle "neden seramik üretiminin iki bin yıl daha beklemek zorunda kaldığı" sorusu merak uyandırıcıdır. Tez çalışmasının sonuçları çanak çömleğin Erken Neolitik'te görülen inanç ve ritüele derinlemesine gömülmüş bir "sembolik teknoloji" olduğunu göstermektedir. Diğer bir deyişle, çanak çömlek, "insan bedeni" ve "ev" arasındaki ilişkiyi, Erken Neolitik'te görülen "ölü", "ev" ve "ortak yapılar" arasında oluşan ilişkiye alternatif olarak yeniden şekillendirmektedir. Bu nedenle, çanak çömlek, tarımın yeni ekonomik bağlamında kurulan yeni sosyal ilişkilerin müzakeresinde önemli bir aracı olmalıdır. Bu bağlamda, çanak çömleğin Yakındoğu'ya bu kadar geç bir giriş yapmasının nedeni, malzeme bilgisi eksikliği

veya ihtiyaç eksikliğinden kaynaklanamayabilir. Bunun nedeni, büyük ihtimalle kültürel içeriklidir ve dolayısıyla sosyal yapı ve inançtaki değişimlerin bağlamsal değerlendirmesini gerektirmektedir.

Anahtar Sözcükler: Yakındoğu, Seramik Analizi, Sosyal Süreçler, Sembolik Kullanım, Sergileme

ACKNOWLEDGEMENTS

I would like to express my sincere gratitude to Assoc. Prof. Dr. Çiğdem Atakuman, my beloved thesis advisor. She introduced a new horizon in my life by leading me to think of concepts beyond their dictionary meanings. More importantly, she valued every aspect of my nature and contributed to my personal and intellectual growth in the scientific and human sense. It was a gift to interact with such a gifted and attentive archaeologist.

Working at ARIT was another great opportunity in my life. I worked there for the past seven years. I am indebted to ARIT Ankara director Dr. Elif Denel for her positive, innovative and gracious attitude. Also, the luxury of easily accessing the valuable publications that I could find in few libraries made my life easier. I would like to thank Özlem Eser for her friendship and the privileges she has granted me for using the library. Thanks are also due to my workmates Pelin Gürol Öngören and Çiğdem Önal Emiroğlu who transformed my work days into a beautiful experience.

Last but not least, I would like to thank Prof. Dr. Akira Tsuneki for having kindly shared the interim reports and published articles of Tell el-Kerkh with me.

Once again, I would like to thank my family members; Nazan, Mehmet, Fırat, Pera, and Günay who are the most important part of my inspirational and beautiful life; my dear cat friend Mimi; my friends Aslı, Tuğba, İlke, Gonca, Emrah; my dear Bohemian crew, and my Çadır Höyük family members Prof. Dr. Sharon Steadman and Assoc. Prof. Dr. Gregory McMahon for enriching my life.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF ABBREVIATIONS

BC	Before Christ
BP	Before Present
DFBW	Dark Faced Burnished Ware
EMW	Early Mineral Ware
et al.	and others
Fig.	Figure
GÖ	Günümüzden Önce
i.e.	in other words
MÖ	Milattan Önce
Pl.	Plate
PN	Pottery Neolithic/ Çanak Çömlekli Neolitik
PPN	Pre-Pottery Neolithic / Çanak Çömleksiz Neolitik
PPNA	Pre-Pottery Neolithic A
PPNB	Pre-Pottery Neolithic B
PPNC	Pre-Pottery Neolithic C
TAÇDAM	(ODTÜ) Tarihsel Çevre Araştırma ve Değerlendirme Merkezi
vd.	ve diğerleri

CHAPTER 1

INTRODUCTION

The term *ceramic* is essentially used to indicate an object that is shaped out of a mixture of earth and water which is then fired. The malleable qualities of ceramic paste have been providing our species with incredibly creative and communicative ways of thinking and representing the world. Ceramic technologies have been used to produce a great range of material culture elements, such as small objects of ornamentation, statues and architectural structures. Amongst this variety, portable containers have been the most important item of daily use as well as archaeological research (Rice, 1987, p. 4; Rice, 2015, p. 4); these portable containers are called "pottery".

In daily life, pottery is used to process, cook, preserve, store, transport and serve food items. However its existence is never limited to these functional qualities; pottery almost always reflects its producers' social perception of forms, images, colors and materials, i.e. the cultural aesthetic. This includes the knowledge of which materials, colors and forms should be selected to perform which duties. Equally, this aesthetic knowledge is very much attuned to the way these different types of pots are expected to perform in relation to the social norms of food production, processing and consumption. For instance, the potter and the user should be knowledgable about which color and form of pottery is needed for a specific social event. So that the right feelings are evoked and mutuality in community life is achieved around all the activities related to food, i.e. the source of life.

Although statuettes, i.e. "figurines", in Upper Palaeolithic of Eurasia are known to be the world's earliest ceramic products dating back to app. 30,000 BP (Barnett & Hoopes, 1995, p. 6; Budja, 2006, p. 183; Budja, 2010, p. 43), the earliest known introduction of "pottery" is known to be in the Far East. For example, in China,

hunter-gatherers were using pottery as early as 19,000 BP (Wu et al., 2012, p. 1696-1700). Japan should be considered as a competitor in this regard with its "Incipient Jōmon pottery" that is dated to around 16,500 cal. BP (Nakamura et al., 2001, p. 1129-1138). Otherwise, the earliest use of pottery from the Russian Far East and neighboring regions is dated c. 15,940–14,310 cal BP (Kuzmin, 2002, p.43). The earliest ceramics from North Africa date to mid-10,000 BP (Huysecom et al., 2009, p. 911-915).

Pottery was a rather late introduction in the Near Eastern cultural scene, which began to emerge as a widely used item at around 7000 BC. Once pottery came into use, it rapidly spread to the West along with the general Neolithic Way of life within a few hundred years. This happened almost simultaneously at a number of locations, involving sites such as Çatalhöyük, Tell Sabi Abyad, Tel el-Kerkh, Mezraa Teleilat and Tell Seker al-Aheimar (Fig. 1). This time period coincides with the establishment of communities mainly reliant of domesticated animals and plants in the aftermath of the Early Neolithic (appr. 10,000-7000 BC)[1]. Therefore, many researchers would argue that the emergence and spread of pottery is related to the technical necessities dictated by the introduction of new types of food and new techniques of food processing, storage and cooking, that must have proliferated following domestication and sedentary life (Tsuneki, 2017, p. 14). Although there seems to be a definitive chronological congruence in the background of this interpretation, there are discrepancies that beg further investigation.

For example, considering the early uses of pottery by non-sedentary and non-agriculturalist "hunter gatherers" of the surrounding regions for thousands of

[1] The gradual process of domestication of plants and adaption of a sedentary is a feature of the Neolithic Period. Two major chronological considerations distinguish the Neolithic Period in the Near East: Pre-Pottery Neolithic (PPN) and Pottery Neolithic (PN). PPN is further divided into Pre-Pottery Neolithic A (PPNA: 10,000-8500 BC), and Pre-Pottery Neolithic B (PPNB: 8500-7000 BC). The emergence of pottery containers marks the beginning of the Pottery Neolithic period (PN 7000-5500 BC). Hunter-gatherer subsistence patterns remained as the dominant economic feature over the PPNA and most part of the PPNB whereas a fully developed agricultural way of life was achieved at the very end of PPNB (Asouti & Fuller, 2013; Atakuman, 2014, p. 3). Particular terms like PPNA-PPNB-PPNC, Archaic Neolithic, Pottery Neolithic, Aceramic Neolithic and Ceramic Neolithic belong to the common characterization of the Near Eastern chronology (Cruells, 2008, p. 672, Atakuman, 2014, p. 2-3).

millennia, it is difficult to understand the reasons for, why the introduction of pottery in the Near East had to wait for agriculture and sedentism. In fact, as demonstrated at sites such as Göbekli Tepe, Nevali Çori or Jerf el-Ahmar, the Early Neolithic communities of the Near East were very skilled in the production of highly crafted artifacts; the construction of monumental architectural structures; manipulation of fire to produce lime-plaster while they even possessed the knowledge of ceramic technologies, as demonstrated in the production of small statuettes, called figurines. As a matter of fact, the rare evidence of a few sherds at the 9th millennium BC site of Demirköy along the Upper Tigris (Rosenberg & Peasnall, 1998), fragmentary fired clay vessels from the late 9th millenium BC site of Boncuklu (Fletcher et al., 2017) or the use of various clay objects together with some crudely made pottery at the 8th millennium BC Ganj Dareh (Smith, 1974) would suggest that some preliminary knowledge of clay vessels was present in these communities. Ultimately, it should not be surprising from the currently available evidence that the earliest pottery of the Near East presents itself as highly crafted artifacts with particularly executed shapes that reflect no process of trial and error. Yet, despite all the knowledge of materials, technologies and skill, they did not begin to widely utilize pottery before the 7th millennium BC.

The first ceramics in the Near East appeared as completely formed products with high craftsmanship. The common shapes and particular decorative elements used in different regions indicate a common conceptual background which was possibly manipulated differentially in each community involved in ceramic related practices. Furthermore, the earliest pottery recorded at many sites does not necessarily seem to be related to cooking and storing, but it definitively carries strong elements of serving and display (see Appendix B). Indeed, many of them are well made small bowls with particular surface colors and treatments, such as painting or burnishing, which suggest a symbolic purpose that may have been effective in particular social contexts of food and drinks sharing. The choice of temper and color could differ but forms seem to be consistently comparable in different regions. Thus, the general development would rather suggest that the technological choices may have been limited by cultural practices.

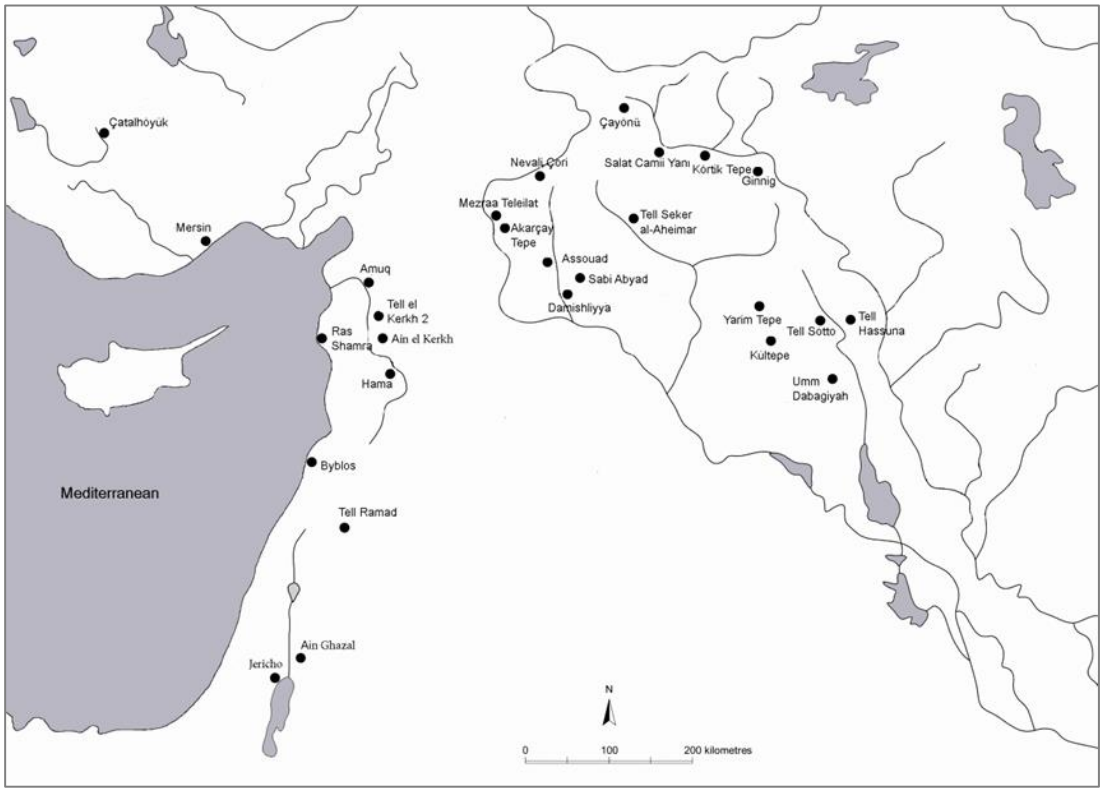

Figure 1. Map of Neolithic sites yielding the earliest pottery

Whereas the paradoxical nature of pottery emergence in the Near East is obvious, interestingly there are not many archaeological studies that have so far raised and systematically analyzed the issue. Instead, the archaeological study of pottery has been restricted to typological studies that aim to establish relative chronologies and cultural distribution spheres and/or technological studies focused on understanding resource locations, production strategies and social organization of labor (Webster, 2008; Trigger, 1989; Willey & Phillips, 1955; Shanks & Tilley, 1992; Renfrew & Bahn, 2005). In tandem with these approaches, the emergence and distribution of pottery was often explained as a new technology that fits with a transformation in food production and preparation processes, storage or transportation purposes, as well as environmental factors (Rice, 1999, p. 6, 8).

In archaeological research, pottery has been important mainly for two purposes; firstly, for typological studies to identify spatial distribution of "culture-areas" and

the changes in the borders of their expansion and contraction cycles through time. Such a goal flourished during the later 19th century and dominated the landscape of 20th century archaeology primarily due to the support, it found from the new nation-states. Through this goal, a list of past cultures existed within the borders of the modern nation-states could be identified. The evidence could be used to support various political claims on place and identity which were often bound up with the modern conceptualization of states as seats of particular forms of power defined by ethnicity, ideology and belief.

In the aftermath of the World War II, these culture-historical concerns were entangled with the development of new schools of archaeological thought, such as cultural ecology and cultural evolution. During this time, archaeologists began to assume that the emergence of pottery represented a particular stage in the technological and economic progress of human societies. This belief reflected the evolving knowledge base necessary for exploitation of new resources, such as clay, together with the evolving skill in the control of fire that culminated in the better processing of food, better production of more durable containers, exchange, trade and ultimately better life conditions overall. This type of research hypothesized that pottery emerged as a functional necessity which would in the long-run provide the impetus for social and cultural progress due to the new requirements of labor control inherent in new relations of production and consumption. Therefore, the investigations mainly focused upon identification of resource locations, exploitation strategies, production processes and technologies, resulting new labor requirements and identifying the evidence of more complex social organization throughout the whole process.

There is no doubt that both of the above concerns have produced important methodological frames that still form the backbone of archaeological research in the Near East. However, there are fundamental problems about the emergence of pottery in the Near East that these approaches have not been able to resolve so far. In light of the emergence and development of ceramic technologies in the world, I believe there is a need to approach "pottery" in a new way. Therefore, this thesis is not an attempt

to use the evidence of pottery to consolidate relative chronologies and cultural regions, as has usually been the case in archaeological approaches concerning the Near East. Instead, my goal is to underscore the emergence of pottery as a social technology of display. In my opinion there is enough evidence to think that pottery was not merely a utensil "discovered" in an attempt to respond to the needs of the emerging agricultural lifestyles of the Neolithic period. Instead, pottery must have also been a social technology of display and symbolic communication. Some elements of this display may be rooted within the social contexts of figurine and plaster use during the PPNB. In other words, the earliest pottery of the Near East may have emerged to fulfill the social needs of the first agricultural communities by manipulating the ancestral traditions of the PPNB in new contexts of food consumption and display.

In order to achieve this goal, I will first provide, in chapter 2, Literature Review and Methodology, a general overview of theories on pottery use and function. The main thrust of this chapter will be to evaluate the early use of ceramic technologies, i.e. figurines, house building technologies and plaster use, from a social perspective in an attempt to understand their effect on early pottery symbolism. Through a critical evaluation of symbolic uses of the prior technologies, in light of recent ontological approaches, such as entanglement theories and symbolic communication theories, I will lay out a methodology to investigate early pottery of the Near East. According to this method, in Chapter 3, I will present the earliest ceramics from the Near East on a region and site basis. In Chapter 4, I will try to assess whether the earliest ceramics were made to meet the utilitarian needs of storage, cooking and food processing and/or serving and display. I will also present a broad interregional perspective for comprehending the pottery form as an image, referring in particular to new practices of serving and display as well as new ideas of food, body, and ancestry. In Chapter 5, I conclude that the emergence of pottery is not an independent "technological invention" necessitated by the agricultural lifestyle. Instead, it is a "symbolic technology" that is deeply embedded in the earlier Neolithic belief and ritual. In other words, pottery restates a relationship between "the human body" and "the house", as an alternative to the Early Neolithic relationship that was formed between

"the dead", "the house" and "the communal buildings". As such, pottery must have been an important agent in the negotiation of new social relations in the new economic context of agriculture. Whereas its form evoked familiar ancestral concepts, its portability and use at various social scales facilitated new types of relations to be formed between and within communities. In this context, the reason why pottery was such a late introduction in the Near East may not be due to a lack of knowledge of materials or a lack of need, instead, the reason is more likely to be cultural one, which requires a further contextual evaluation of the shifts in social structure and belief.

CHAPTER 2

LITERATURE REVIEW AND METHODOLOGY

Most of the existing literature about the origins of pottery can be categorized under a number of headings: the economic model, the technological model, and the social and symbolic models.

In the class of economic models, James Brown proposes that early, sedentary life promoted the output of small-sized plant foods and grains, which created a demand for all sorts of vessels. However, for sedentary communities, resources were limited due to issues that had to do with logistics, the workforce and the timing of the harvest season. According to Brown, ceramic technology developed more rapidly because people learned to cluster large numbers of pots during the drying and firing processes and this helped them produce pottery in a more time-efficient manner. Therefore, pottery technology was a logical outcome of a time-budget advantage on non-ceramic containers. Apparently, amendments to the raw materials, labor organization, and property of foodstuffs had an impact on the form-function-quality of the vessels (Brown, 1989, p. 213-216).

The adaption of Brown's hypotheses for the American Southwest, by 800 BC by Crown and Wills, suggests that the generation of the pottery productivity was in relation with the formation of sedentary activity embracing the use of cultigens, and food processing technologies. It has been further assumed that pottery production settled after sedentism became stable through the productivity of women responsible from the pottery production activities (Crown & Wills, 1995, p. 249-250).

Hoopes and Barnett also point out the promotive role of sedentism on pottery's origins. Apparently, amendments to raw materials, labor organization, and the nature of food had an impact on the form-function-quality of the vessels. Hoopes and Barnett further suggested that the majority of simple vessels were produced in

temporary settlements while fine vessels were manufactured in permanent workshops (Hoopes & Barnett 1995, p. 4).

Culinary hypotheses on pottery's origins have been shaped according to the economic model in claiming pottery production was an outcome of sedentism and food production strategies. For most hypothesists, the major reason pottery making arose was because of the boiling of surplus cereals. Since pottery was adapted to deal with new forms of Neolithic life, pottery-making fit with a transformation in food production and preparation processes, storage or transportation purposes, as well as environmental factors (Rice, 1999, p. 6, 8).

Kenneth Sassaman's social model is based on the American Southeast during the time span from 4500 to 2500 BP. It suggests that gender roles, shifts in the status of women, as well as labor demands were influential in the emergence and development of pottery (Sassaman, 1993, p. 19). From this point onwards, exchange and social interaction led to widespread dispersement of pottery (Pavlů, 1996, p. 20, 21). According to Vandiver, the emergence of pottery was a technological discovery that passed from simple to complex stages through trial and error. By examining the pottery of the Central Zagros region between 6000-2500 BC, she found out that initially sundried vessels were in use and the slab construction technique was the common method for a long period. An important variable in the ongoing process was the use of temper. Thus, after the vegetal temper was replaced by the grit temper, new forms were employed although slab construction remained as the main method (Vandiver, 1987, p. 10, 25, 27).

Hayden's renowned model of economically based theories views pottery containers as prestige goods used in "commensal" events, such as competitive feasts. Hayden's model has also evaluated pottery containers as prestige serving and display items and as a proxy of sociopolitical complexity. Considerations on the emergence of pottery containers include assessing an underlying competitive community bounded by alliances or exchanged partners. Plasticity of pottery is associated with essential dimensions of ritualisation, gaining its significance from objectification. In this respect, the special involvement of pottery in competitive feasts, along with other

prestige goods, may indicate important starting points for the dynamics that sustain social and economic alliances (Hayden, 1990; Hayden, 1995). Another bone of contention is whether feasts are affiliated with ritual activity. Dietler suggests that the symbolic discourse of feasts is complex, and it involves the utilization of containers in a wider variety of circumstances including the "preparation-consumption" stages (Dietler & Hayden, 2001, p. 72).

Besides these, some scholars argue that there is a symbolic association between body and food. Specifically, the females are seen as the transformers of food from a natural to cultural product, therefore pottery should be seen as a metaphor of this transformative process (Lupton, 1996; Haaland, 1997, p. 379).

Cultural anthropologists also see body as a "container" and point to the similarities between the ways we describe pots as bodies; for example, the mouth, neck and body are terms that we use both for human bodies and pots (Haaland, 1997, p. 379; Lupton, 1996: 8). Ultimately, sharing the food placed in a pot has an important symbolic significance that constructs a person and its relation to others.

Gamble (2007) argues that the emergence of container form should not be searched at a unique spot of origin. The concept of "container" has existed since the Upper Paleolithic since it was already in use at that time to make houses, boats, clothes and basketry (Gamble, 2007, p. 204). If we follow on Gamble's footsteps, it may be possible to see that the earliest pottery forms may have been inspired by the prototype containers: familiar shapes like stone vessels, white ware containers, and basketry. Containers of organic origin, such as basketry or wooden vessels, which may have been at times lined with clay, were probably used for short term storage or serving of dry materials, however, due to its organic origin, it is often difficult to demonstrate it as the precursor of pottery technology. More significantly, the connections may be searched in the materiality; for example, in the early use malleable substances such as clay and plaster, to form objects, as will be argued below.

2.1. Stone Vessels as the Precursor of the Earliest Ceramics

The forms of early pottery containers suggest that these vessels may have inspired by the stone vessels of the early Neolithic (Fig. 2). The particular color choices together with the shape would appear to strengthen this perception (Nieuwenhuyse & Campbell, 2017, p. 175). Katherine Wright's analysis of the culinary customs of the Southern Levant presents valuable insights about the transformation of stone vessels and basketry during the PPN period. Stone vessels have been counted as a common artifact type within the context of the ground tools. It is recorded that the stone bowls during the PPNA consisted of small simple, shallow open bowls with no stylistic variation or decoration. Some specimens are exposed to grinding. On the other hand, Early-Middle PPNB specimens had finer shapes and more diversity. The raw materials of the vessels were generally limestone and related stone type but some basalt pieces were evident. The shapes were comprised of open forms. Platters as a PPNB innovation were observed as the most common type. The diverse shapes consisted of miniature bowls, plates, and globular and V-shaped bowls. Decoration was not usually favored (Wright, 2000, p. 98, 103).

Özdoğan's overview about the distribution of stone vessels during the Proto Neolithic and Pottery Neolithic contends that the contexts do not provide a distinguishable pattern. Decorated stone vessels were found in Çayönü, in Hallan Çemi, and in Körtik Tepe. The PN levels of Mezraa Teleilat also provided a group of undecorated marble bowls (Özdoğan, 2009, p. 24). Unusual stone bowls with relief designs depicting anthropomorphic and zoomorphic figures were recovered from the PPN phases of Hallan Çemi (Hauptman 1999). Stone bowls were recovered from the PPNB levels of Tell Sabi Abyad II (Verhoeven & Akkermans, 2000, p. 91, 92). According to Akkermans, stone bowls are mainly found in 7th millennium levels from sites in the Balikh Valley; there were mainly recovered from Tell Sabi Abyad, Tell Assouad and Tell Damishliyya. Halaf levels from these sites represented only a few stone vessels (Akkermans, 1993, p. 118, 172). Only a few stone vessels were recoverd from the Halaf levels at these sites. Four fragments of stone vessels were

recovered from Layer 6, dated to Rouj 2a Period, from Tell el-Kerkh 2 (Tsuneki & Miyake, 1996, p. 112). Stone vessels were also found in Phase 1 at Salat Camii Yanı (Miyake, 2007b, p. 41). Pre-Proto-Hassuna phases of Tell Seker al-Aheimar also provided stone vessels (Nishiaki & Le Mière, 2005, p. 59). Fine stone vessels were recovered from the uppermost layer, level 1, and also from Level IV of Umm Dabaghiyah (Kirkbride, 1972, p. 4, 7-8).

The production of stone vessels is a very different activity when compared to the production of pottery. The functional properties of the two products also differ. Whereas the stone vessels are produced by a reductive method involving breakage, knapping and grinding, the pots are produced through additive methods such as mixing, structuring by hand and finally the process involves a chemical change through fire. Stone vessels would not be suitable for cooking; however, they seem to have been used for food processing and serving. Altough these differences in function exist between stone vessels and pottery, we see that they have similar forms and sometimes decorations which are probably related with their social contexts of serving and display (Fig. 3).

Figure 2. Early Pottery from Tell el-Kerkh that resembles the stone vessels represented in Figure 3 (Tsuneki & Miyake, 1996: Fig. 9)

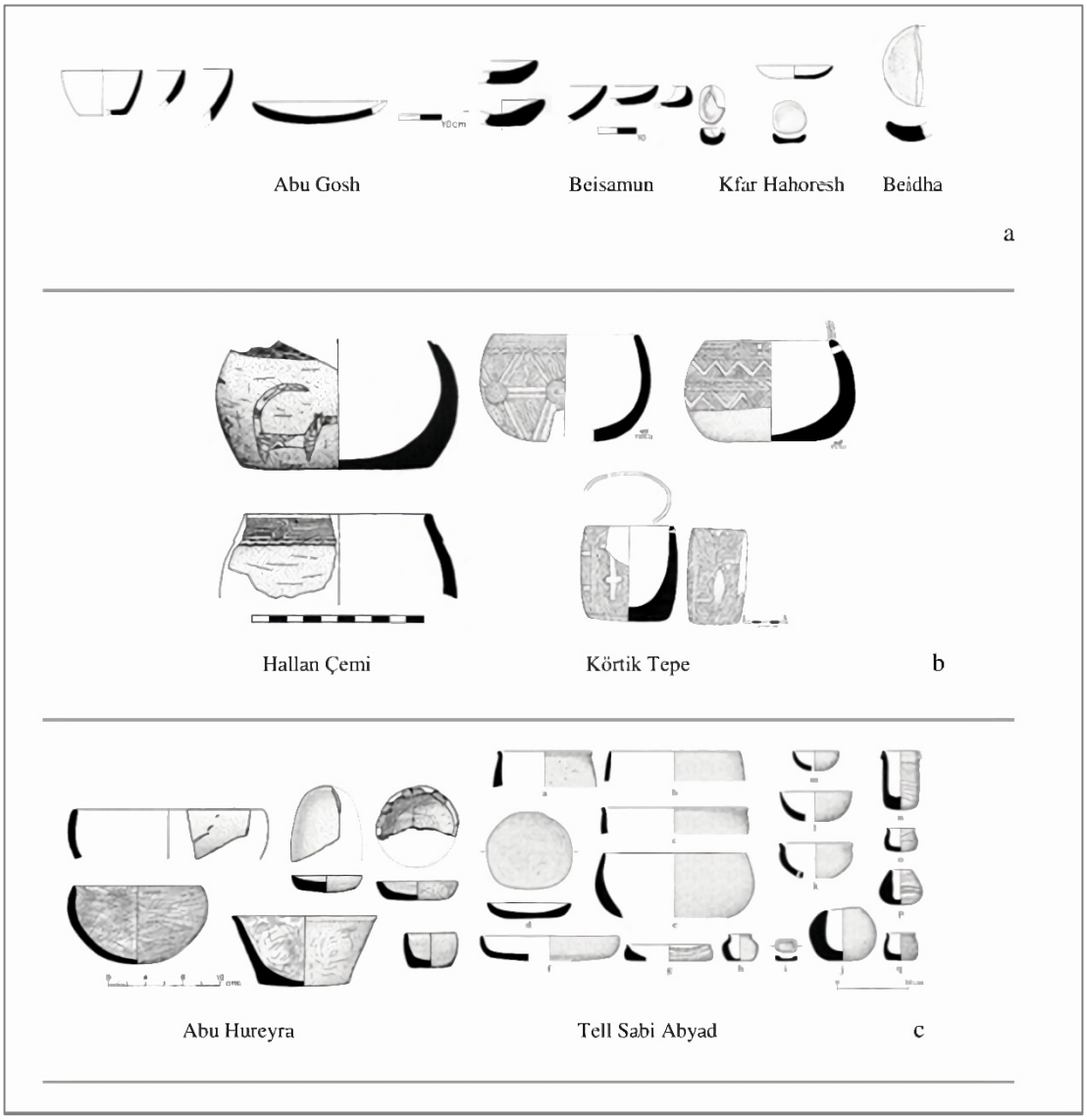

Figure 3. Stone vessels from the PPN sites: a. Stone bowls from Abu Gosh; Beisamoun; Kfar Hahoresh; Beidha (Wright, 2000: Fig. 10); b. Stone bowls from Hallan Çemi (Rosenberg, 2011: Fig. 9) and Körtik Tepe (Arbuckle & Özkaya, 2006: Figs. 2-4); c. Stone bowls from Abu Hureyra (Conroy, 2005: Fig. 3.3), and Tell Sabi Abyad (Akkermans, 2006: Fig. 14)

2.2 Architectural Containers as the Precursor of Early Pottery

The developing knowledge of the clay and ceramic technology is evident in the PPN through the use of sun-dried clay as architectural component. Within the architectural structures of early Neolithic buildings, various "vessels" of unfired clay are found which may have been produced by lining pits with clay for storage purposes. At Çayönü Tepesi, large "bin-like containers" manufactured from mudbrick paste have been discovered (Özdoğan & Özdoğan, 1993, p. 93). At Tell Maghzaliyah, a storage bin, functioning as a permanent container manufactured from unfired clay was discovered (Bader, 1993c, p. 13). At Çayönü's "cell and large room" subphases of the PPN some forms appear to resemble "the concept of pottery" (Özdoğan & Özdoğan, 1993, p. 93). It is interesting that a shallow plate with a ring base, painted with red ochre was found deliberately broken and placed upside down on the floor of the "Skull Building". This building is a communal burial building where skulls and other body parts of approximately 500 individuals were deposited, as part of the so called "skull cult" traditions of the time period. Due its context and interesting composition, it has been related to a closing deposit, signalling the end of activities being carried out within the building (Özdoğan, 1999, p. 50).

2.3 Lime Plaster as the Precursor of Early Pottery

The use of white ware (*vaisselle blanche*) in Northern Levant, during the later PPN and at the beginning of Pottery Neolithic, is often linked to a tradition that may have led to the appearance of early pottery containers. A group of 37 or more unfired or lightly baked miniature vessels were discovered at Nevali Çori. It is thought that they are attempts at replicating the limestone vessels found at the site (Hauptmann, 1999, p. 77).

The so called "white ware" is essentially a pot made of lime plaster. Lime plaster is produced by heating limestone to 800-900 degrees Celsius and then mixing it with water and sometimes other additives to form a paste like clay which is then used to produce the final pot shape. The final shape can be of extremely large containers to smaller vessels similar to pottery. The shaping phases of white ware involve slab technique, molding or modeling; these phases correspond with the shaping stages of pots. White ware is also frequently tempered with vegetal and/or mineral material in a similar way to the pots (Kingery, Vandiver & Prickett, 1988, p. 227).

Techniques used in finishing the surfaces of the pots, like smoothing, were also implemented in white ware. More importantly, the common vessel types and particular features of white ware are echoed in the early pottery typology (fig. 4). The technological superiority of the plaster technology has been labeled an "incipient craft specialization" that inspired the later development of pottery production (Goren et al., 2001; Nilhamn, Astruc & Gaulon, 2009; Gourdin & Kingery, 1975).

In comparison to clay pottery, however, lime plaster vessels were probably used to serve or preserve dry food stuffs since they are highly permeable. Their capacity as transportation vessels is also low due to their fragile nature. These vessels are not suitable for cooking either.

A number of plaster lined hearths were discovered within a number of buildings at the PPN site Hallan Çemi (Rosenberg & Redding, 2000, p. 44) and at Tell Halula (Molist, 1997, p. 3). Lime plaster features also on the early clay pottery. For example, from the El Rouj 2b period at the site of Tell el-Kerkh 2, a few lime plastered sherds have been discovered (Miyake, 2003: Fig. 57: 11, 17). Forms of these vessels were similar to those of the plaster vessels found at the site (Miyake, 1998, p. 18). Similar observations have been made at Tell Aray 2 (Iwasaki, Nishino & Tsuneki, 1995, p. 147, Fig. 12: 31-34), Hama (Thuesen & Gwozdz, 1982, p. 100), Tell Sūkās (Riis & Thrane, 1974: Fig. 126), Tell Kaskashok II (Nishiaki, 1991, p. 38, Pl. 63: 12), Bouqras (Le Mière, 1983, p. 352), Ras Shamra, Byblos, Tell el Kowm, Umm Dabaghiyah, Tell Ramad, Tell Assouad and Tellul et-Thalatat.

Interestingly, lime plaster was a material that was widely used in the complex burial practices of the so called "Skull Cult" and the associated renovation of house floors and walls during the Pre-Pottery Neolithic period. Essentially, the skull cult is a complex burial tradition of the time period, involving disarticulation, decoration and secondary inhumation of skulls and other skeletal remains (Kuijt, 2008, p. 171; Kuijt, 2001, p.86; Bonogofsky, 2003, 2006; Bienert 1991, Atakuman, 2014, 2015).

Although variations existed, after death occurred, a primary burial would be placed under the living house floors. Following this, after a certain period has passed, this burial would be opened to remove the skull. Then, the skull would be plastered and adorned with other decoration such as eyes, hair etc, as if the dead would be brought to life for an important occasion (fig. 4). Finally, after this occasion is over, the skull would be buried with other skulls in a communal place (secondary burial) (Kuijt, 2000, 2008; Verhoeven, 2002). At some places, it has been shown that the practice is also related with making of life size anthropomorphic plaster statues to be buried as foundation deposits under house floors, such as at Ain Ghazal (Rollefson, 2000). Similarly, a related practice exists at Göbekli Tepe and other associated ritual sites, where anthropomorphic T shaped limestone pillars were "raised" from the ground for special ceremonies (Schmidt, 2007). Possibly related assemblage of related objects was recovered at Pınarbaşı in Central Anatolia. Here, an assemblage of lime plaster objects containing the bones of a number of domesticated animals was uncovered (Baird, 2004).

At many places such as Çatalhöyük, it is argued that renovation of house floors and walls with lime plaster and application of paint is a feature of the skull cult traditions (Mellaart, 1964; Matthews et al., 1996, p. 325). The burnishing and colouring of wall and floor plaster with red ochre has been observed at many sites of the Early Neolithic. Some of these sites are Çayönü Tepesi (Schirmer, 1990, p. 382), Gritille (Voigt, 1985: 15), Abu Hureyra (Moore, Hillman & Legge, 2000, p.494), Ain Ghazal (Kafafi, 1986, p. 51), Beidha (Kirkbride, 1966, p. 11-13), Bouqras (Akkermans et al., 1983, 340), Hama (Thuesen & Gwozdz 1982, p. 99-100), Labweh (Kirkbride, 1969, p. 46), Musular (Özbaşaran, 1999, p. 150: Fig. 5), Ras Shamra VC (Dornemann,

1986, p. 58), Tell el Kowm (Dornemann, 1986, p. 53), Umm Dabaghiyah (Kirkbride 1982, p. 17: Fig. 8), Tell Ramad (Mellaart, 1975, p. 58) and Tell Sūkās (Riis & Thrane, 1974, p. 10).

Clearly, the properties of clay and the technology needed to manufacture it as well as the knowledge of forms were known by the Early Neolithic communities for a long period before the introduction of pottery. However, the fully flourished clay pot did not appear before the 7th millennium BC, at the very end of the Early Neolithic. Whereas one could argue that its introduction was an invention dictated by the necessities of agricultural life, based on the above evidence it is equally plausible to argue that the emergence of ceramics is related to the disappearance of the ritual practices of the Earlier Neolithic. In other words, the emergence of pottery is related to the gradual transformation and replacement of the symbolically charged materials and forms of the Early Neolithic, toward the new symbolic technologies of portable objects made of plaster or clay, such as pots. In this respect, it is tempting to see pots as anthropomorphic objects, which are acting to bring communities together, in a similar way to the skull-cult practices of the Early Neolithic.

2.4 Clay Figurines as the Precursor of Pottery

In context of the above discussion about the prior use of plaster, both in the production of containers similar to clay pots and also in their much earlier use to shape skulls, it becomes more intriguing to see the clay and plaster anthropomorphic figurines of the Early Neolithic as a related symbolic technology. Antropomorphic figurines in the Near East had been around since the late Natufian and PPNA times. However, many of the earliest objects are made of stone. Clay figurines begin to proliferate during the PPNB and their use continues through the 7th and 6th millennium BC. They are found at many sites such as at Çatalhöyük, Ain Ghazal, Nevali Çori, Çayönü and Köşk Höyük (Fig. 5).

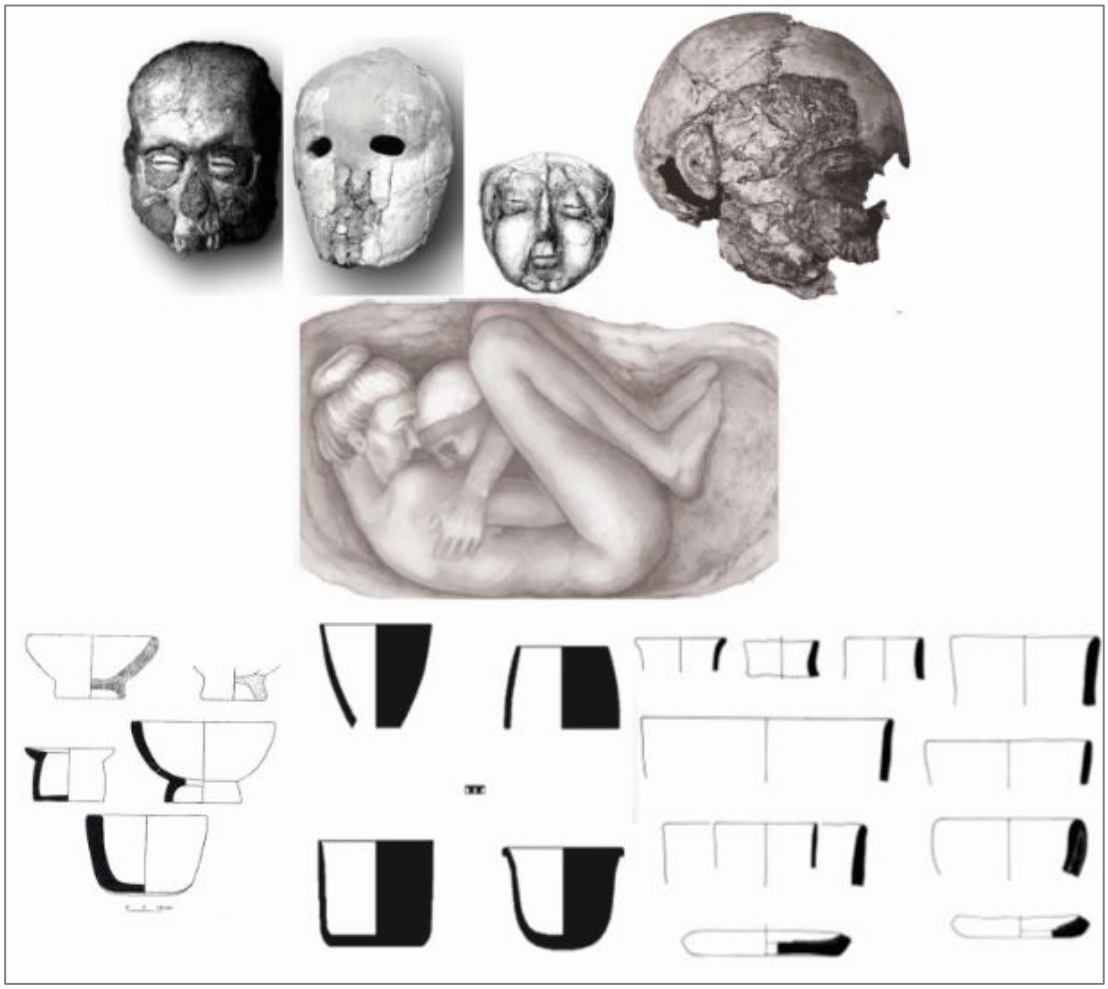

Figure 4. Plastered skulls from Jericho, Beisamoun, and Kfar Hahoresh; Plastered skull from Köşk Höyük; Illustration of an adult primary burial with plastered skull from Çatalhöyük; White Ware shapes from Tell Sabi Abyad and Tell el-Kowm; White Ware shapes from Ramad, Neba'a Faour, and Labweh (Based on Goren et. al., 2001: Figs. 2-4; Bilgi, 2012: Fig. 297; Haddow & Knüsel, 2017: Fig.2; Nilhamn, Astruc & Gaulon, 2009: Fig. 4; Nilhamn, Astruc & Gaulon, 2009: Fig. 4; Conroy, 2005: Fig. 3.19; Balossi Restelli, 2006: Pl. 10.4)

By 6500 BC, the examples from Çatalhöyük depict figures with hands on belly while the Hacılar imagery represent images with hands on breasts. Complex narratives scenes were identified by particular attributes. The prominent theme for the postures

is the seated image. Common themes are: a child held by an adult or seated woman flanked by animals. The diverse images have different poses, are in a range of ages and appear overweight or pregnant. There is also range in sizes which may indicate different uses of the images. The locally available clay sources were used in the manufacture of the similar miniature clay objects, such as the house models, beads, stamp seals, clay basins and pestle-shaped objects as well as miniature pots. At Çayönü, sticks and chaff tempered mud was used in the manufacture of the house models. These clay boxes, as representations of actual houses, include roofs, roof parapets, floors, doorways, and walls (Broman Morales, 1990, p. 57-69).

Figurine like anthropomorphic pots, which became prolific during the 6th millennium BC, may be taken as an indication that there is a relationship between pots and figurines. For example, the "face-pot" from Çatal is intriguing evidence which show that pots carry anthropomorphic symbolism (Fig. 6). In Hacılar 1, vessels of 10 to 30 cm height represent women with the hands-to-breasts gesture. The elaborate paintings on the vessels suggest a form of rich clothing. The facial features of some pieces are, unusually, inlaid with obsidian (Lesure, 2011).

Kuijt and Chesson (2005, p. 169, 174) suggest that the figurines, i.e. miniature statues, were made to be used in domestic contexts whereas the larger statues of Ain Ghazal or Göbekli Tepe, as mentioned previously, were made for public contexts. Although some researchers claim that the figurines may have served many functions, such as "teaching figures" and "toys," the spatial context and associability of the figurines with other objects may indicate a ritual function and meaning (Verhoeven, 2002, p. 237). Interestingly, many of these figurines are found their head broken intentionally, in a similar way to the skull removal practice. Also, the existence of "house" models within the figurine repertoire indicates their connected use. This suggests that figurines are probably a related practice of the so-called skull-cult traditions, perhaps metaphorically referring to the interplay of death and life through the use of different materials such as stone and its derivatives, such as lime plaster vs clay. Within this context, it is tempting to see the introduction of pottery as a final stage in the long standing beliefs of the Early Neolithic that celebrate death and life

together. These traditions appear to have taken a new form with the establishment of agriculture, and together with it, the emergence of socially and economically independent households as a new social unit at the end of the PPNB (Kuijt, 2000, 2008).

Based on the above treatment of precursors of pottery, we may remember that the earliest appearance of pottery may be related to the collapse of "ritual economy" of the Early Neolithic, as suggested by Mihael Budja. According to Budja, the pottery replaced the skull-cult related practices and this generated the utilitarian use of pottery that spread through household use (Budja, 2007). In this context, it is interesting to note that early pottery was often the subject of deliberate depositional action, i.e. "burial", in a similar way to the burial of human beings. Burying people and artefacts was a wide spread tradition in the Neolithic. During the Early Neolithic, "skulls" become the "artefact" of plastering, painting and secondary burial that aided in construction and transformation of ties between people. Arguably, particular materials were consistently used to as reference and meaning throughout the Neolithic period. What were probably being referenced through the pots was the prior activities of the "skull cult". That is to say, the activities surrounding the production, use and deposition of pots and other objects during the PN is perhaps not creating meaning are so easily adopted because they already had an inherent social meaning. This does not mean that the "meaning" attributed to pots was similar everywhere; instead, the argument put forward here is that the pots were embedded in pre-existing social and symbolic system.

Ultimately, it is important to recognize the wider context of portable item proliferation during the 7th millennium BC (Atakuman, 2015; Bailey, 2000). Sometimes referred to as the Neolithic package, these portable artifacts include, stamp seals, pendants, stone vessels, figurines and other related objects. Douglas Bailey (2000) and Çiğdem Atakuman (2015) argue that these "portable" items may have proliferated during the transition to sedentism and agriculture, as a new "politics of the human body" had emerged. According to these authors, at the densely and repeatedly occupied "tell" settlements, the negotiation of personal identity and

household composition was a major preoccupation to resolve disputes between persons and groups. Therefore, certain items such as pots, figurines and stamps, all of which are usually made of clay, were made to resemble human body in miniature, in an attempt to invoke different aspects of the person and its relation to the collective. That is to say, these objects may have introduced a new discursive field through which personal identities and community structures began to be redefined with reference to new structures of power. It is possible that the proliferation of pottery may be approached in this light, as an object that elaborated on social identity in various spheres of social membership, during the major social and economic transformation of the Neolithic. In this context, I assume that portable materials, in specific pottery, may have become agents in construction of new connections between and within communities (Atakuman, 2015; Hodder, 2012; Knappett, 2011; Knappett & Malafouris, 2008; Thomas, 1993, 2000).

In the following section of the thesis, I will present the available evidence on the earliest ceramic forms in the Near East before coming to a discussion where I evaluate the evidence against the views presented in this section.

Figure 5. Neolithic Clay Figurines in Anatolia from 6200 to 7900 BC (Based on Bilgi, 2012: Figs. 17-20, 37, 60-62, 78, 121-126, 142, 182; Erim & Özdoğan, 2011: Fig. 47; Nishiaki, 2007: Fig. 1; Özdoğan, 2011: Figs. 17-19)

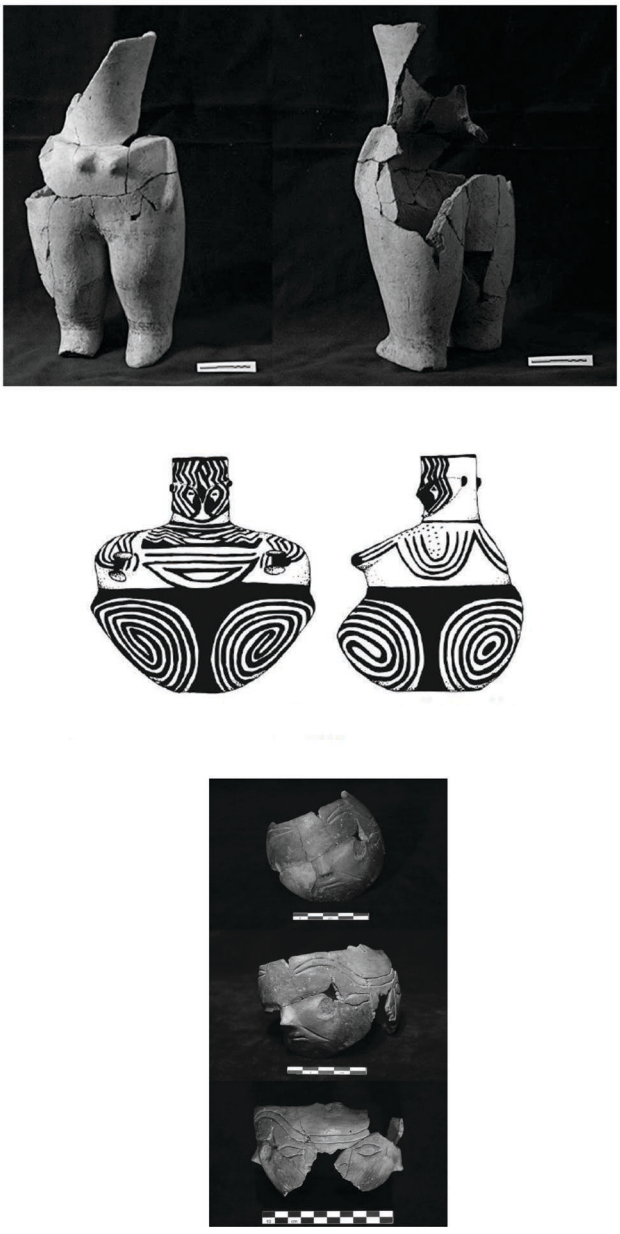

Figure 6. Anthropomorphic pots from Domuztepe, Hacılar and Çatalhöyük that resemble figurines (Based on Hodder & Meskell, 2011: Fig. 9; Belcher & Croucher, 2014: Fig. 6; Lesure, 2011: Fig. 90)

CHAPTER 3

THE EARLIEST POTTERY IN THE NEAR EAST

The technological level of production for the first ceramic containers has long been a major issue. Current knowledge about the technology and main characteristics of the first pots served as a foundational resource to determine the major stages in the early development of pottery. Plant tempered, plain and coarse wares have been interpreted as the fundamental current for the initial stages of pottery production in Upper Mesopotamia. However, recent interpretations about the utilization of temper reveal the relative complexity of the development process within the region.

Ultimately, new field data on the very beginnings of pottery production in the Near East have broadened the nuclear zone and initial stages of ceramic technology. Investigations in the Rouj Basin, and in sites along the Khabur, Balikh, Euphrates, Southeastern Turkey, Northern Iraq, Amuq plain and Central Turkey have ensured more concrete analyses and offered new perspectives on the initial stages of pottery production in the Near East.

We provide here an examination of the data set by screening the archaeological sites from the above mentioned regions. The exploratory modes of the analyses start with a regional survey as an incentive to pottery origins. We also provide an introductory description of the early pottery assemblages of the Near East based on the compositional and stylistic variables, and the relevant chronological framework. Evaluation of the sites also includes the architectural phases and small finds inventory. Then, we designate a descriptive comparison of the pottery technology in which we compare the available data from the published reports. We tried to couple together the key "assemblages" according to the already established ware groups, fabric types, tempers, sherd and vessel types, surface treatments, and decorational contents.

3.1 Syria, Balikh Valley

The Jezirah is a vast steppe zone in northern Syria. The Balikh River is one of the perennial rivers within this area that encompasses the largest tributaries of the Syrian Euphrates. The Balikh valley's diffuse river pattern served as a vital source of water in antiquity. The river and its channels were subject to ample vegetation. Correspondingly, the area started to be occupied by Paleolithic occupants near Jisr Chnine and the area became remarkably populated during the 7^{th} to 4^{th} millennia BC. The influx of European archaeologists into Syria during the early 20th century resulted in later; extensive expeditions conducted from the 1960s onward (Akkermans, 1993).

Within the geographical sphere of the region, there developed Neolithic settlements that have comparable archaeological material. The early Neolithic settlement patterns of the Balikh Valley were obtained from a cluster of sites that produce a rich inventory of the earliest pots and bowls, namely the sites of Tell Assouad, Tell Damishliyya and Tell Sabi Abyad, where transition from aceramic to the ceramic Neolithic is evident. These data contribute to the state of the emergence of pottery during the 7th millennium BC (Akkermans & Schwartz, 2003, p. 110). The earliest deposits associated with pottery production from Tell Sabi Abyad in the Balikh Valley of northern Syria prove the use of early mineral ware. The fabric appeared to have abundant, dark mineral inclusions. The complexity of the production process is an observable variable especially regarding the shaping and finishing of the vessels (Nieuwenhuyse et al., 2010, p. 77).

3.1.1. Tell Assouad

Tell Assouad is located on the east bank of the river Balikh. The settlement is comprised of two mounds with diameters of 150 m and 100 m respectively. The

main mound is 12 meters high while the second mound is only 5 meters high. The first excavations were led by M.E.L Mallowan and those by Henri de Contenson and Jacques Cauvin followed later in 1970. Between the years 2001-2006, the main mound was re-excavated by the French Permanent Archaeological Mission. Eight levels of occupation were detected from the mound. However, the pottery was only found from the basal levels VIII and VII (Akkermans, 1988, p. 29; Akkermans, 1989, p. 123,).

The interpretation of the architectural finds and related pottery is problematical since it was suggested that the basal levels VIII-VII had pottery but no architecture while the upper levels VI-I had mudbrick architecture but no pottery. Excavations of the architecture from the mound revealed a small rectangular building with multiple rooms and white plastered walls and floors. An ox skull and two pedestals along the walls were also architectural features of the building (Akkermans, 1989, p. 123).

The pottery assemblage from the site was recovered only from the lower levels VIII and VII (Fig. 7). The assemblage has a radiocarbon date around 6600/6500 B.C. The pottery is defined as a plain coarse ware. The assemblage is mainly plant tempered and usually demonstrates a dark core (Akkermans, 1993, p. 28). Almost 14% of the sherds are mineral tempered (Akkermans, 1988, p. 29). Principal shapes are hole-mouth pots, straight-walled bowls, and low plates. Hole-mouth vessels featuring a clay band underneath the rim are considered a characteristic shape. Loop handles are commonly present, and ledge handles occasionally appear. The surface of the vessels is burnished and usually not decorated. In some instances, a band of red paint has been applied underneath the rim (Akkermans, 1989, p. 123).

3.1.2. Tell Damishliyya

The settlement is located on the west bank of the river Balikh. The small mound measures about 60 by 70 m, and it is up to 5 m high. Rescue excavations occurred in

1984, directed under the auspices of the University of Amsterdam's Archaeological Mission to Syria. Seven building levels from Strata 1 to 7 were excavated and three main periods were distinguished as PPN-Period I; PN-Period II; and Halaf-Period III (Akkermans, 1988, p. 19; Akkermans, 1989, p. 125).

Mudbrick architecture was found in all strata. The substantially exposed stratum 2 contained a rectangular building with narrow rooms. The walls of the building had been erected upon a mudbrick platform. The sizes of the mudbricks are considerably large in size and possibly were reused as evident from the white plaster traces that remain (Akkermans, 1989, p. 125).

Small stone bowls and dishes found from Periods I-II were mainly made of alabaster. The earliest pottery was found in Period II, mainly from the upper stratum 7; but the lower strata had some few fragments, dating to ca. 6500-6000 BC (Fig. 7). The occupation levels have not yielded any pottery, but the available data came from a large ash pit. The irregularly shaped, coarse pottery is mainly plant tempered. Mineral temper is sparse. The surface colors ingenerate light orange-brown, and occasionally buff. In the lower strata 3 and 4, some grey or black colored sherds were found. More than half of the sherds are slightly burnished. A limited variety of shapes comprised of large straight-walled pots or closed pots with simply rounded rims. Open plain rim bowls and hole-mouth pots are also included in the assemblage. Another type of specimen demonstrates large vessels with rounded necks, and pots with flattened and square rims. Handles are commonly found mainly in the form of loop handles. The pottery has no decoration apart from that found on a few incised sherds (Akkermans, 1988, p. 25-26).

3.1.3. Tell Sabi Abyad

The best known of the Neolithic settlements in the Balikh Valley is the site of Tell Sabi Abyad. In size it is approximately 240 by 170 meters and rises between 5 to 10

meters above the ground. Four mounds of the site (Tells Sabi Abyad I to IV) were excavated by Leiden University under the direction of P.M.M.G. Akkermans. The earliest pottery, dated to the beginning of the seventh millennium BC, was found on Tells Sabi Abyad I and II. The occupational history of Tell Sabi Abyad I varies from operation to operation. The low, southeastern part of the mound (Operation I) has been extensively excavated since 1986. The four areas, operations II-V, were opened for excavation in the 2001, 2002, and 2003 field seasons. The oldest operation layer, the so-called Operation III located on the northwestern side of the mound, was excavated between 2005 and 2010 (Akkermans, 2013, p. 29, 32).

According to the local sequence, the early period was previously termed as Balikh IIA with the presence of pottery has been radiocarbon dated to ca. 6600-6200 BC. Nonetheless, recent studies and a set of radiocarbon dates from Tell SabiAbyad I show that the earliest pottery from the Initial Pottery Neolithic Period dates to ca. 7000-6700 BC. The more developed Pottery Neolithic stage of the occupation is subdivided into Balikh II C (Pre-Halaf), Balikh II A (Transitional) and Balikh III B (Early Halaf) with the radiocarbon dates ranging between ca. 6200-5700 B.C (Akkermans, 2006, p. 124, 127). Tell SabiAbyad II is dated between ca. 7550 and 6850 cal. BC, which corresponds to Balikh 1C period. The uppermost level fits the Balikh IIA period, representing the initial stage of Pottery Neolithic. The coarse pottery found at the site is comparable to the data found in Tell Assouad and Tell Damishliyya (Verhoeven & Akkermans, 2000, p. 1, 2).

Level 11, found on virgin soil and subdivided into Levels 11B and 11A, has been attested as the earliest level dated to the Balikh IIA period, around 5700 BC. A shallow, oval depression was found filled with a compact loam. However, it is not clear whether the depression is natural or not. The depression and its adjacencies were covered with a stone pavement (Verhoeven & Kranendonk, 1996, p. 27-28).

Level 10, again with two substrata, correlated to Balikh IIC period, date to around the middle of the 6th millennium BC. The 5 cm-thick layer of sherd pavement in stratum 10B was the only architectural feature. The pavement in the northern part of the trench appears to have been disturbed (ibid., p. 28).

Level 9, dated to period Balikh IIC (later middle of the 6th millennium BC), is represented by a wall and an oven. The wall was made out of 10 cm-thick layers of loam joined by a mortar. The circular oven is 67 cm in diameter and was buried under a loam coating. The floor of the oven was constructed of loam, and the wall was made of clay (ibid., p. 31).

Level 8 is divided into four substrata belonging to the Balikh IIC period, dated around 5300 BC. A compact pisé wall and two large pits embedded into the floor associated with the wall are the main architectural features. Level 7 represented the final Balikh IIC period, dated around 5200 BC. Within the scope of the three substrata, a stone wall and two rectangular buildings were uncovered. The two rectangular buildings were constructed next to each other. The walls of the buildings were made of pisé; however, no plaster was detected on the walls. The stone wall was possibly built as a foundation for a clay wall. Two shallow oval pits were found filled with loam, sherds and animal bones (ibid., p. 33-34).

Level 6 has been interpreted as the earliest transitional or Balikh IIIA level, dated around 5200/5150 BC. All the buildings aside from some tholoi and a rectangular structure were exposed to fire. The so-called Burnt Village is comprised of eight rectangular multi-roomed buildings, four circular structures (tholoi) and ten ovens. The settlement was constructed in terraces. The multi-roomed rectangular houses were built next to each other in regular lines. The sizes of the buildings vary from 90 to 120 m^2. The structures appear to have been divided into three rows with small rooms placed in each row. Doorways provided circulation through some of the linked rooms. The rooms without doorways on the floor level may have been approachable through openings in their roofs. The walls were made of pisé. The largest of the four tholoi measured 5.75 m and harbored smaller compartments and a stone door socket at the main entrance. Two other tholoi situated in the open area have diameters of 4 m and 1.75 m. The larger structure contained a domed superstructure with plastered interior walls. The smaller tholoi have several floor levels. The fourth tholos had a 3.50 m diameter and was located in the courtyard. It has two compartments, a flat roof and a sloping floor covered with plaster (ibid., p. 38-62).

Level 5, as part of the Transitional/Balikh IIIA period dated around 5150 BC, produced a large, rectangular multi-roomed building. Parts of another structure were also found. Building 1 was comprised of 15 rooms. The walls were made of compact pisé or mudbrick. At the wall junctions, small buttresses were found. The minutely made northern floors indicate loam and lime spots. Most of the floors had been repaired or renewed. Doorways provided connections between the rooms. Ovens and hearths that had been built in the courtyards were found. A child's inhumation grave was uncovered below one of the rooms. Building 2 was comprised of four rooms, but the southern half of the building was not excavated. A small court supplied the entrance. The mudbrick walls of the two rooms were covered with plaster on the interior. Among the domestic features, an oven and four hearths were recorded (ibid., p. 63-72).

The final stage of Balikh IIIA is represented by Level 4 dated around 5100 BC. A small rectangular building and a large tholos have been recorded as the architectural finds. The tholos had an antechamber and was comprised of two rooms. The walls were made of mudbrick. Some traces of grey mud plaster are also recorded. The structure had a loam floor and a flat roof. The rectangular structure had six rooms. The walls were made of either pisé or mudbrick. The exterior of the walls was plastered white. A keyhole-shaped kiln was found in one of the rooms (ibid., p. 73, 76-79).

In Tell SabiAbyad II the PPNB levels produced 286 small finds. These included ground stone tools, stone vessels, beads, anthropomorphic and zoomorphic figurines, tokens, labrets, basketry and white ware. Most of the finds were made of stone, but clay was commonly used as well. The variety of small finds reflects the domestic activities involving the grinding of raw materials, textile work, food processing, lumbering and weaving (Verhoeven & Akkermans, 2000, p. 91, 92). Among the common items are the stone vessels that were made either of limestone, alabaster or gypsum. The surface colors were noted as white to pink, beige, brown and grey. The exterior surfaces were smoothed and polished. The characteristic shapes are open bowls, closed bowls and wide-open bowls (ibid., p. 105).

Eight fragments of vaisselle blanche (white ware) were also among the finds. The vessel walls and rims were rounded and covered with bitumen to obtain a liquid-proof surface. Furthermore, bitumen fragments with imprints of basketry came from levels 8, 5 and 3. The use of the impermeable basketry was compatible for storage, particularly for water and dairy products (ibid., p. 102, 103, and 106). The four anthropomorphic figurines were made of limestone and sun-dried clay. Among the figurines was a woman resting on her knees, two human heads with flat faces and a sun-dried clay piece without facial features. Twelve fragments of animal figurines representing rams and bulls were also found (ibid., p. 100, 101).

The Neolithic sherds from Tell SabiAbyad II recovered from pit A represent the final stage of a long period of pre-pottery activity on the mound (Fig. 7). Along with the numerous small artifacts, 137 pottery sherds were found in pit A. The pottery assemblage preceded the more developed Tell SabiAbyad I ceramics. The highly fragmented pottery has been identified as coarsely made, organic-tempered, roughly shaped and finished handmade pottery. The vessels have simple shapes and limited heights. The four basic types of vessel shapes are: rounded bowls, vertical pots with a loop handle, vertical pots without a loop handle and small hole-mouth pots. Most of the sherds (about 85%) are vegetal tempered. In addition to organic fibers, small, dark-colored mineral particles are present. Fabrics without vegetal inclusions invariably show the presence of mineral temper. The discrepancy of the fabric was not a factor noted as a subdivision but rather as a process. Almost all the sherds have thick walls. The color of the cores ranges from dark grey to very dark grey. The surface colors are from buff to brown; sporadically they are reddish to orange. The exterior surfaces are mostly burnished and occasionally smoothed. No other surface treatments or decoration were detected (Verhoeven & Akkermans, 2000, p. 124-126).

The 400 m^2 excavated portion of operation III with the very early Pottery Neolithic architecture shows four main levels of construction and reconstruction. Some of the buildings located in the northeastern part of the site seem to have been in use for some considerable period as the renewal traces of the floors would suggest. The

long-lived structures were positioned around the yards associated with low wall fragments of these architectural features.

In level 4, single-roomed buildings of approximately 15 m^2 and multi-roomed structures of approximately 64 m^2 were exposed. Building 1 features four long, rectangular rooms with a small square room at the back. The walls were built of reddish brown pisé slabs covered with thick orange-red mud plaster, sometimes with a thin layer of white plaster. The floor was built from trodden earth or grayish white plaster that was constantly renewed as needs altered. Two rectangular structures were built against the north of Building 1. One was formed by a large room; the other was built of pisé and mudbrick walls. Building 2 has two constructional phases and was formed by two long rooms. The early phase was built by dividing each long room with interior buttresses to create two unequal sized, smaller compartments. In the second phase, the compartments were in equal size due to a replacement of new interior buttress (Akkermans et al., 2006, p. 132, 133).

Following the abandonment of level 4 structures, a new phase of architecture was introduced in level 3. The new phase was comprised of two rectilinear buildings, a couple of fireplaces and circular, white-plastered basins. The construction techniques reproduced the previous ones. New walls were built on the remains of the former structures. Doorways ensured circulation through the buildings. Level 2 included the remains of Buildings 1, 2 and 3. The rebuilt Building 1 was formed out of four, white-plastered rooms. Building 2 was formed out of adjacent small rooms with mud-plastered walls. Building 3 was comprised of a single, white-plastered room (ibid., p. 135).

Operation III produced a rich small finds inventory. Small beads and pendants were found around the houses. In a level 2 building floor, 79 unbaked clay beads were recovered in a small bowl of unbaked clay. Among the recorded artifacts are spatulas, sling bolts, tokens, jar stoppers, spindle whorls and figurines. All were made of unbaked clay. The chipped-stone industry was mainly based on brown flint and Anatolian obsidian. While the obsidian assemblage consisted of blade and bladelets; flake tools were predominant in the flint industry. Grinding slabs, mortars,

pestles, palettes, hammers, maceheads, chisels, and celts made out of basalt, limestone, sandstone, gypsum, alabaster, marble, and other stones that served for domestic use were found. Among the small finds of Operation III, there was a vast amount of small stone pots and bowls. Vaisselle blanche (white ware) was also widespread. This type served as containers and is a compound formed by lime or gypsum and ash. The manufacturing technique benefits the softness of the material and was formed by adding the layers respectively; at the end, the material is like concrete. The main vessel types are large, straight-wall pots and open bowls. Some of the vessels were decorated with dotted impressions along the rim. Basketry impressions on the exterior of some of the white ware vessels suggest that large baskets were used in the shaping process (Akkermans et al., 2006, p. 138-141).

The uppermost phase of pottery making activity observed in the initial Pottery Neolithic strata in Tell Sabi Abyad I from the levels A12-10 has been identified as early mineral ware (EMW). The finest detail of the ware is the clay fabric containing a high incidence of dark mineral inclusions (Nieuwenhuyse et al., 2010, p. 77). The potters showed ultimate attention to the shaping and finishing processes as evident from the primary shaping signs and studious, smoothing-burnishing treatments (Fig. 7). The main shapes attested are simple convex-sided bowls and pots with straight walls. No vessels with carinated profiles were observed, but “ear-shaped’ lugs were recorded. There is a variety of wall thicknesses in single sherds and miscellaneous surface colors in several vessels. Darker surface colors ranging from grey to dark grey are prominent. Lighter shades are neutral on account of oxidizing-firing conditions. Divergent surface colors within the body of the same sherds indicate the use of open bonfires instead of specialized kilns. Interestingly, the pottery has decoration in the form of red slip and painting. The roughly shaped motifs were applied with brushes and included "parallel diagonal lines, diagonal lines in alternating directions, and cross-hatching and diagonal waves" (ibid., p. 77-80).

Pottery production then transformed to coarse; plain, plant tempered vessels (CMPT ware) was recovered from the deep soundings at Tell SabiAbyad I in Operation III (Fig. 7). The subsequent CMPT ware was defined as a homogeneous assemblage by

the excavators (95% of the pottery bulk). The main vessel shapes recorded were convex-sided bowls, hole-mouth pots and vertical pots with loop handles. The forms are non-standardized except for the low and oval-formed husking trays. The density and size of plant inclusions show an alteration. Any form of decoration is nonexistent. A similar type of coarse and plant tempered ware was found in other sites of the Balikh valley as well as along the Euphrates, in northeastern Syria, on the Khabur and at Tell SabiAbyad II. The rest of the pottery assemblage (5% of the pottery bulk) is mineral tempered and had not been verified from any other site in the Balikh Valley. The typical vessel shape mentioned is convex-sided bowls. In comparison with the plant temper ware, the mineral tempered specimen has thin walls and well-smoothed or burnished surfaces. The surface colors are gray-brown to orange-brown. By comparing the clay fabrics, a close connection was detected between the Sabi Abyad pottery and dark colored, mineral-tempered wares (the so-called series Noire) of Tell Halula and other Pottery Neolithic sites on the Euphrates (Akkermans et al., 2006, p. 137, 138).

The Pre-Halaf or the Balikh II pottery sherds from levels 11-7 mainly belong to the Standard Ware (Fig. 7). The rest of the assemblage has been assigned as Dark Faced Burnished Ware (DFBW), Grey-Black Ware, and Mineral Coarse Ware. DFBW is characterized by a large amount of black mineral temper. The surface and fabric colors are mostly brown and grey with variances of red to black. Some sherds have possible traces of bitumen. Since the DFBW show strong resemblances with those from Amuq and Syria and Cilicia, DFBW in Tell Sabi Abyad has been evaluated as an import product. Grey-Black Ware has gray or black, and generally burnished surfaces. The fabric colors are buff or light brown. The sherds were tempered with fine mineral temper. Plant inclusions appear in small quantities. The Mineral Coarse Ware is characterized by a large amount of mineral inclusions. The burnished surfaces have buff to gray colors (Le Mière & Nieuwenhuyse, 1996, p. 126-127).

Standard Ware is mostly plant tempered. Only 10% of all sherds are mineral tempered. The reddish pink or buff surfaces are either burnished, smoothed or brown-slipped (ibid., p. 129). The shapes of all ware types are simple. They mainly

consist of carinated and collared ceramics. Decorational traits were mostly evident for the DFBW. The techniques include applique, incision, impression and pattern burnishing. 65 fragments of husking trays with finger pressed or ridged bases were also recovered from the Pre-Halaf levels (ibid., p. 135, 136).

The Transitional or Balikh IIIA sherds and complete vessels recovered from levels 6 to 4 that can be distinguished from the Pre-Halaf assemblage with new groups of Orange Fine Ware, Fine Painted Ware and Standard Fine Ware (Fig. 7). The wares from the Pre-Halaf period continued but exhibited some changes. The changes included the increase of wall thicknesses within the DFBW and the increase of sherds without plant temper within the Grey-Black Ware. Standard Ware is also frequently found in this phase with the changes in surface colors of orange-red and cream (ibid., p. 144-147).

Standard Fine Ware has high quality paste and mineral temper. The surfaces are mostly buff and cream colored. The surface treatments consisted of wash, smoothing, and burnishing. Most of the sherds have matt black or brown paint. Traces of reuse and repair were evident on most of the sherds. Jars were the main shapes but some bowls were also present. Decoration was observed in the form of geometric forms, but rarely as impressions (ibid., p. 161-167).

Orange Fine Ware is characterized by pinkish-orange surface colors and orange-red paint. The Ware is grit tempered. The surfaces are smoothed or burnished, and generally slipped. Most of the sherds are painted. Decoration was simpler than the Standard Fine Ware. The shapes consist of bowls and jars (ibid., p. 168). Fine Painted Ware was found in small numbers. The group has a fine fabric and generally temper was not used. Some lime or sand temper was observed in some sherds. Most of the pieces are burnished. Decoration was found in the form of red to dark-red paint in thin lines. Bowls and jars are attested as the main shapes (ibid., p. 170).

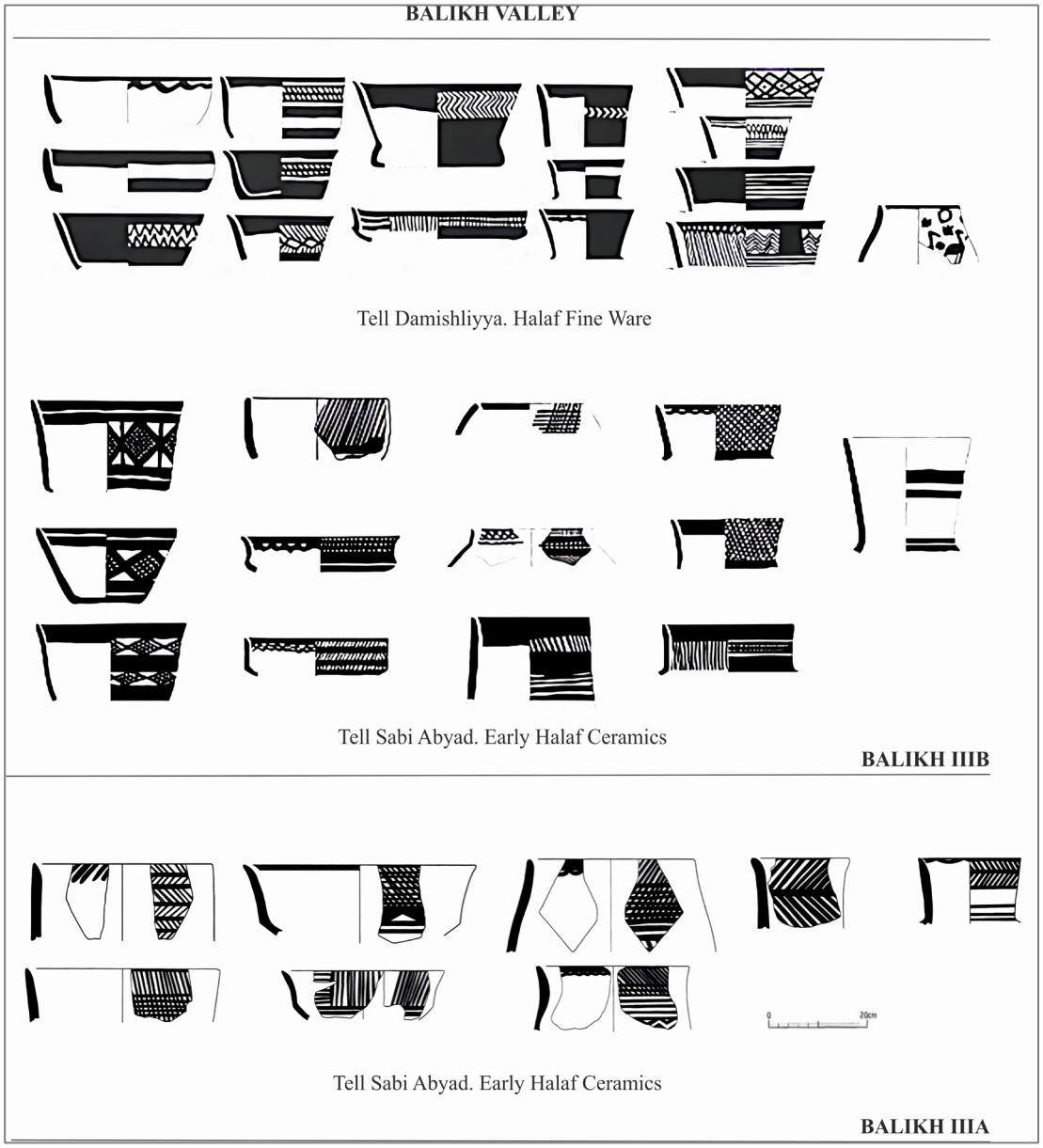

Figure 7. Pottery of Balikh IIIB-Balikh I Periods (Akkermans, 1988: Plts. 6-7; Le Mière, 1979: Figs. 22-43; Copeland 1979: Fig. 4-5; Akkermans & Verhoeven, 2000: Figs. 5.1-5.3)

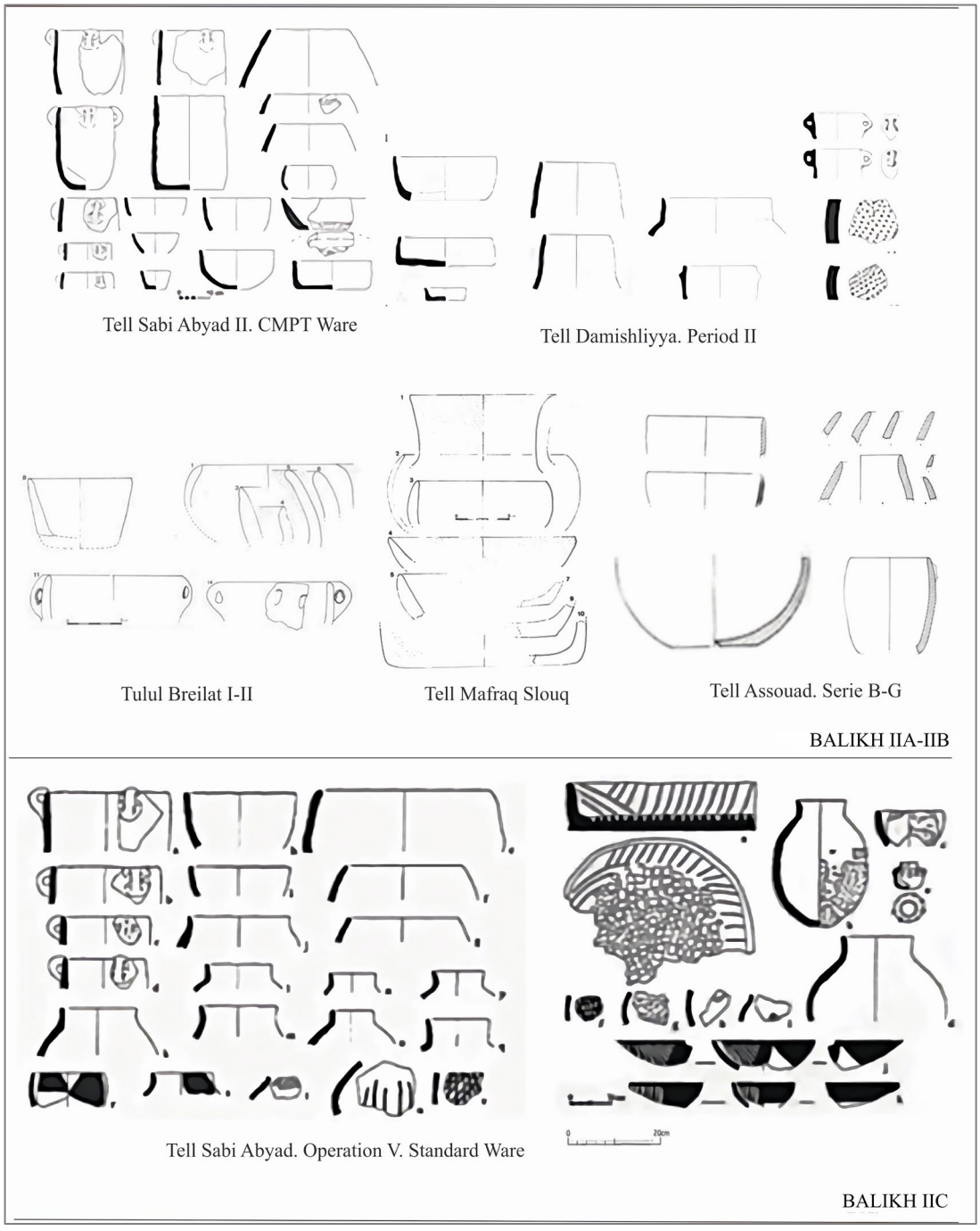

Figure 7. (Continued)

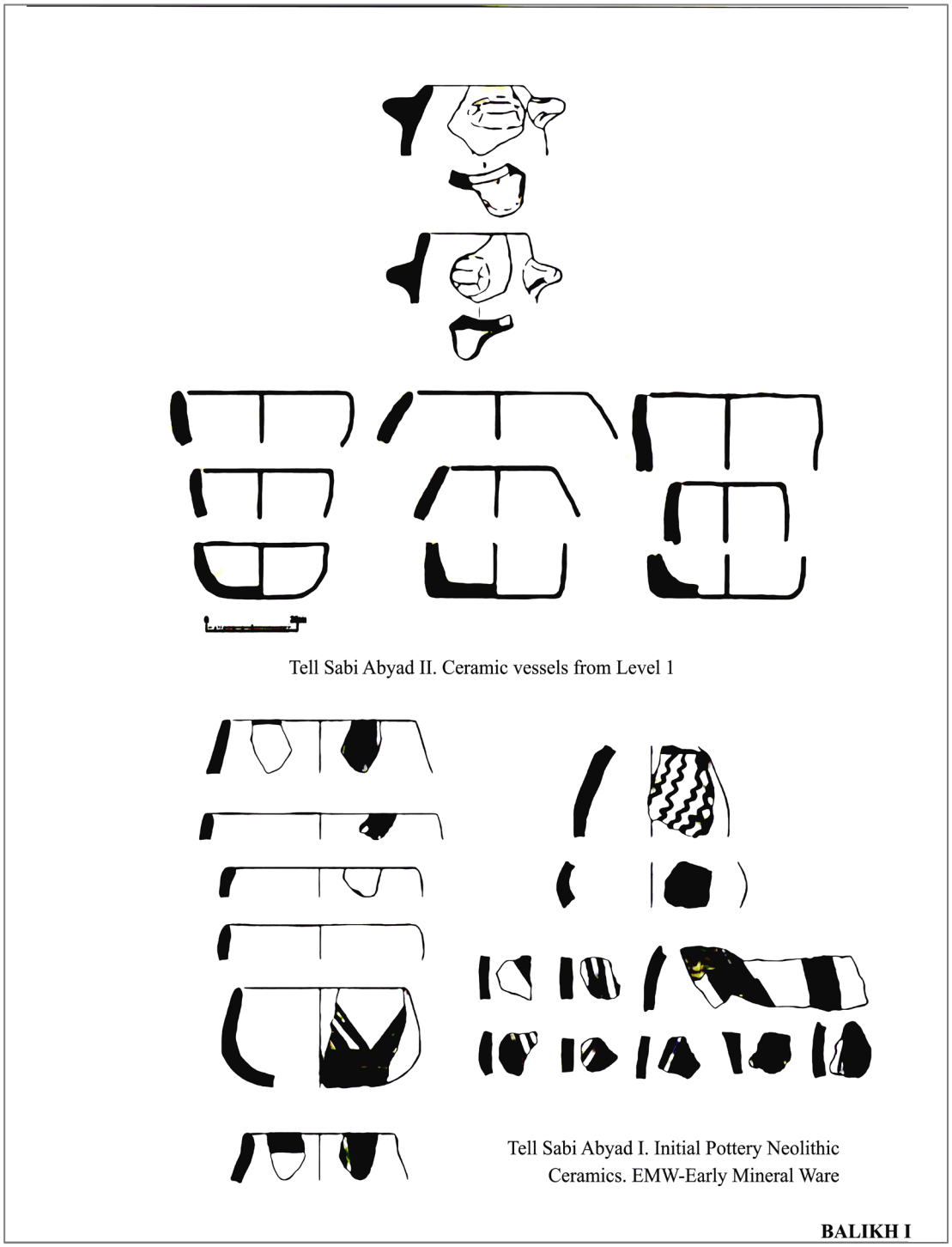

Figure 7. (Continued)

3.2. Syro-Cilicia and the Lebanese coast

Research, first by Robert and Linda Braidwood and recently by Isabella Caneva and Francesca Balossi over the past few decades in Syro-Cilicia and on the Lebanese coast has presented the ceramic category-Dark Faced Burnished Ware (DFBW) and the related cultural horizon. The Amuq sequence mainly was defined by the stratigraphy of Judaidah which was identified by ceramic evidence. The early Amuq phases A and B contain three main pottery groups named as Coarse Simple Ware, DFBW and Washed Impressed Ware (Braidwood & Braidwood, 1960, p. 31).The DFBW data provided by the Amuq sequence was found elsewhere in Yumuktepe, southern Turkey, as well as in the Rouj Basin of northwest Syria and along sites in the Euphrates Valley. The widespread and recognizable style of DFBW has led to a debate on the nature of a cultural horizon to which burnished pottery is related.

3.2.1. The Amuq Plain

Founded near the northeastern corner of the Mediterranean Sea, the Amuq Plain is part of Hatay province in southeastern Turkey. A comprehensive archaeological survey of the Amuq was conducted by Robert and Linda Braidwood on behalf of the OIC between the years 1932-1938. The team discovered 178 settlements and conducted excavations in Çatalhöyük, Tell Dhahab, Tell Imar al-Sharqi, Tell Judaidah, Tell Kurdu, and Tell Tayinat. The pottery and other artifacts discovered and excavated at these sites have provided one of the longest and most reliable chronological sequences of the Near East for a very long time. Braidwood's Amuq sequence is still in use as a reference guide for dating sites elsewhere in the Levant. The earliest Neolithic was identified as Amuq Phase A in operation JK3 at Tell el-Judaidah and all three operations at Tell Dhabab. Phase A was identified by ceramic evidence from these sites. The typological study for the Amuq A sequence displays

three main groups called Coarse Simple Ware, Dark-Faced Burnished Ware (DFBW) and Washed Impressed Ware (Braidwood & Braidwood, 1960, p. 31). The DFBW data provided by the Amuq sequence was found elsewhere in southern Turkey as well as in Syria and the Euphrates Valley. The widespread and recognizable style of DFBW has led to a debate on the nature of a cultural horizon with which burnished pottery has been said to relate.

Apart from an area of packed earth with charcoal, which possibly served as a hearth, on floor 25, no architectural features in Judaidah-operation JK3 may be allocated to Phase A. The area was overlaid partially by stone foundations on floor 24. The remaining part of floor 25 is at the same level on intervals. 21 ground stone objects were recovered from the site. They are made of limestone and most of them are fairly dissimilar. The other limestone finds include a spindle whorl and sling stones. Stamp seals were among the small finds inventory. They represent three types: flat button-like seals with an irregularly shaped base, a truncated pyramid with a rectangular base and perforated pieces with a rectangular base. They all have geometric designs in the form of crossing lines. The rest of the small finds consists of beads, a pendant and bone tools (Braidwood and Braidwood 1960, p. 46-47).

The first group of pottery that was assigned to Phase A is categorized as Coarse Simple Ware (Fig. 8). It constitutes 8-13% of the selected pottery bulk. The subgroups were noted as soft and brittle, with the soft group being the principal. The ware is tempered either with mineral inclusions mainly with calcite or sporadically with plant inclusions, presumably straw. The surface is wet-smoothed and varies in color from orange-buff to light yellow-orange buff and dirty orange-brown buff. The core is black and the paste is well fired. The main forms attested are deep bowls, ovoid jars, and collared jars. Clay bands across the rim, impressions with a rope effect, and blobs of clay were used as decorative elements. Handles and attachments are rarely found (ibid., p. 47-48).

The mineral tempered DFBW comprises 79-84% of the selected sherds (Fig. 8). The pottery is mineral tempered and has dark cores. A few sherds found are tempered with straw. The surface color is mostly black, but dirty yellowish brown and gray-

brown buff sherds are also apparent. The main form is a straight-sided bowl, followed by collared jars. Although hemispherical bowls are the most frequently found, some hole-mouth vessels are also present. The bases are flat. 23 % of the sherds have ledge handles. Some sherds have a clay band application, and various sherds have a rounded clay blob close to the lip. The surfaces were wet-smoothed before the horizontal burnishing application. Only 11% of the bowls are decorated with lunate, elliptic and square impressions. 23% of the pottery balk of Phase A is comprised of red burnished sherds tempered with calcite. Ledge handles below the rims are another characteristic. This distinct group mainly consists of bowls and has not been found in the next phases (ibid., p. 49-51).

Washed Impressed Ware, constituting 5-10 % of the pottery balk, is technologically very similar to DFBW except for the surface treatment (Fig. 8). The burnished surfaces of this ware tend to be duller due to the presence of quartz in the paste. The mineral inclusions are granular and sparse; fine vegetable impressions have occasionally been observed. The surface color is gray-brown; but orange-brown buff to gray-black examples has also been observed. Hemispherical bowls with vertical rims are the only form. The red wash on the rim bands and the impressed decoration are the characteristic decorative elements (ibid., p. 52-54).

All Phase A wares proceeded to Phase B as principal products but in a more elaborative way (Fig. 8). Brittle Painted Ware and Lustrous Red-Film Ware emerged as new classes, but both groups are limited in number. Phase B is represented only by material collected from exposure in Judaidah JK 3. DFBW was fashioned in the same way regarding surface treatment and paste. The vessel walls get somewhat thinner, and surfaces are treated with fine burnishing. The degree of the oxidation also decreased which is explainable given the development of better quality kilns. Impressed and incised decoration advanced. Pattern burnish, found usually on the collars of the jars, exhibit hatches or crosshatches in bands. Some straight-sided bowls and collared jars of Phase A redressed the balance. Deeper bowls, along with carinated sherds appeared; low bowls became prevalent, and the ledge handles

diminished. Bowls with incurved rims and loop handles are duly noted. The quality of impressed and incised decoration increased (ibid., p. 73-77).

Dark-Faced Unburnished Ware was tempered with a large amount of grit. Otherwise, the group was made out of the same clay used in DFBW. The surfaces within this group are unburnished and have no luster. The surfaces are wet smoothed, and the colors are mainly "light gray-brown buff to dark gray." No handles or decoration are attested. Large hole-mouth jars commonly were coupled with small deep bowls, and high-collar jars (ibid., p. 78).

Many characteristics of Coarse Simple Ware from Phase A were unchanged in Phase B (Fig. 8). Most of the sherds belong to the brittle group. The paste is mineral tempered, mainly with serpentine. In addition, fine straw temper and cattail seeds are apparent. The main surface colors vary from cinnamon to pink. Smoothed surfaces have no burnishing. Low bowls, collared vessels, and ovoid jars have uniformly been found. The bases are flat in general. All of the decorative features continue those of Phase A examples. Coarse Red-Slipped Ware yielded a variety of red slip and burnishing. The forms and all of the other technological features correspond to Coarse Simple Ware (ibid., p. 70).

Coarse Incised or Impressed Ware show an alteration from the other coarse wares regarding surface treatment and oxidation processes. Most of the sherds have a black core that merely indicates surface oxidation. Incised or impressed linear designs implemented before the slip (if available) appear in horizontal, diagonal or vertical order. Further, common patterns such as rays radiate from a central point (ibid., p. 73).

Washed Impressed Ware shows stylistic continuity with the Phase A group. Predominant amongst these wares are hemispherical bowls. A thin red wash on the outer rim was observed in the entire assemblage. Some of the sherds bear impressions above and beneath the rim band (ibid., p. 79).

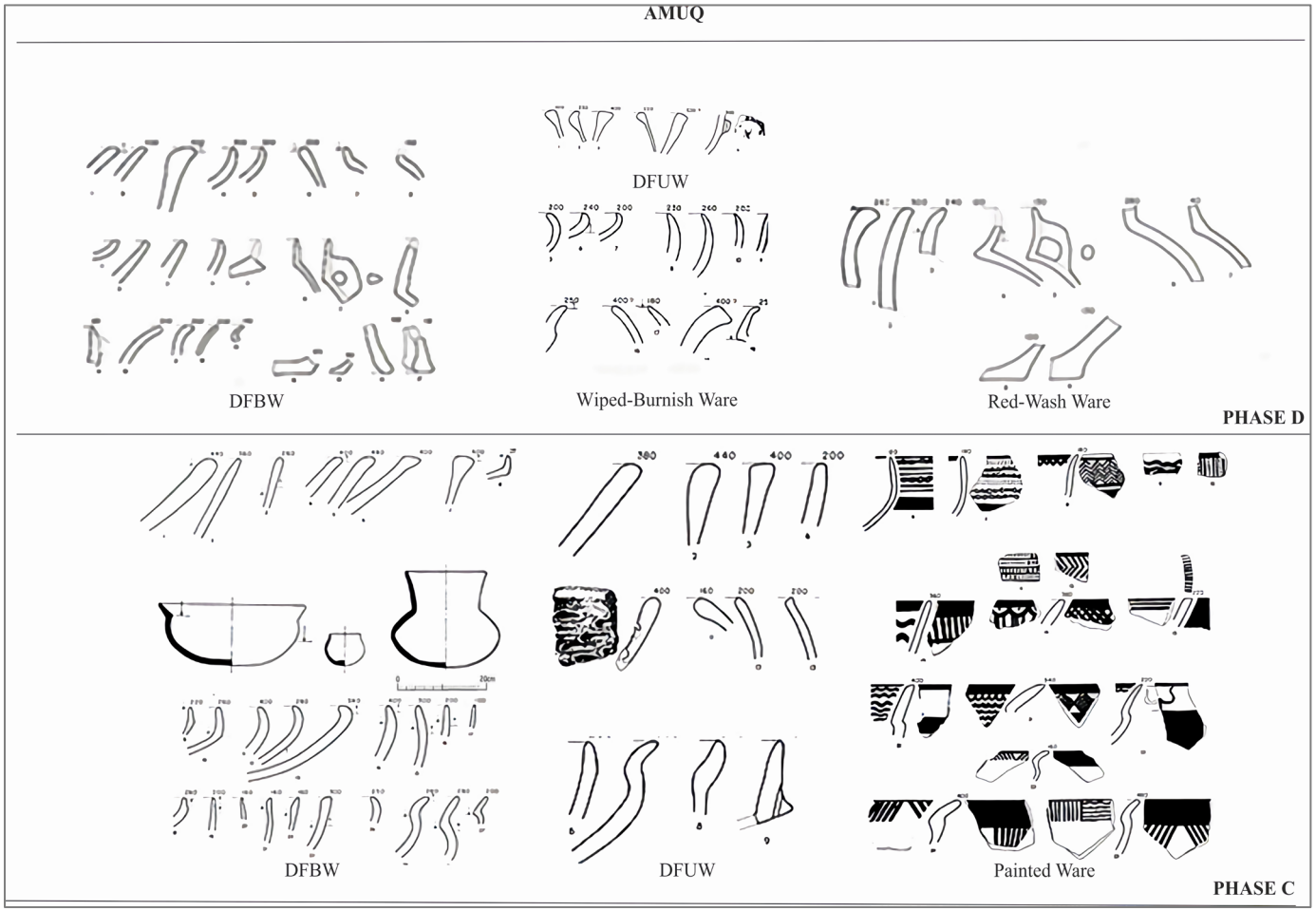

Figure 8. Pottery of Amuq Phases D-A (Braidwood & Braidwood, 1960: Figs. 21-26, 28, 42, 45, 54).

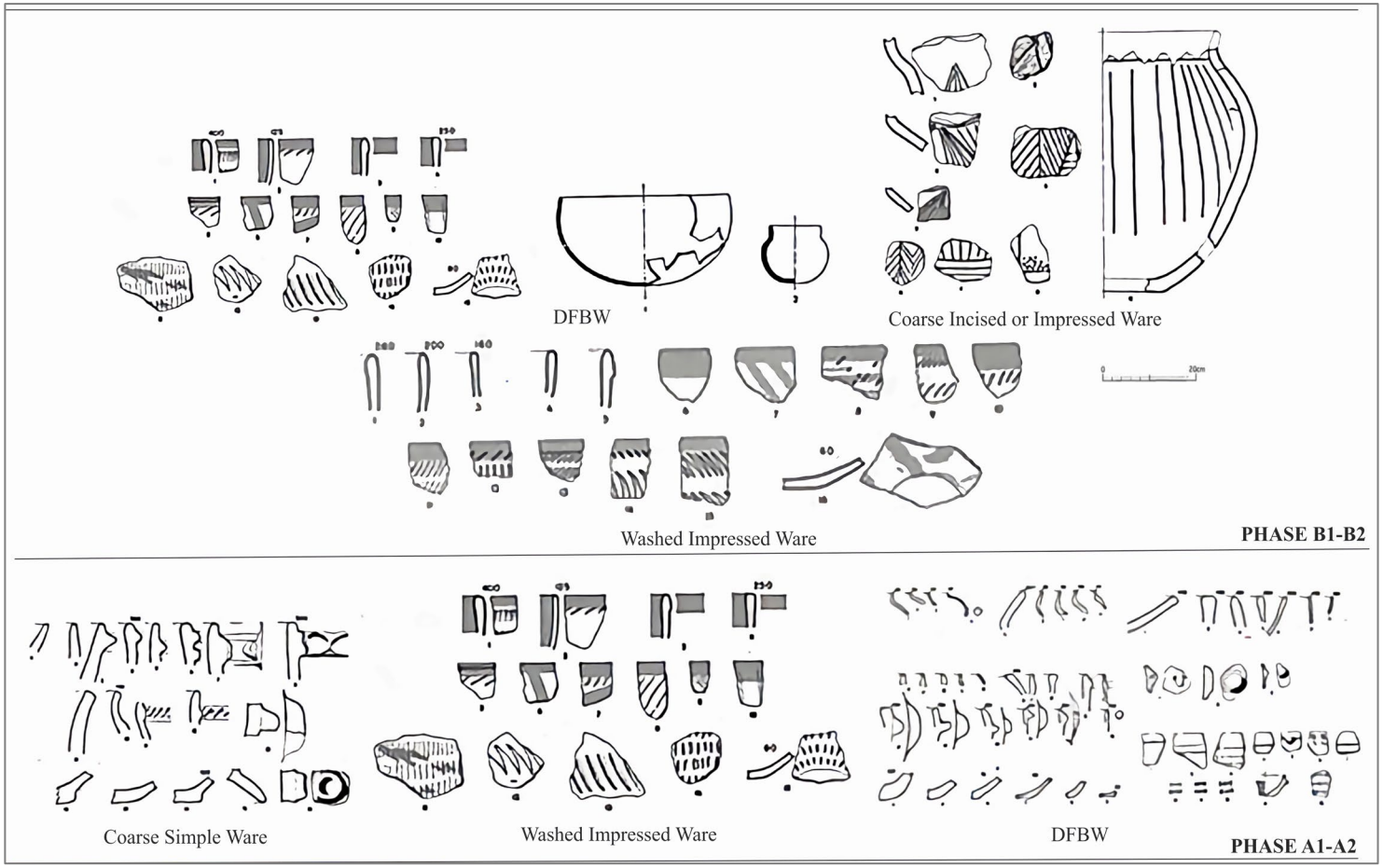

Figure 8. (Continued)

3.2.2. Mersin-Yumuktepe

Yumuktepe, located on the southeastern coast of Turkey, is in the hinterland of the modern city of Mersin. The mound is 25 m high; the site is 300 m diameter and covers a 12-hectare area. The mound was discovered and excavated by J. Garstang from 1937-39 and 1947-48. The current excavation, begun in 1993, is being conducted as the joint expedition of the University of Istanbul and the University of Rome, La Sapienza. The excavation was first directed by V. Sevin and I. Caneva, and since 2001 by I. Caneva. 33 levels were exposed in excavations conducted by Garstang. The new campaign has re-evaluated the stratigraphy and presented the levels as follows: Level XXXIII-XXX: Early Neolithic; Level XXVIII- XXVI: Middle Neolithic; Level XXV-XVII: Late Neolithic; Level XVI-XIII: Middle Chalcolithic; and Level XIIB: Final Chalcolithic (Caneva & Sevin et al., 2004; Düring, 2011). Levels XXXIII- XXIX dated 7070-6500 cal. BC. Level XXVIII gave the dates of 6500-6250 cal. BC. Level XXVII dated to 6320-6030 cal. BC. Level XXVI is dated to 6150-5840 BC. The dates for level XXV are 6000-5720 cal BC, and level XXIV is dated to 5720-5470 cal. BC (Balossi, 2006, p. 16).

The lowest Neolithic layers of Yumuktepe penetrated from Garstang's Trench A and the recent contiguous sounding of the so-called SA show that the lowest Neolithic layers lie over virgin soil. The structures from the earliest layers were limited to cobble platforms. No solid stone archirecture has been found from level XXXIII to level XXVIII. Instead, wattle and daub dwelling structures characterized these phases. Rarely found were thin rows of foundations. The floors or plans of these huts have not been identified. Middle Neolithic levels of XXVIII and XXVII show evidence of architectural changes. The main change detected was massive stone foundations and stone basements. Round and oval hearths, suggesting daily use, were also found. Some structures with several rooms and annexes have been interpreted as having functioned as storage areas (Caneva & Sevin et al., 2004, p. 33, 35-37).

During the late Neolithic phase, assigned to levels XXV- XVII, the settlement had a terraced layout. A massive stone wall and apsidal houses and round and stone paved silo structures were the main architectural elements. The stone walls were thicker and more advanced in the final Neolithic phase. The complexity of their architectural features may indicate fortification purposes. The number of cobble-paved silos enormously increased in this phase (ibid., p. 45, 50-53).

Early Neolithic small finds included a bone stamp seal. A few ground stone tools were also found. These consisted of small grinders and slightly polished axes. No ornaments or clay figurines were found. Among the finds of the final Neolithic phase were clay spindle whorls, disk-shaped beads and stone bracelets. Bone perforators and spatulae were also found in this phase (ibid., p. 40, 53).

The earliest pottery, the so-called Sandy Ware, discovered from the soundings SA and WA is grit tempered. The abundant use of grit inclusions gives a sandy look to this ware. The exterior surfaces are usually burnished and slipped. Interior surfaces have only a smoothed appearance. Surface colors range from buff to dark brown. Wall thicknesses are considerable, measuring 8 to 15 mm. Globular small jars and bowls with simple rims are the main vessel shapes. Impressed decoration occasionally was used along with incision. Impression motifs consist of straight lines aligned along the mouths of the vessels. The decoration was applied with fingers or a spatula; shells and combs were used to create several points in different shapes and sizes (Caneva & Sevin et al., 2004: 39, Balossi, 2006, p. 40).

Yumuktepe levels XXIX-XXVIII are contrast with the Syrian ceramic tradition as these levels did not produce coarse ware. Sandy-slipped ware of the earliest phases gave place to DFBW. Balossi named this homogeneous assemblage of DFBW as DFbW due to the specific characterictics peculiar to Yumuktepe. DFbW is tempered with medium sized mineral inclusions. Vessel walls measure between 3-8 mm. Vessel surfaces are minutely burnished though not polished. Various hues of brown, reddish brown and scarlet brown appear in the surface colors. Hole-mouth jars, bowls with inverted walls, and large plates have been noted as the typical shapes. Several sherds are decorated with fingernail impressions (Balossi, 2004, p. 115).

Levels XXVII- XXVI drew apart from the southern tradition due to the appearance of pinkish ware (Fig. 9). Two classes appear within the assemblage. They have tentatively been named pinkish gritty ware (class 1) and pinkish-orange fine ware (class 2). Principle shapes are jars suitable for use in storage facilities. A few bowls were also present (Balossi, 2006, p. 23). The class 2 sherds have smoothed surfaces unlike the sherds of class 1 that generally have no surface treatment. Impressed finger decoration and incision was evident in the class 1 pottery assemblage. Both classes are mineral tempered. While the first class was tempered with voluminous medium sized inclusions, the second class has a finer temper and less porous texture. Most of the surfaces in class 1 sherds are untreated even though some sherds have a light wash and impressed finger decoration along their necks. The wash is essentially a slip so that the surface of the vessel is apparent through the patina. Most of class 1 and 2 pottery is defined as necked jars linked to storage; generally for liquids (ibid., p. 21).

Dark ware from levels XXVII- XXVI has been divided into three classes. Class 3 (Dark burnished Ware) was classified as a follow-up of the DFbW from the previous levels but shows several technological and morphological changes. In this category, deep bowls are substantial, but hole-mouth jars are also present. The pottery is tempered with medium mineral inclusions and always burnished. The wall thicknesses of the vessels are around 6mm. Surface colors are noted as bright and have tonalities of browns and grays and sometimes black (ibid., p. 21, 23, 28).

Class 4 is called Gritty Dark Ware, and is mostly comprised of hole-mouth jars and bowls. The exterior surfaces are simply smoothed; interior surfaces are untreated. Sherds are mineral tempered, and usually of medium to coarse concentration. The walls are relatively thicker than the Class 3 vessels. Class 4 bears the closest resemblance to the Amuq B-DFBW assemblage described by Braidwood (ibid., p. 21-23, 30).

Last, class 5, namely Fine burnished Dark Ware, consists of fine-textured sherds with thin walls and well-finished surfaces. The main shapes discovered are small plates, cups, and bowls. The paste has minute mineral inclusions. Burnishing remains as the

main surface treatment. Black and dark grey are the most observable surface colors, with some light grey and brownish-beige instances. In most cases, the vessels have retained a shiny appearance due to polishing. Dark surface colors seem to have been a choice. 60% of the exterior surfaces are polished, and the remainder is burnished. Impressed decoration is rarely used. In most of the cases, the interior surfaces are highly burnished. The wall thicknesses are around 4 mm (Balossi, 2006, p. 22, 31; Balossi, 2004, p. 119). Class 3 and Class 5 vessels are comprised of bowls and plates for daily use. Carbon deposits indicate that Class 4 vessels were primarily used as cooking pots. Balossi proposed that the light colored vessels were probably used for storage and dark colored vessels were assigned to daily use (Balossi, 2006, p. 22).

The painted pottery discovered in level XXV have motifs associated with Amuq pottery (Fig. 9). Painted ware is mineral tempered and light colored. The sherds with medium sized sand temper are homogenous while other sherds show finer and more compact paste. The surfaces are burnished and painted. The sandy examples have rough surfaces and no treatment at all. The geometric designs in red, scarlet or brown consist of crisscrosses, zigzags, horizontal and vertical bands. All three classes of dark wares occur in the new levels and exhibit their earlier characteristics. Pottery sherds with more developed painted decoration appear more in levels XXIII to XX. The paste of the vessels became finer. The main surface colors attested are brown, black, red or buff. Geometric designs are usually found on the necked jars and also on bowls and other forms. Fine DFbW disappeared and probably replaced light grey class with thin paste. The surfaces of the new type are burnished and the walls are thick. Bowls with a flaring profile have also been noted. Class 3 has shown several changes. Red and light colors have become dominant. Carinated profiles and flat bases are prevalent. The typical form is a deep bowl with a round rim and straight walls. The surface color was yellowish or reddish brown. The surface color was not homogenous as evident from the slightly lighter shading on the rims (Balossi, 2004, p. 126, 127).

The DFBW horizon discussed by Francesca Balossi that contained data from Hama, Ras Shamra, and Byblos included in this chapter as a comparative material will be discussed below.

Figure 9. Pottery of Yumuktepe Levels XX-XXVI (Balossi Restelli, 2006: Plts. 2.3-2.6, 2.8-2.10, 2.13, 2-15-2.18, 2.22-2.25, 2.38)

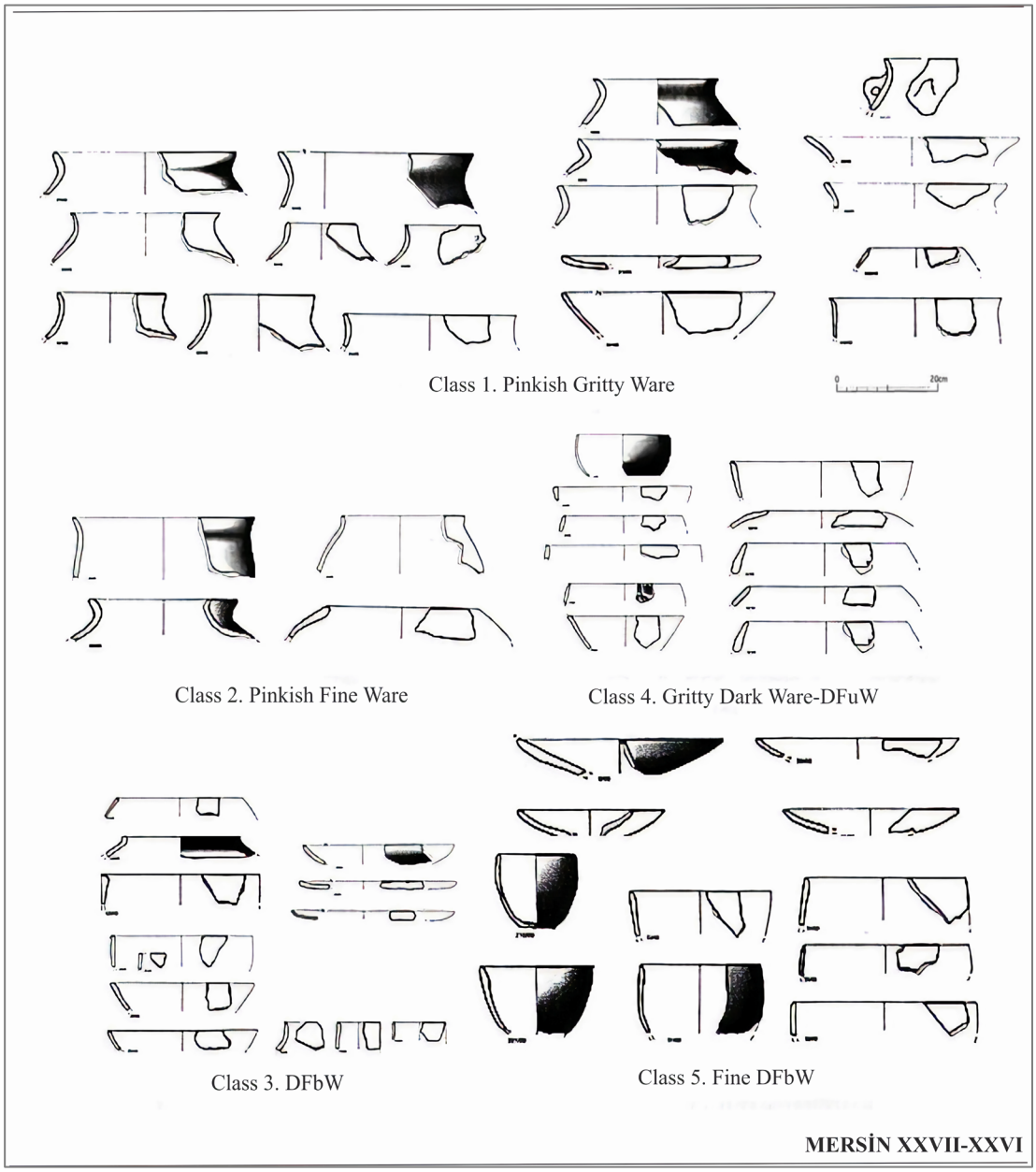

Figure 9. (Continued)

3.2.3. Hama

The citadel mound of Hama is located in central, western Syria along the banks of the Orontes River. The mound measures 45 meters in height and covers around 10 ha

in area. Harald Ingold conducted the Danish excavations at Hama between 1931 and 1938. The oldest occupation at the site is represented by Period M and subdivided into layers 36-16.

Simple and plain wares found in layer 26. Three groups of wares were identified by the excavators: burnished ware, coarse ware, and medium ware. The Period M pottery inventory is dominated by burnished ware through the oldest layers M36-27 with color variations on the surface. Closed bowls are the most common shapes relating to the oldest layers. Rims are defined as plain, pointed, flattened or flaring. The most common shape for dark and orange burnished wares is the closed bowl with simple rim. The bowls have thin walls with a rim diameter from 14 to 24 cm. The closed bowl with flattened rim and ledge handle is only attested in dark burnished ware (Thuesen, 1988, p. 24, 31). Principal surface colors were classified as dark, orange and light. The main surface treatment is burnishing observed mostly on exteriors which are implemented either in parallel or oblique fashion with a tool. The clay is mineral tempered with dark gray inclusions and the pots are well fired. The core has similar dark grays, but surface colors are varied. The divergence of surface colors most probably resulted from firing or the burnishing process. Indented decoration was observed in layers 27-28 (ibid., p. 31).

Dark burnished ware is the best-represented group of dark brown, gray and black surfaces. The light burnished ware has a light gray color on the burnished surface. Since fewer than ten sherds represent the group, they typify a distinct class. Orange burnished ware is similar to the light burnished ware yet the firing technique is different. Derivation of orange ware is considered to be a result of the oxygen reduction in the later phase of firing which which might have inspired potters to further inventions (ibid., 23). Excavators recorded that the orange ware is seen just before the introduction of plain pottery in layer 26. Therefore, the pottery inventory of layers M26-16 represented an opposite state to the Amuq A-C phases in which dark burnished ware was more frequently found.

Plain wares emerged in layer M26. They are subdivided into coarse plain ware and medium plain ware and extended into layer M16. The main shape for the plain wares

was an open bowl with simple pointed or rounded rim. The main surface treatments noted for the coarse ware were wet-smoothing, washing, and plastering. The clay was tempered with organic materials like straw and grain, but a significant amount of mineral inclusions continued to be used as temper. Lime plastered and red washed sherds represent the minor subgroups. A sherd with a homogeneous paste without organic temper represents the medium plain ware.

3.2.4. Ras Shamra

The earliest stage of ceramic development in the coastal site Ras Shamra is represented by phase VB which has been identified with Amuq A sequence (de Contenson 1963: 36). In the lower layers of phase VB, white plaster ware continued to appear. The earliest ceramic type found on the site was the lightly fired, crumbly ware (céramique friable). The chaff tempered pottery has pinkish-yellow surfaces and thick walls. Highly burnished black and brown ware make up 94-97% of the earliest pottery bulk. The main vessel forms consist of hemispherical bowls, globular hole-mouth jars, and jars with a collared neck (Moore, 1978, p. 301).

The main surface treatment is burnishing. Only some decorated examples exhibit incision and red paint. The well-fired clay is grit and vegetable tempered. In phase VA a series of husking trays was revealed. These are similar to the Tell Hassuna examples. The third class of the pottery assemblage has been described as fine ware. Thin-walled globular and carinated bowls and jars appear to be the main shapes. The surfaces are highly burnished, the colors varied in black, brown or red. Some sherds are decorated with incisions or dot patterns. Pattern burnishing is another form of decoration found in phase VA. Frequent patterns are herring-bone and diamonds that were created with a burnishing tool (ibid., p. 302).

3.2.5 Byblos

Byblos on the Lebanese coast has produced a large sample of Neolithic pottery. The earliest pottery assemblage from the site is known as "Néolithique Ancien." Globular jars and hemispherical bowls are the predominant shapes. Various pottery forms include deep hemispherical or holemouth craters, bowls, cups, holemouth jars, jars with short everted necks and beaker like vessels. Loop handles and ledge handles were attached horizontally for suspension (Banning, 1998, p. 208). A few open dishes with ring bases were among the variety of forms. Poorly fired pottery was porous as some bowls were lined with white plaster and polished for a waterproof effect. A few flat bottoms were evident, but most of the bases were round. The exterior surfaces of the vessels are smoothed and fired to a buff color. Most of the sherds are roughly burnished. In this context, despite the manufacturing technique remaining same, the Byblos assemblage differs from the dark burnished ware group of the North Syrian sites (Moore, 1978, p. 329-339). Surface decoration is scarce but noticeable. Cardium shell impressions and incised designs are the common decorative treatments. Principally, chevrons, hatched triangles, and simple parallel lines served as the basic patterns. The clay was tempered with straw, limestone, and quartz (Banning, 1998, p. 208).

3.3. The Rouj Basin

The Rouj Basin in northwest Syria was investigated by an extensive survey conducted by the University of Tsukuba. The survey was directed by T. Iwasaki between 1990 and 1992 and included the sites Tell Aray 1 and 2, Tell Abd el-Aziz, and Tell el-Kerkh 2 (Tsuneki & Miyake, 1996, p. 109). Then, the excavations were carried out by the Syro-Japanese Archaeological Mission under the directorship of A. Tsuneki in Tell el-Kerkh between 1997 and 2010. The intensive survey and the

excavations revealed outstanding architectural and occupational debris dating to the PPNB and the Pottery Neolithic as well as the Early and Middle Bronze Ages, the Iron Age, and the Roman-Byzantine periods (Tsuneki et al., 1997, p. 1).

Tell el-Kerkh is defined as a Neolithic mega-site comprised of the three adjoining mounds of Tell-el Kerkh 1, Tell-el Kerkh 2, and Tell Ain-el Kerkh. This mega-site covers approximately 30 hectares. Since the three adjoining mounds presented substantial data, the settlements were chosen for excavation. More importantly, the establishment of clearly stratified pottery sequences can be used for reconsidering the Amuq chronology (Tsuneki, 2012, p. 30, 31).

Tell-el Kerkh 1, the highest mound located on the southernmost side of the complex, provided data from the Early and Middle Bronze Ages, the Iron Age, and the Roman-Byzantine periods. However, Tell-el Kerkh 2, and Tell Ain-el Kerkh produced mostly Neolithic finds except for the Roman-Byzantine sherds found on the southern part of Tell Ain-el Kerkh (Tsuneki et al., 1997, p. 1).

The Rouj chronology included PPNB (EI-Rouj 1) through Early Bronze Age (EI-Rouj 6) periods. The El-Rouj 2 period (Late Neolithic) was further divided into four sub-periods (EI-Rouj 2a to 2d) where the sub-periods were then divided into phases (Odaka, 2013, p. 206).

The Rouj 1a (EPPNB) period is represented by the lowest layers of Tell Ain el-Kerkh dating back to c. 8700-8300 cal. BC. The Rouj 1c (LPPNB) period gave dates of c. 7700-7000 cal. BC (Tsuneki, 2012, p. 35).

The Pottery Neolithic period (Rouj 2) is divided into four periods: Rouj 2a (Incipient PN) based on layers 5 and 6 in Tell el-Kerkh 2. Rouj 2b (Early PN) attested at Tell Ain el-Kerkh, Tell el-Kerkh 2, and Tell Aray 2. The dates affirmed for Rouj 2a-b range between c. 7000 and 6600 cal. BC. Rouj 2c (Middle PN), detected in layers 6-4 of Tell Ain el-Kerkh, dates from between c. 6600 and 6100 cal BC. Rouj 2d (Late PN) is mainly determined from layers 3-1 of Tell Ain el-Kerkh and gives dates between c. 6100-5800 cal. BC (Tsuneki, 2012, p. 35-36).

3.3.1. Tell el-Kerkh 2

Due to the considerable amount of Neolithic materials collected from the surface of the western mound-Tell el-Kerkh 2, the mound was selected for soundings with the intention of establishing the earliest chronology of the Rouj basin. The diameter of the mound is less than 180 m and rises 5 m above the surrounding area. A 5x5 m sounding pit (pit A) was set at a depth of 4.30 m, and twelve layers were uncovered. The uppermost layers from 1 to 4 are associated with Rouj 2b, while Rouj 2a was found in layers 5 to 6. The layers from 7 to 12 belong to Rouj 1c. On the other hand, Rouj 2a (Incipient PN) was represented only at Tell el-Kerkh 2 from the material found in Test Pit A. (Tsuneki & Miyake, 1996, p. 110-111; Tsuneki, 2012, p. 54; Odaka, 2017, p. 86).

The architecture of Tell el Kerkh II is not complicated. Twelve layers were determined according to building remains. In Layer 1 three hearths filled with stones along with carbonized materials and animal bones were found. Layers 2 to 4 contained similar circular structures built in the same location that were all made of mudbrick and clay with plastered and pebble foundations. The function of the structures remains unclear. No structures were found in layers 5 and 6. Rectangular rooms made of pies were found in Layer 7. The rooms did not have stone foundations; they probably belonged to a single large building that served for storage. Since the size of the sounding was limited, no detectable structures were found below Layer 7. A deep ash pit and a thick ash layer were discovered in Layers 11 and 12 (Tsuneki & Miyake, 1996, p. 111).

Four fragments of stone vessels were among the finds. One example from Layer 6 is comparable with Kerkh Ware in terms of form and wall thickness. Bone implements and beads were also discovered but their number was limited in comparison with the chipped stone tools. There was no clay figurines recovered from the site (ibid., p. 112).

More than 1450 pieces of handmade Neolithic pottery were procured from the sounding at Tell el-Kerkh 2. Three main ware groups were entitled as follows: Kerkh Ware, Dark-faced Burnished Ware (DFBW) and Coarse Ware (Fig. 10). Kerkh Ware was identified as the earliest pottery from the Levant and as a prototype of DFBW, which was obtained from Layers 6-5 that correspond to Rouj 2a period. Although the Kerkh Ware makes up 33-42 % of the pottery assemblage, the sherds have always been accompanied by DFBW and Coarse Ware, though Coarse Ware was rarely found (Tsuneki, 2012, p. 35; Odaka, 2013, p. 206; Odaka, 2017, p. 86).

Kerkh Ware is mainly tempered with sand and mica along with grit inclusions. The fabric shows variety from not well-compacted examples through fine-textured clay. The exterior surfaces are well-smoothed and mostly burnished. The interior surfaces are generally wet smoothed apart from the rims. Surface colors vary from dark gray to grayish buff but grayish brown is the most prominent choice. The vessel walls measure around 10 mm. The vessel shapes are uniform and they are constituted of shallow bowls and deep bowls with simple rims. No decoration was detected on the surfaces. The diameter of the vessels measures 14-16 cm (Tsuneki & Miyake, 1996, p. 114).

Dark-faced Burnished Ware (DFBW) was the most remarkable pottery assemblage found in Rouj 2b and Rouj 2c periods along with Coarse Ware (Tsuneki, 2012, p. 36). The DFBW assemblage is subdivided into four main groups. DFBW Group A is tempered with small sand particles, grit and lime inclusions. Vessel walls measure between 5 mm to 7mm. Two main shapes were detected: hemispherical bowls and deeper bowls. No decorated pieces were attested (ibid, p. 114).

DFBW Group B dominated the DFBW from Tell-el Kerkh 2. Sand was mainly used as temper; grit and lime particles were also occasionally present. Like Group A, the vessel walls were thin. The characteristic vessel shapes were included hemispherical and deep bowls with thick and flat lips. A few decorated sherds were found that had fingernail impressions. A sherd with a patterned burnished design and one sherd with traces of plaster coating were also attested (ibid, p. 116).

DFBW Group C is identical to Group B in terms of fabric. The wall thicknesses are around 10 mm. The surface colors are generally reddish brown. One hemispherical bowl was found that is similar to the deep bowls of Group B. The main decorative treatments on the surfaces are deep impressions made by the pinching method (ibid., p. 116).

DFBW Group D was rarer than the other groups. Sand particles, coarse grit, and vegetable inclusions were used as temper. Wall thicknesses usually exceed 10 mm. The surface was slightly and irregularly burnished. The surface color was noted as reddish brown. Large, pedestal bowls and deep jars are the main vessel shapes (ibid: 116). Lime plastered DFBW D sherds were also discovered along with a DFBW B sherd with lime plaster on the exterior surface of the base (Conroy, 2005, p. 68).

Coarse Ware is the last group of the pottery assemblage; it has been described as distinctive. The pottery is chaff tempered. The light-coloured surfaces are roughly burnished and frequently smoothed. The vessels are generally large and heavy. The main shapes consist of large-deep jars and flat based bowls. Horizontally applied bands were the common decorative treatment. Some of the red washed sherds have incised decoration. Husking trays are noted as a characteristic among the varieties (Tsuneki & Miyake, 1996, p. 118; Tsuneki, 2012, p. 36; Odaka, 2017, p. 86). Some Coarse Ware sherds are completely coated in a layer of plaster, usually more than 1 mm thick (Miyake, 2003).

3.3.2. Tell Ain el-Kerkh

Tell Ain el-Kerkh is located in the northern part of the Tell el-Kerkh mound complex. The seven cultural layers each measure 3.5 m in thickness and include the El-Rouj 1, 2b, 2c, and 2d periods. The 800 years of occupation date from 6,600 to 5,800 cal. BC. The materials from layers 3 to 1 represented Late PN dated between ca.6100 and 5800 cal. BC. Based on the information showing the decline of Kerkh Ware, Tsuneki proposed that the inhabitants of the settlement populated Tell el-

Kerkh 2 during the Rouj 2a-b periods. After this, the settlers are relocated to the main area at Tell Ain el-Kerkh but then later returned to Tell el-Kerkh 2. It appears people may have continued to occupy the main area, or they may have moved into the northwest area of Tell Ain el-Kerkh (Tsuneki, 2012, p. 36, 61-62).

The "Central Area" located on the northern summit of the mound has seven occupational layers. Rouj 2d period was found in layers 1 to 3. Layers 4 to 7 date to the Rouj 2c period. The architectural features excavated in this area belong to domestic houses, storehouses and tanneries. A mill house and a cemetery were also excavated (Tsuneki, 2012, p. 50). In Layer 6, a pisé building with a square plan was recovered. The floor of the building has a limestone paving which was then lime plastered (Tsuneki, 2000, p. 2-3). The architecture of Layer 5 was poorly preserved. It consisted of tannours, clustered stones and some remains of a plastered floor (Tsuneki et al., 1999, 5). In layer 4, a pisé building with a lime plastered floor was recovered. There was also a small square pit found in this single-roomed building. From the third layer, stone foundations that may belong to single-roomed rectangular houses were found. In the second layer, a rectangular stone foundation was excavated. These remains most probably belonged to the dwelling structures. No architectural features were found in Layer 1 due to disturbance in the Hellenistic period (Tsuneki et al., 2000, 5-6).

Three ash-filled ritual pits found in Layer 2 contained fragmentary pottery pieces belonging to the fruitstands and long necked-jars that had intentionally been broken and carefully placed there (Balossi Restelli, 2015, p. 97). Beads made of imported stones like turquoise; serpentinite and agate were among the small finds. Stamp seals made of stones, bones and terracotta as well as clay sealings with seal impressions were among the small finds inventory (Tsuneki, 2000).

The pottery assemblage from Tell Ain el-Kerkh has been classified into four main groups: DFBW, Dark-faced Unburnished Ware (DFUBW), Cream Ware and Coarse Ware (Fig. 10). Kerkh Ware was found in the Northwest Area but is represented by few pieces (Tsuneki et al., 1997, p. 18; Tsuneki et al., 1998, p. 12).

For the Rouj 2c period Kerkh Ware, DFBW and Coarse Ware constituted the pottery assemblage. Dark-faced Unburnished Ware Cream Ware (Red Washed Ware) and a few fine painted potteries appeared in the Rouj 2d period (Tsuneki, 2012, p. 36).

DFBW is usually tempered with sand and mica. The surfaces of the DFBW pots are burnished. Hemispherical bowls are the most common shapes. The other shapes can be determined from the rim fragments. The vessels with bevelled rims are large in size with thick vessel walls and nail pinching decoration. Bowls with flattened rims usually have ledge handles and nail impressions. Bowls with simple rims are also commonly found. A body fragment of a carinated bowl was noted in the assemblage. Jars with cylindirical necks are classified as the only close form. 34% of the DFBW sherds have impressed decoration. Most of the attested decorated pieces are bowls (Miyake, 1998, p. 12). DFUBW has the same fabric of DFBW. The surfaces of DFUBW were exposed to wet-smoothing instead of burnishing (Tsuneki et al., 1997, p. 18).

The Coarse Ware is chaff tempered and subdivided into three groups: comparably well-made and slightly burnished, red washed and brittle. The surface colors usually have light colors of whitish cream and buff. No diagnostic sherds have been found and the shapes were not detected. Decoration is observed below the rim in horizontally applied bands (Tsuneki et al., 1997, p. 18; Tsuneki et al., 1998, p. 14). Kerkh Ware is represented by fragmentary pieces of undiagnostic sherds. The sherds are tempered with fine sand. The surfaces are burnished and the vessel walls are thick (Tsuneki et al., 1998, p. 12).

3.4. Middle Euphrates and Southeastern Turkey

The region, as its name implies, is located in the south-eastern part of Turkey, neighboring Syria and Iraq. The first systematic investigations were conducted in

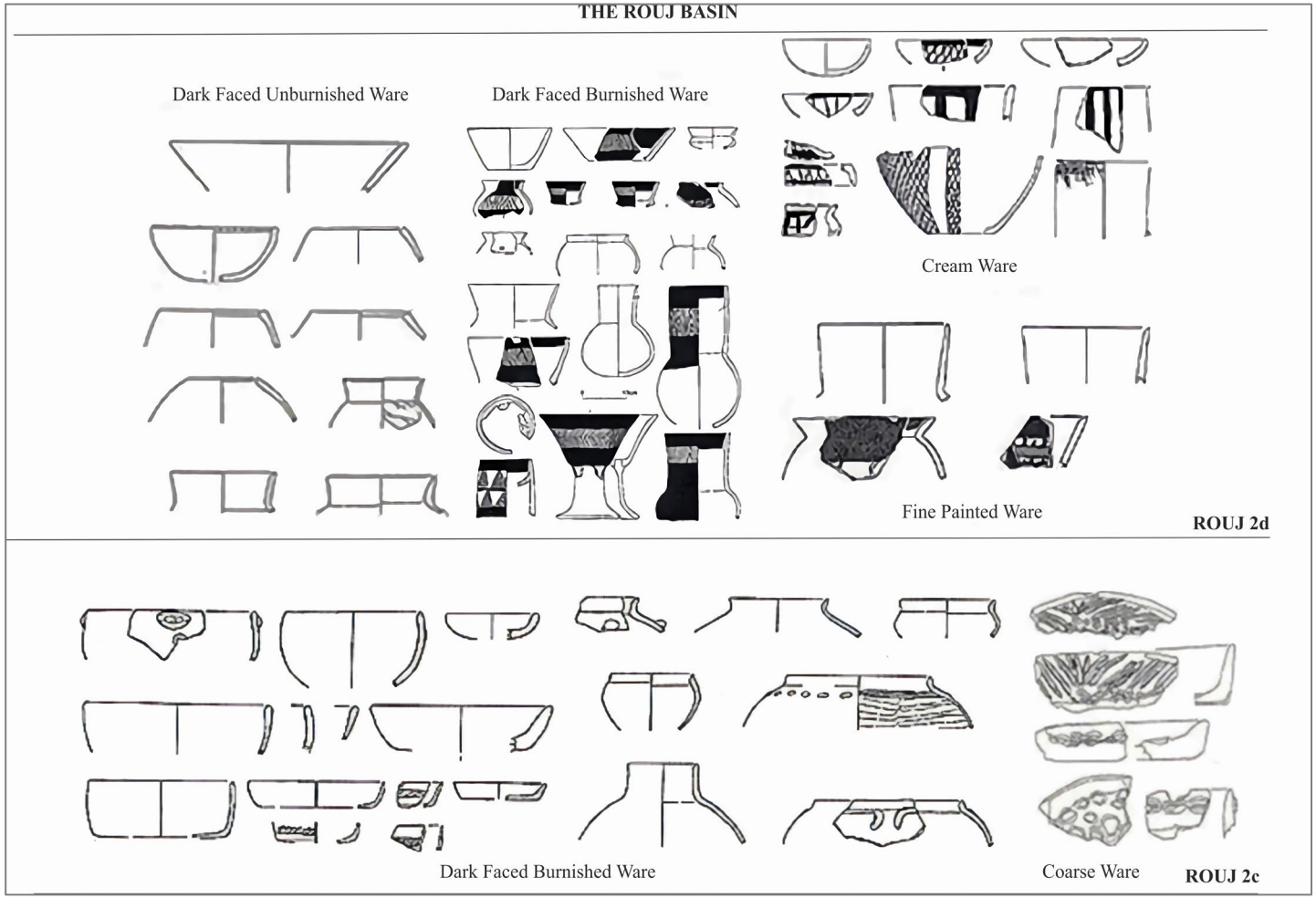

Figure 10. Pottery of Rouj 2a-2d periods, Tell el Kerkh (Tsuneki, 2012: Fig. 4, Tsuneki & Miyake, 1996: Figs. 10-11).

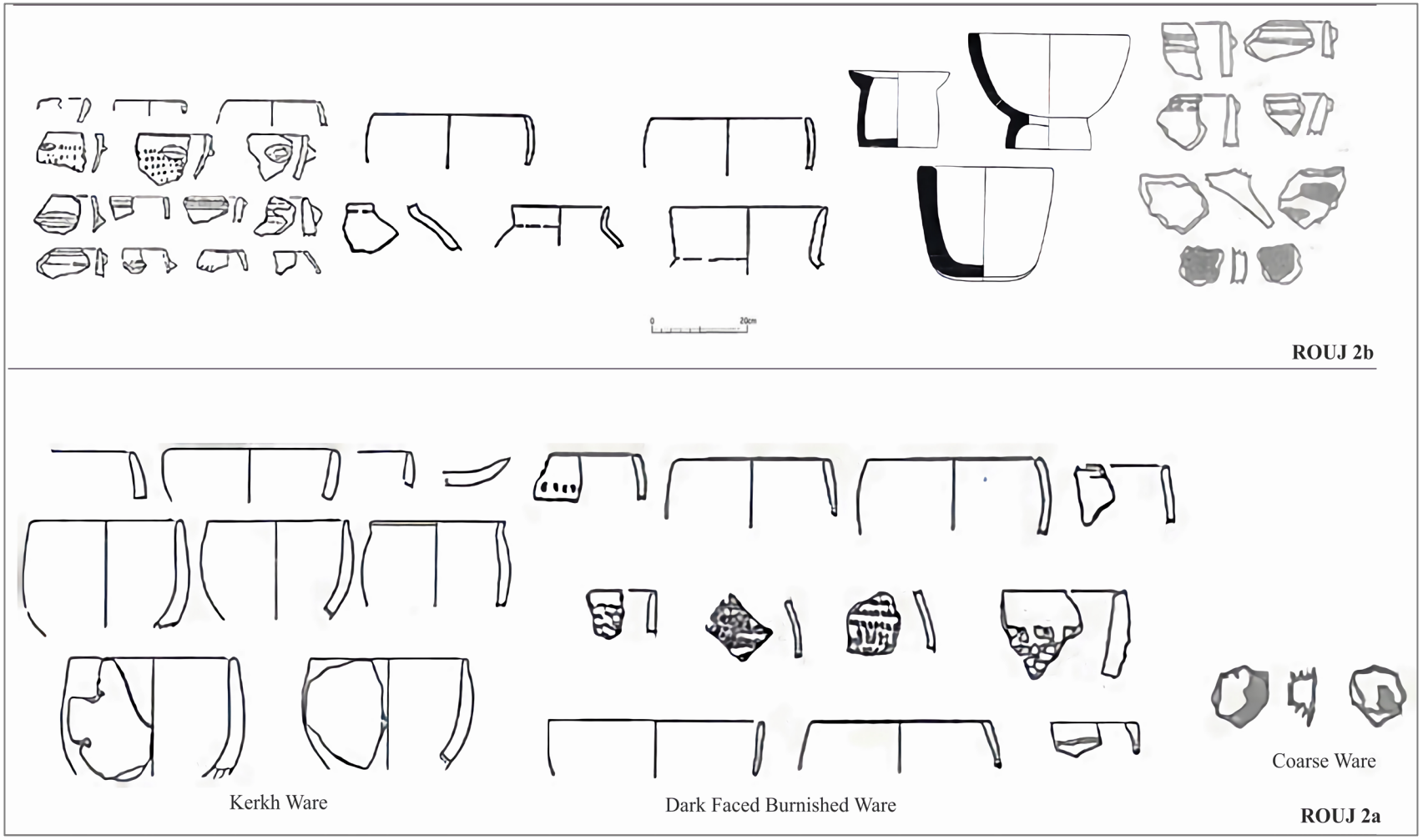

Figure 10 (Continued)

1967 within the scope of Keban Project. The initial salvage survey project of the Lower Euphrates Basin made in 1975 revealed many important data and gave way to the numerous excavations conducted after the 1990's. The sites chosen for this thesis have provided valuable comparative data, especially in regards to technological development. At Akarçay Tepe in southeastern Turkey, the earliest pottery is mineral tempered, mainly with limestone and mica. The assemblage is called Black Series due to the black or gray cores (Arimura et al., 2001, p. 348). The earliest phases from other sites of southeastern Turkey, Salat Camii Yanı and Mezraa Teleilat, likewise contain mineral tempered ware (Özdoğan et al., 2011, p. 51; Miyake, 2008).

3.4.1. Akarçay Tepe

Akarçay Tepe is located in Şanlıurfa Province, on the left bank of the Euphrates, in southeastern Turkey. The mound consists of two small adjoining hills. The size of the mound is 350 meters in the E-W direction and 150m the N-S direction; it rises 2 m above the ground. The site was discovered and surveyed by G. Algaze in 1989. Following a second survey by ODTÜ Taçdam and İstanbul University, excavations started in 1999 by the Şanlıurfa Museum in collaboration with İstanbul University, Tsukuba University, and Barcelona Autonome University. Except for the years 2003-2004, the excavations proceeded until 2005 (Arimura et al., 2001, p. 348).

The excavated portion of the site dates from PPN to PN. The six phases are comprised of PPN (Phases IV-VI), PPN-PN Transitional (Phase III), and PN (Phase 1-2) (Özbaşaran & Duru: 2011, p. 166). The first pottery appeared in phase III (PPN-PN transitional period). The Pottery Neolithic settlement is represented from Phases III to I dated between 7370-6015 cal. BC. The earliest date that corresponds with the PPN settlement is 7940 cal. BC (ibid., p. 167).

The multi-roomed building BA from Phase III is the earliest Pottery Neolithic structure. Two square-planned small rooms were uncovered on the north; a long-

narrow room was found in the middle; two long and narrow rooms were discovered in the east section. Three lines of stones on the west wall and a line of stones in the west that were preserved indicates that the topography of the mound sloped downward in a direction west to east. Although interior floors were not discovered, external floors with pits and post-holes were found on the east and the south of the building. The earliest pottery from the site, termed as Black Series, was exposed from the fill of the external floors. Building BB from Phase III was found in the same area. It has small cell-like rooms and open spaces with pits, fire installations, and post-holes. The open spaces of the building revealed information about the daily activities (Özbaşaran & Duru, 2011, p. 172).

The PN architecture from Phases 1 and 2 includes Building AA and Building F. Building AA has a round plan. The west wall of the building has two buttresses. Two post holes were found on the floor level. Building F is comprised of four rooms. The mudbrick walls of the building were constructed on a stone foundation. The compacted earth floors were assigned only to two of the rooms. An enclosed external space was found adjacent to the western outer wall of the building. It has been defined as a working space and submitted various artefacts (ibid., 2011, p. 173).

Small finds like beads, figurines, limestone objects and stone cups were found in both the PN and PPN periods. Limestone was a commonly used material as is seen in figurine fragments, stamp seals, and pierced objects. Limestone was also a widely-used material for manufacturing cups or containers. 21 fragmentary stone bowls have been recovered from the site. Most of the bowls are made of pinkish buff or pinkish white stone. No decoration is attested except for the example with an incised line decoration under the lip. The exterior and interior surfaces are well polished. The main vessel shapes are bowls and plates. Among the clay objects are figurines representing animals or females, spindle whorls and a token. A common type of piercing bone tool was frequently found along with a spatula, chisels, and polishers (Özbaşaran & Duru, 2011, p. 176-177; Arimura et al., 2000).

Phase III exhibits the earliest pottery examples from the site. The pottery is mineral tempered, mainly with limestone and mica. The fine and compact sandy clay is well

fired. Due to the black or gray cores, the assemblage is called the Black Series (Fig. 11). The surface colors are brownish or grayish; reddish, buff or light brown samples were also present. The exterior and interior surfaces are burnished. The vessel shapes are limited in number. A hemispherical bowl, some small bowls and a few burnished or slipped sherds with vertical incisions were found (Arimura et al., 2001, p. 348).

In Phase II, pottery production underwent a change and introduced a new series called Coarse Ware (Fig. 11). The pottery is heavily chaff-tempered. The surfaces are burnished or smoothed and light in color. The size of the vessels is large and they have thick walls with flat bases. The main vessel shapes are hole-mouth bowls, hemispherical bowls, jars and shallow plates. In Phase II b, new assemblages with mixed temper and fine sandy clay emerged. The sandy clay is compacted and well fired. Some sherds exhibit burnished surfaces (Arimura et al., 2000, p. 239).

Phase I is the latest sequence in which fine wares predominate. Among the fine wares are the slipped, slipped and burnished, washed, painted plain burnished and DFBW. In addition, Coarse Ware was amply present in this phase. Simple coarse ware is thick-walled and chaff tempered. Some mineral tempered and burnished examples were also found. Several forms include shallow bowls with round bases, rounded bowls, hole-mouth bowls, low collared bowls and carinated bowls. Necked jars and big jars with flat bases are included in the assemblage. Incised designs and applied bands were noted as decorative elements. Furthermore, a piece of a husking tray was recovered from a burnt area in trench 20M (Arimura et al., 2000, p. 237, 239).

3.4.2. Mezraa Teleilat

The settlement is located in the province of Şanlıurfa, on the left bank of the Euphrates, in southeastern Turkey and was occupied from the Pre-Pottery Neolithic through the end of Pottery Neolithic. The size of the mound is 450 meters to the N-S

and 160 meters in the E-W direction; it rises 4 meters above the ground. The total area of the site was reported as 7 hectares. The site was discovered by G. Algaze in 1989. Excavations began as a rescue operation that was carried out by İstanbul University and METU-TAÇDAM under the direction of M. Özdoğan between 1999-2004 and later by the Şanlıurfa Museum under the guidance of Necmi Karul (Özdoğan et al., 2011, p. 36; Özdoğan 2011, p. 203).

Five major phases have been found from the mound. They are: Achaemenian/Persian Period (Phase 1A), Neo-Assyrian Period (Phase 1B), Early Iron Age (Phase IC), Pottery Neolithic (Phase II), Transition from PPN to PN (Phase III), Late PPNB (Phase IV), and PPNB (Phase V) (Özdoğan, 2011, p. 206). Regarding the excavation data, the main fill of the mound dates to the Neolithic period, including the PPNB, PPNC and PN stages. There is an exceptional continuity of occupation between the aceramic Neolithic and pottery Neolithic. The remarkable continuity of occupation is further recorded with Phase III being a transitional period and having the dates 7080-6800 cal. BC (Özdoğan, 2009, p. 29). Phase IV dates between BP 9324±59 and BP 8040±55. Phase II dates between the intervals of BP 8360±80 and BP 7595±50 (Özdoğan, 2011, p. 218, 219).

Phase III (PN-PPN Transition Period) is comprised of four structure layers. The architecture consists of hut-like structures with stone paved floors, ovoid pits that served as fire pits, ash pit floored kilns, and post holes. In addition, numerous pits of uncertain function with thick plaster at the sides and burnt sections were discovered. M. Özdoğan indicates that a light colored ashy deposit along with burnt mudbrick and wood fragments demonstrate the use of wattle-and daub architecture (Özdoğan et al., 2011, p. 87-88; Özdoğan, 2011, p. 207-210).

Phase II (Pottery Neolithic) is further divided into Phase IIC (Early Neolithic) and is characterized by corridor houses. Phase IIB (Middle Neolithic) is represented by cellular compounds, and Phase IIA (Late Neolithic) was found with long houses (Özdoğan, 2011, p. 212-214).

The limestone human and phallic figurines dated to the beginning/early part of IIIB Phase was seen by the experts as an innovation for that time period. Most of the pieces have poor artistry as the surfaces have not been properly treated. The human figurines have three subcategories: seated figures, standing figures, and phallic symbols. The PPN-PN transitional levels of Mezraa Teleilat yielded 90 figurines. The imprecise figures exhibit a phallic form but some images appear to have female breasts. The arms of the images project to the front with a stereotyped gesture. Some seated forms also appear. The seated male limestone figurines are represented as leaning backwards. There is a general tendency to shape the heads in some detail. In some instances, the figures are decorated with red paint. The phallic symbols share the same characteristics with the limestone figurines, particularly with the seated figures (Özdoğan, 2011, p. 209; Lesure, 2011, p. 176).

The earliest pottery is identified as Mineral Tempered Ware and Dark Faced Burnished Ware. DFBW first appeared toward the end of Phase III. Although the pottery is rare and includes pieces of technically good quality, it might have been imported from somewhere else (Özdoğan et al., 2011, p. 51). The first type is defined as coarse and mineral tempered ware with thick walls. The second type, on the other hand, has been identified as fine burnished ware with reddish brown surfaces and consists mainly of hole-mouth pots (Özdoğan, 2009, p. 29).

The early "local" pottery seen after the dark wares is of good quality, plant tempered coarse ware. Depending on the nature of the paste and property of the temper, three main groups have been identified (Fig. 11). Ware 1-Plant Tempered Coarse Ware involves the highest ratio of sherds among the overall assemblage. Ware 1 sherds were mainly collected from the first PN levels (II D-II C phases) but became diversified in the II B phase and proceeded through the last PN layers, into the II-A phase. Selected pot-sherds have shown large-cut plant temper, coupled with seeds; limestone and mineral inclusions may be inherent to the clay. The surfaces, whether untreated or wiped, have a thin slip. The subgroups of Ware, namely the 1A-Untreated or Smoothed Ware and the 1B-Probably Slipped Ware, were determined based on the surface treatments. The well-fired pottery with black core has light

surface colors. Both groups have predominantly buff and pinkish/brownish buff surfaces. The group 1 B pots exhibit either a slip-like coating, clayey slip or limy undercoating (Aytek, 2008, p. 161-165).

Ware 2-Plant Tempered Fine Ware, as a later development, was produced by the coiling technique and exhibits a standardized manufacture style. In phase II C, Ware 2 emerged along with Ware 1 and continued into the next phase II B. In Ware 2, the plant temper is smaller in size as opposed to Ware 1. Traces of seed-grain and fine-cut plant temper are visible. In most cases, mineral temper was added to clay in the form of sand, mica and small limestone particles. In general, the cores are black and the pottery well-fired. The vessels are often relatively thick walled. The main surface colors have been distinguished as buff, pinkish buff, and pinkish. Two sub-groups were classified per their surface treatments as 2A Unburnished Fine Ware, and 2B Burnished Fine Ware. All the pieces of group 2A are smoothed and some pieces are covered with a thin clay slip. The pieces from group 2 B show horizontal burnishing on possible clay slip for the exterior surfaces. Interior surfaces are either burnished or smoothed. The vessel walls are thinner by comparison with Ware 1 (ibid., p. 166-168).

Ware 3-Brittle Fabric Ware is coarse and characterized by large-cut plant temper. Most of the pieces are unbaked and probably related to architectural features. Ware 3 is defined as a coarse ware with a brittle paste. The pieces are intensively plant and grit tempered. Altough the assemblage is represented by a few pieces, it is dated to level 2C 2 (ibid., p. 169-170).

The vessel shapes indicate some variety, especially with the development of fine wares. Holemouth pots predominate in the early phase. In later phases, shapes are more standardized; necked jars and bowls occur. Over the course of time, the edge thicknesses were reduced and unevenly formed lips were smoothed. Decoration was found in the form of a band relief across the rim. In some cases, coarse, thick lugs attached (ibid., p. 181-182).

In the same early PN phase, "sandy wares" became evident apart from the plant tempered wares. Both groups have much in common regarding production technique and shapes. They also share the same development process. Coarse and fine ware distinctions are recorded for both groups, but the relation between them is not very definite. However, plant tempered pottery was more dominant than the sandy ware in all stages. As sandy ware has the same technological characteristics as plant tempered ware, it is claimed that they both were locally produced (Aytek, 2010, p. 290).

Combed and Impressed Ware was found in the succeeding level IIA-3b (Fig. 11). Most of the pottery is recorded as unburnished ware with light-colored fabric. Plant inclusions were commonly used as temper. Along with small bowls, jars with spherical bodies dominated the shape repertoire. The most common decoration was "impresso," followed by combed wavy lines, incised patterns, and "rocker" decoration formed by a comb-like tool to create miscellaneous patterns. Some fine wares from the same phase tempered with grit were also found. Light surface colors include dirty yellowish white and pinkish dirty white. The decoration is occasional. Wavy lines, crescents, and small knobs were applied to the bodies of the vessels. The pottery assemblage of level II A 3 a is attested as being transitional among the impressed ware and red slip ware. Plain vessels tempered with plant inclusions were found. The surfaces have been wiped, but no other surface treatment is confirmed. Hemispherical bowls and spherical jars are common shapes. The bowls with straight rims exhibit a thick red slip on the rim. In some of these pieces impressed or incised decoration was applied on the bodies (Karul et al., 2001, p. 170).

The predominant types of pottery vessels found in level II A 2a were S-shaped bowls and jars with straight necks that belong to the Red Painted Ware. Inner sections of the open pots were usually covered with a thick red slip. The decoration found was in the form of geometric designs. Some of the pieces have red paint on the cream slip or the reverse variation. Husking trays and some sherds in the DFBW fashion also began to emerge in the same phase. Smeared Red Slip Ware from level II A 2b

shows no divergence from the red painted ware, except for the application of slip. The red clay slip shows a wavy aspect due to smearing (ibid., p. 169).

3.4. 3. Salat Camii Yanı

Salat Camii Yanı in Southeastern Turkey is located approximately 20 km east of Bismil, on the banks of the Salat Stream, a tributary of the Tigris River. A large portion of the mound was removed and destroyed due to continuous earthmoving and construction activities. The section where the material was most concentrated was around the island-like elevations and the formations between such elevations. This fact indicates that the center of the mound was located at this section. The settlement was first discovered during the surface survey by Guillermo Algaze and identified as being from the Pottery Neolithic Period. Under the scope of the Salvage Project of the Archaeological Heritage of the Ilısu and Carchemish Dam Reservoirs, implemented under the coordination of METU TAÇDAM, this settlement was explored again during the Salat Cami Yanı and Bismil Sub Zone Surface Survey conducted in 2003. The team was under the management of Y. Miyake. In 2004, the same team initiated the excavation campaign. The Salat Camii Yanı excavations were completely terminated after the campaign that lasted until 2009. The settlement extends over approximately 220 m x 130 m, and it is 1-1.5 m higher than the surrounding fields (Miyake, 2005, p. 2-3; Miyake, 2009, p. 101).

A total of three phases and 12 layers from the Neolithic were identified at the zone starting immediately beneath the topsoil down to bedrock. Based on the retrieved materials, the stratification of the Pottery Neolithic layers from top to bottom is as follows: Neolithic-Phase 3 (Layer 1 and Layer 2); Neolithic-Phase 2 (Layers 3-7), and Neolithic- Phase 1 (Layers 8-12). According to the calibrated dates, the first two phases of the settlement date to the second half of 7000 B.C. The date from 12 radiocarbon samples collected from phases 1 and 2 of the settlement concentrate around 6400-6200 B.C. Phase 3, on the other hand, dated according to the pottery

assemblage, and coincides with the Proto-Hassuna Period (Miyake, 2007a, p. 284, 288; Miyake, 2009, p. 104).

No architectural remains from Phase 3 have yet been found (Miyake, 2007a, p. 287). Rectangular shaped pisé walled structures, and oval-shaped hearths in the space between these structures have been discovered in Phase 2. In the same phase, fire pits and storage pits have also been revealed. The rectangular shaped pisé-walled structure from Phase 2 was constructed directly on the soil without any rubble foundation and was partitioned into several rooms through partition walls. Six hearths were recovered from the same spot. They were in use over a long period of time as evident from the traces of renewal (Miyake, 2009, p. 105-106).

In Phase 1, there is a stone pavement that extends onto a wide area partially on the bedrock and partially on the fills. It is remarkable that an abundant number of animal bones were discovered immediately above, or between the pebbles of, the pavement. The pavement itself was mostly composed of large pebbles. Three more stone pavements were also discovered at the top levels of the lowermost stone pavement, although not-so-well preserved as the former features (Miyake, 2007b, p. 38).

Animal figurines represent the largest group amongst the small finds. The horned figurines may represent sheep, goats or cattle. Clay beads and bracelets were also among the finds. Bone tools, including "bız" and spatulas, are not so frequent. Stone finds include beads of various shapes, spindle whorls, stone vessels and flat axes. In 2008, a bead of natural copper was detected for the first time. This bead was shaped into a ring by hammering the natural copper raw material into a small plate and then curling it into a ring shape. The end of the copper plate was distinctly apparent. In addition to the malachite pieces retrieved earlier, this bead is of paramount importance in order to demonstrate the existence of copper processing activities (Miyake, 2007b, p. 41; Miyake, 2008, p. 215).

The pottery from Phase 3 is similar to the early traditions. However, there are ample differences since new forms emerged. The fine ware groups from this phase correlate with the Proto-Hassuna assemblage. The predominant ware is plant tempered and

defined as coarse ware similar to the sherds belonging to Phase 2. However, new shapes like carinated bowls, ogee-pots, and husking trays were detected in Phase 3. Decoration is observed for the first time that found in the form of applied decoration including human figures and wavy lines. Three new groups were also observed in phase 3. These were: dark coloured burnished ware, red washed ware, and painted pottery. The surfaces are either burnished or smoothed. The geometric designs are comprised of chevrons and zigzag lines. Dark coloured burnished ware is mineral tempered and well fired. The exterior and interior surfaces are burnished. Red washed ware is highly vegetal tempered but the ware also includes mineral temper. The vessel walls are thin and the surfaces are washed. Carinated profiles are observed in the last two wares discussed above (Miyake, 2011, p. 132-133).

Plant-tempered pieces represent the majority of the pottery assemblage in Phase 2 (Fig. 11). Mineral tempered pottery is scarce and was only recovered from the lower layers. The plant tempered pottery has thick walls and the cores are black. The light surface colors range from reddish brown to buff. The surfaces are generally smoothed. The vessel forms consist of hemispherical bowls, shallow bowls, and carinated bowls. Hole-mouth jars and pots with concave necks were also recovered from this phase. Pots with horizontal handles placed beside the mouth that were found in Phase 1 continued to be observed in Phase 2. No decorational pieces have been found in this phase (Miyake, 2007b, p. 40; Miyake, 2005, p. 4; Miyake, 2009, p. 102).

In Phase 1, the earliest phase of the Pottery Neolithic, the pottery contains abundant mineral inclusions with burnished surfaces constitutes the most frequent group of finds (Fig. 11). The surface colors range from black to buff. Hole-mouth jars and pots with concave necks were more frequently detected along with the limited hemispherical bowls. Bases are usually thick and flat. One of the most significant features is horizontally elongated handles placed beside the rims. No decorated pieces were encountered (Miyake, 2009, p. 102; Miyake, 2007a, p. 285; Miyake 2007b, p. 39).

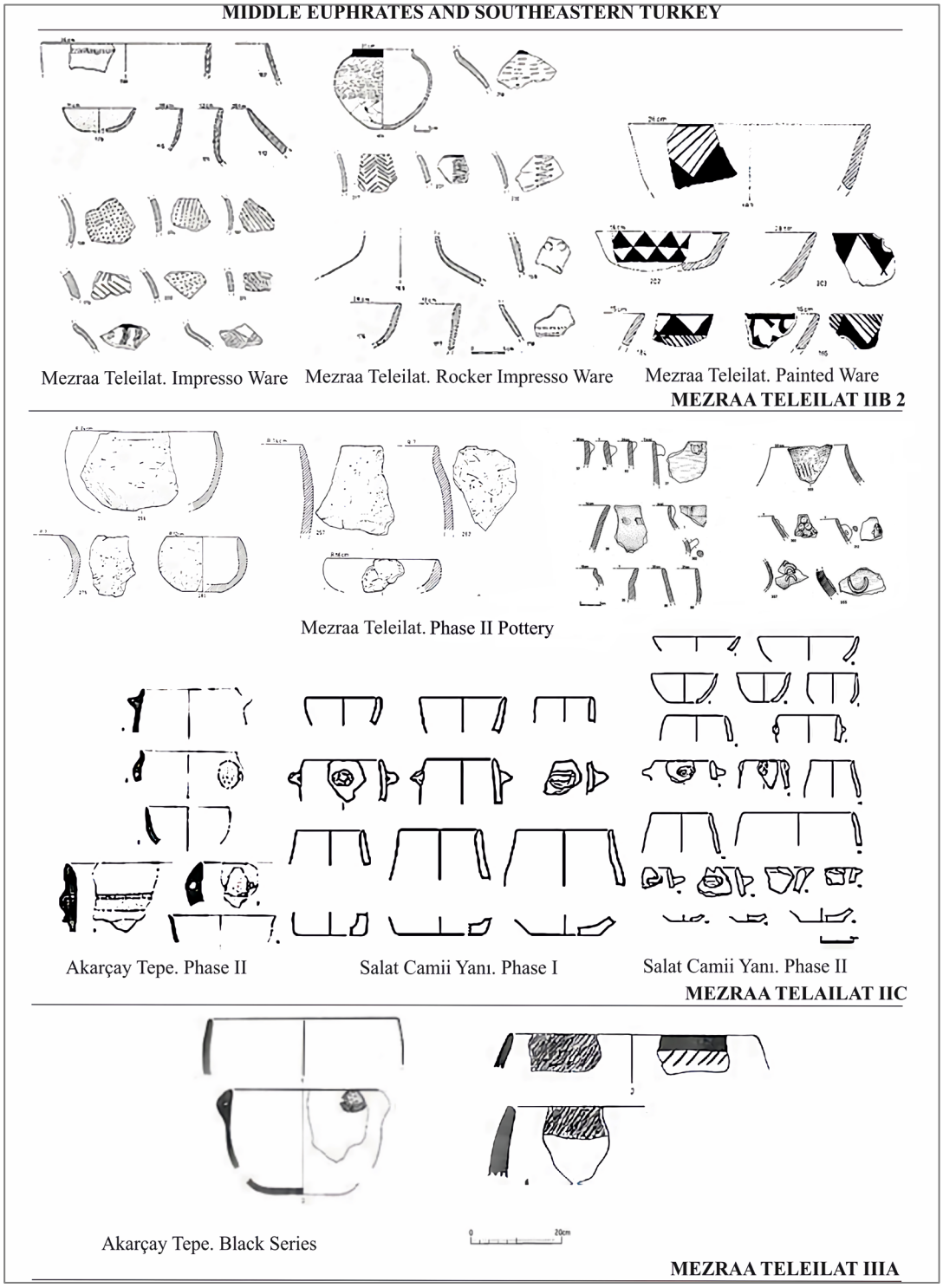

Figure 11. Pottery of Mezraa Teleilat IIB2-IIIA Periods, Mezraa Teleilat, Akarçay Tepe, Salat Camii Yanı (Arimura, 2000: Figs. 9-10; Özdoğan, 2009: Figs. 1-2, 1-3; Aytek, 2006: Plts. 28-32).

3.5. Upper Khabur Region and Northern Iraq

The Upper Khabur region in northeastern Syria is located south of the Anti-Taurus Mountains. Various wadis of the region drain into the Wadi-el-Radd that is the main tributary of the Khabur. Evidence retrieved from recent excavations has made it possible to determine that the pottery predates the Proto-Hassuna assemblages. Excavations at Tell Seker al-Aheimar have revealed that the Umm Dabaghiyah-Sotto-culture does not represent the oldest Pottery Neolithic of northern Mesopotamia (Nishiaki & Le Mière, 2005, p. 55). Early Dark Ware of the site is tempered with volcanic minerals but rarely with limestone. The second class from the earliest deposits is also tempered with volcanic minerals, mainly with basalt (ibid., 61, 64).

Proto-Hassuna wares in Northern Iraq reflect a relatively advanced stage of pottery production. Technological comparisons have been carried out by Stuart Campbell on Proto-Hassuna pottery from the sites of Ginnig, YarimTepe 1, Kültepe, Tell Hassuna, and Telul eth-Thalathat, Tell Kashkashok, Tell Sotto and Umm Dabaghiyah. In spite of variations, the occurrence of parameters with the same value point to the group being a single assemblage. The parameters are the presence of light colored coarse "ogee" jars, husking trays and use of applied and painted decoration. The majority of the assemblage is comprised of coarse wares. A small number of sherds were recorded as fine ware and possibly imported red and black polished wares. Open platters and hemispherical bowls still dominate as vessel shapes. New shapes, specifically the "ogee" jar, begin to make their rare appearance. Applied decoration suggests symbolic meanings. Horn-like motifs, moon or eye-brow like crescents, single or paired knobs, and human and animal figures appear. Painted decoration in the form of a simple rim band is mostly found on finer vessels. The color varies from red to brown (Campbell, 1992, p. 29-33).

3.5.1. Tell Seker al-Aheimar

Tell Seker al-Aheimar is one of the largest Neolithic mounds in northeast Syria. The mound is located on the right bank of the Upper Khabur and covers an area of approximately 300 m by 150 m. The site was first noted in a French-Japanese survey and then excavated by the University of Tokyo between 2000 and 2005 under the direction of Y. Nishiaki. The transition from the late PPNB to the early Pottery Neolithic is continuous with the calibrated dates of the early 7th-millennium cal. BC (Nishiaki, 2016, p. 71). Sector A with 11 occupation levels provides evidence about the earliest pottery. Levels 4 to 6 have been assigned to Proto Hassuna while levels 7 to 15 are labelled Pre-Proto Hassuna. Pre-Proto Hassuna levels in sector A have been dated to 7880+/- 80 and 7750+/- 80 BP (Nishiaki & Le Mière, 2005, p. 63).

Based on the archaeological evidence, three PPNB and two Pottery Neolithic phases have been defined. Small rectangular buildings built on a cobbled platform and rectangular pit-ovens were recovered from the earliest PPNB phase. The rooms are parallel to each other with the floors made of packed mud. In the next PPNB phase, the multi-roomed rectangular buildings were larger. Stone sockles and gypsum plastering became popular. Ovens were built in oval fashion. The latest PPNB phase was represented by rectangular buildings with large rooms and mud plastered floors. In this phase, the walls became narrower and the use of stone sockles for the walls became rare. The construction of "large room" buildings continued, but the "cell plan" buildings were not observed. Large platforms built with mud slabs were used as a foundation for buildings. Gypsum was used for floor plastering. Benches, niches, and water channels were also lined with gypsum. The Proto-Hassuna buildings represented by the narrow pisé walls were built directly on the ground. The floors of the small rectangular rooms were thinly plastered with gypsum (ibid., p. 57).

The small finds from the PPNB and Pre-Proto-Hassuna phases included stone vessels, stone ornaments, and white ware, figurines, and bone tools, objects made of

gypsum and ground stones. The gypsum objects with animal jaws in parallel lines had a special interest (ibid., p. 59).

The earliest pottery is from the Pre-Proto Hassuna phase and is mineral tempered. The first type "Early Dark Ware" is mainly tempered with volcanic minerals and sometimes with limestone (Fig. 12). The pastes present variable mineral inclusions relative to type, size, and quantity. The simple shapes primarily consist of closed and holemouth pots along with convex bodies and large flat bottoms. Dark surfaces are black or grey and strongly burnished. The assemblage is plain and not decorated (ibid., p. 61).

Basalt Tempered Ware as the second class is also tempered with volcanic minerals, mainly with basalt (Fig. 12). The sizes of the inclusions are large and compacted; therefore the pottery is heavy. The principal surface colors range from dark beige to dark brown, but reddish brown examples is also present. The shapes display a variance similar to the "Early Dark Ware" with the exception of concave bodies and some forms of lugs. No decoration was observed in the earliest levels; painted decoration rarely emerges at later stages. In Level 8, the first ware type disappeared and the second class became sparse. Thus, plant and basalt tempered pottery came into use. In this later stage, the pottery was usually tempered with basalt accompanied by plant tempering. The sizes of the plant inclusions are significant but low in quantity. The shapes recall the previous mineral wares but with more elaboration. The surfaces are burnished and not decorated. Through the later stages, painted decoration appears (ibid., p. 62).

3.5.2. Ginnig

Ginnig is located in the North Jazira of Iraq and was excavated over four weeks between late 1987 and early 1988. The excavations were carried out by Edinburgh University under the direction of S. Campbell. The uppermost level of the site was

subjected to a rescue excavation. The site covers an area of 80-100 m in diameter. Based on the ceramic assemblage, the site was dated to the very early PN period (Campbell & Baird, 1990, p. 65, 76).

The ground stone tools and chipped stone industry show close parallels to Aceramic Neolithic sites (Campbell, 1992, p. 30). One building exposed on the top layer appeared to have been built with coursed mud (*tauf*). The irregularity of the building indicated an agglutinative plan. The floors were plastered with mud and usually had two different levels. 313 pottery sherds were recovered from the collapsed *tauf* deposits and the lower floor of one of the rooms of the building (Campbell & Baird, 1990, p. 66-67, 69). Most of the pottery sherds were undiagnostic. The coarse pottery is vegetal tempered, solely with chaff. The mineral inclusions were coherent to the clay fabric. The thicknesses of the sherds varied between 8-15 mm. The surfaces have been roughly smoothed. Open bowls with rounded rims were noted as a common type. Closed bowl shapes were missing in the assemblage. A single body sherd was similar to the "ogee" pot type known from Proto-Hassuna sites. All the bases found were flat. The sherds were lacking in any sign of decoration or finer forms (Campbell & Baird 1990: 70).

3.5.3. Yarim Tepe 1

Yarim Tepe 1 is located on the Sinjar Plain of Northern Iraq. The mound was in a cluster of six different mounds situated along the Wadi Ibra (Yarim Tepe I-VI). The site was excavated by a Soviet archaeological expedition under the direction of N. Y. Merpert and R.M. Munchaev between 1969 and 1980. Due to the effects of plowing, Yarim Tepe 1 was reduced to an area of 100-120 m in diameter. Cultural layer deposits were over 6 m deep in the center of the mound. The occupation of the mound was firmly dated to Hassuna with an uncalibrated date of ca. 5600 BC. Twelve building levels were identified from the top to the bottom layer. Levels 12-8 corresponded to archaic Hassuna. Level 7 is attested as a transitional level between

archaic and standard Hassuna. Levels 6-1 showed some Samarra elements but were dated to standard Hassuna (Matthews, 2000, p. 64).

The occupation in level 12 contained three building complexes and subsidiary structures. The multi-roomed buildings consist of three to five small rectangular rooms. The walls were made of tauf with a 35 cm thickness. Some ovens, platforms, structures containing burials were found that related to the rooms. In level 11, three building complexes along with circular structures were found. The sizes of these rooms were larger and the buildings contained more rooms. The walls were coated with plaster (Merpert & Munchaev, 1993, p. 95).

The rectilinear structures of level 10 revealed a more complicated plan. They were accompanied with ovens and grain-drying platforms. The number of the rooms in the three building complexes increased in level 9. One of the complexes contained nine rooms, three-grain-drying platforms and an open yard area with ovens. The other two complexes also contained ovens and platforms. In level 8 a new layout was established. One of the building complexes was formed by a large single room with several open yards. Level 7, as the latest lower level, exhibited an irregular plan and a new layout. The building complexes were separated from each other either with open yards or passages (ibid., p. 98-99).

In level 6, a building complex comprised of living rooms, domestic quarters and a cellular structure with several compartments was discovered. A vaulted oven was found inside one of the rooms. Another large complex from the same level consisted of several rooms interconnected by doorways. One of the rooms was identified as a kitchen. A well-preserved oven was located inside the room (ibid., p. 81).

The architectural layout of level 5 presented twelve large, multi-roomed buildings. The long axes of the buildings run parallel and are separated by open spaces. The passages and open courts between the buildings are plastered with gypsum. Each domestic building features an oven in a separate room. Also found was a mortar and smaller chambers, the latter possibly used for storage facilities. One building, separated from the living quarters, contained fourteen rooms and was interpreted as a

storehouse (Merpert & Munchaev, 1993, p. 79-80). Thirteen large domed kilns were found in level 4. Kiln wasters were excavated in the same area indicating an industrial purpose. Levels 3 to 1 contained rectangular structures with several rooms. Ovens were found inside the rooms and also in the open yards. The open spaces between the rooms were plastered with gypsum (ibid., p. 75, 77).

Artifact evidence from Yarim Tepe 1 has revealed turquoise, rock crystal, obsidian, sea shells, and copper. The obsidian objects were finished tools. The obsidian indicates eastern Anatolia as the source. Chipped stone was not commonly found. The flint objects were mainly cores, blades, and debitage. The items made of clay included spindle whorls, sling bullets, and clay figurines. Thirty-eight pieces of clay female figurines included pieces decorated with incised bands, painting and relief. A large number of beads made either of stone, bone or shell were recovered. Ten fragments of marble or alabaster bowls and jars, as well as seven palettes, were also found within the lower levels (Merpert & Munchaev, 1993, p. 91, 111-112; Merpert & Munchaev, 1987, p. 17, 19).

The pottery was grouped into archaic and standard groups (Fig. 12). The pottery from levels 12 to 8 was the archaic Hassuna type. Standard Hassuna ware was apparent between levels 7 and 1 (Matthews, 2000, p. 66). The early levels produced 3341 pottery sherds. The early assemblages have been divided into five types based on their technological and morphological characteristics (Bashilov, Bolshakov, & Kouza, 1980, p. 50). Type I consists of coarse storage vessels. The sherds are organic tempered. The main vessel shapes are large jars and medium-sized vessels either with a cylindrical neck or with a low neck and a rounded body with a flat base. Decoration has rarely been found in the form of applied decoration. Type 1 sherds were mainly collected from levels 10-12 (Merpert & Munchaev, 1993, p. 105).

Type II is coarse ware. The surfaces are dark and treated with a thin slip. Rounded jars were noted as the main forms. Applied, painted and incised decoration was also noted. Type II vessels were common in all the early levels, especially from levels 12 to 8 (ibid., p. 105).

Type III includes both coarse and finer wares. Dark surfaces were sometimes treated with a thin slip. Open cups and bowls were the main forms. The archaic painting patterns were transformed into more complex geometrical forms between levels 7 to 12 (ibid., p. 105).

Type IV consists of tall pots of coarse or fine quality. Medium size bowls and simple cups are the principal shapes. Painted decoration shows eighteen variations. Applied decoration was also found along with the incised decoration. Type III was observed in all the early levels. Incision became a common decoration treatment in Level 7. Husking trays represent type V. Subgroups of the husking trays have revealed a cellular pattern from levels 10-12 and "ribbing" from the subsequent levels (ibid., p. 109).

3.5.4. Tell Hassuna

The mound located to the south of Mosul was excavated between 1943 and 1944 under the direction of S. Lloyd and F. Safar from the Iraqi Directorate General of Antiquities. The settlement covered an area about 200 x 150 m. (Lloyd et al., 1945, p. 259). Fifteen levels were uncovered including levels I-VI associated with the Hassuna range. Level 1a is attested as proto-Hassuna while Level 1b dated to Hassuna. Samarra pottery appeared in level III and was observed in the subsequent levels. Halaf and Ubaid periods appeared in levels VII-XV. One reliable radiocarbon date from level V indicated a date range of 5090-+200 BC (ibid., 261-263).

Hassuna Archaic level Ia was represented only by hearths identified with an ashy layer and woven reed matting. A single room with a pisé wall was excavated in level Ib. This wall had been renewed with additions in level 1c. Multi-roomed rectilinear buildings emerged in level Ic. The walls of the pisé building had thicknesses of 20 to 45 cm. In level Ic, a circular building with a diameter of 5 m was also recovered. Ovens and wood ash were found in the compartments dividing the structure. Two

main groups of domestic rooms accompanied the courtyards in level II. A large multi-roomed house inside the courtyard area and plastered grain bins were recovered in level III. Two well-preserved, multi-roomed houses in level IV covered a large area. The adobe walls of the buildings were about 45 cm thick. The roofs of the houses were flat. Some of the rooms have pavement on the floors. The pavement was made out of a clay and straw mixture. Two groups of dwellings were found in level V. One of the dwellings was a large house with a courtyard and bins. In level VI, only a small oval kiln was exposed (ibid., p. 271-275).

The small finds included clay items, beads, amulets, bone awls, and spatulas. Sling balls, spindle whorls, and female figurines constituted the clay items.

The pottery assemblage identified was the Hassuna-type ceramic tradition was found in central and northern Mesopotamia (Fig. 12). Level Ia mainly constituted straw tempered coarse ware. Some decorative elements were noted in the forms of applied crescents, blobs and nipple spouts. In the earliest levels leading up to and including levels Ib and Ic not many burnished wares were found and (also) in Ib and Ic coarse ware occurred less frequently. Archaic and standard Hassuna wares developed new shapes. Among these were the so-called milk jars and lug-handled, large pots. In level Ib, jars and bowls with incised designs were recorded. The archaic painted ware show red paint on burnished surfaces. Standard wares with a variety of painting colors became dominant in level II. Husking trays also appeared in the same level (Lloyd et al., 1945).

3.5.5. Umm Dabaghiyah

Umm Dabaghiyah is located in the Jazira in northern Iraq. The area commences ca. 20 km west of Hatra and comprises a large area that runs south and west. Within the eastern boundary of the area, four mounds are located. The largest of these mounds was excavated under the direction of D. Kirkbride between 1971 and 1974. The

settlement measures 100 by 85 meters with a depth of ca. 4 m. Four levels of occupation were excavated at the site (Kirkbride, 1972, p. 5). Due to the absence of radiocarbon dating, the site has been estimated to date around 6000 BC (Matthews, 2000, p. 58).

The uppermost layer, level 1, is eroded and was damaged by plowing. Circular plaster basins and hearths were recovered from this level, but no buildings have been attested to the level 1 occupation. Fine stone vessels and some pottery were left in situ on the floors (Kirkbride, 1972, p. 4, 7; Kirkbride, 1975, p. 4).

In level II, a mudbrick, paved courtyard and storage blocks across this central space were excavated. The pavement measures 15 x 12 meters and was made of vegetal, tempered clay slabs. On the south side of the central area a long enclosure wall was found. Another wall built parallel to the enclosure wall remained in use at all the levels. The multi-roomed house located beside the storage blocks contained hearths, ovens, kilns and storage bins. The domestic houses were plastered with gypsum. Among the storage rooms, a cell was identified as an arsenal because it contained 2400 clay sling balls (Kirkbride, 1972, p. 4; Kirkbride, 1973, p. 208-209).

In level III, domestic houses, courtyards, kilns and storage bins located around the west of an open central area were recorded. Two blocks of storage rooms lined the rest of the central space. The block on the northern side measures 25 m and is composed of small rooms. The L-shaped block on the south measures 30 m long and includes a narrow passage between the two lines of rooms. Cross walls or interior buttresses appear at regular intervals in both blocks. The excavated portion of the buildings is comprised of 70 rooms and a "tower-like" projection on the exterior (Kirkbride, 1973, p. 206-207).

In level IV, the architectural layout differs from the succeeding levels. The site is comprised of fragmentary remains of small rectangular structures that were rebuilt multiple times. After a period of abandonment, in between level IV and level III, domestic houses were constructed throughout the SW boundary of the village (Kirkbride, 1975, p. 4-5).

The small finds repertoire is comprised of stone vessel fragments, bone tools, gypsum objects, and figurines. The bone tools are mainly awls, spatulae, and points. Among the gypsum objects are grinders, mortars, spindle whorls, pot lids, basket linings, and figurines. Basalt axe heads and stone beads were also recorded. Three female figurines were recovered from different houses below phase 5 in Level II (Kirkbride, 1972, p. 8).

Pottery was found in all levels at Umm Dabaghiyah (Fig. 12). Coarse Ware dominated in all the levels, though the pottery from the earliest levels represented a better quality. Coarse ware was generally tempered with chaff and straw. In some instances, grit was added to the clay. The lightly fired pottery usually has a grey or black core. Most of the vessels were manufactured by the coiling technique. The exterior surfaces of the vessels were smoothed. Cream or whitish slip was used on the surfaces of the medium and finer wares. High-sided bowls, double-ogee jars remained the basic shapes. Husking trays and miniature vessels were also recorded. A majority of the vessels are undecorated (ibid., p. 8). Decorated vessels exhibit burnishing, painting, incision and applied decoration. The finely burnished sherds recovered from the lowest levels are well fired and finely burnished. In some cases, burnished sherds are grit tempered. Besides the pinkish brown sherds, grey and black burnished wares were present (ibid., p. 9).

Painted Ware mainly decorated with red ochre and displayed on a cream slip was also discovered. Half of the painted sherds had bands along their rims in all levels. The most common designs consist of dots, circles, commas, and ticks. In the earliest levels, red painted triangles form a pendant alternating with cream triangles across the rim. Chevron designs between thick vertical lines appear in earlier levels and proceed to the upper levels. Applied decoration, observed at all levels, is in the form of modeled designs, knobs and handles. Human eyes, ram's heads, snakes, and crescents were among the popular designs. Two large vessels contained partial human figures. Incised decoration is rare and was established in the later phase. The simple designs consist of crosses (ibid., p. 10).

3.5.6. Tell Sotto

The mound of Tell Sotto is located on the Sinjar Plain of Northern Iraq, 2 km west of Yarim Tepe. The mound was found by V.A. Bashilov and V.I. Gulaev in 1971 and excavated under the direction of N.O. Bader in three field seasons (1971, 1973, and 1974). The mound rises 2.5 m above the ground with a depth of 3.80 m. Seven occupation levels relating to four periods have been confirmed for the settlement (Bader, 1993a, p. 41-43). In spite of the absence of radiocarbon dates, the site is believed to date to around 6000 BC (ibid., p. 45).

The uppermost occupation of the site was heavily damaged due to plowing. The topmost layer of Period 1 contained wall fragments, plastered floors, and ash layers. In Period 2, at the base of the clay layers, a thick plaster layer was identified as Level 3. The excavated portion of Period 2 revealed a small rectangular room and its associated plaster floor. Also, remnants of a partly disturbed wall, measuring 4 m, were excavated in the same square. Period 3, represented by Levels 4-6, had an industrial character. The architectural remains were comprised of ovens, hearths, round storage pits and ash pits. The sector was believed to have been modified several times due to the presense charcoal deposits. The lowest cultural layer, Level 7-Period 4, was identified by a well-preserved, rectangular multi-roomed house with a long corridor running between the rooms (ibid., p. 43-45).

The small finds from the site mostly were recovered from the lowest level. Among the finds were stone vessels, bracelets, and beads. Also, a pendant in the form of a ram, two clay female figurines, and zoomorphic figurines were recorded. Bone tools recorded included awls, stone axes, needles, polishers, clay sling balls and spindles (ibid., p. 45).

Throughout the periods, the pottery is organic tempered (Fig. 12). Standard Hassuna pottery characterized Period 1. The sherds with an incised decoration were similar to the specimens found in the upper levels of Yarim Tepe 1. Hassuna pottery continued to be found in Period 2. The round-rimmed vessels and burnished pottery dominated

the Period 3 assemblage. Ochre was detected in the burnished vessels. Also, imported sherds have been discovered in this period. The surfaces of these sherds exhibit a dark cherry color and burnishing. The sherds have been tempered with shell. In the lowest level, Period 4, large cooking vessels, chalices, oval tubs and rectangular vessels were recorded. Burnished pottery with ochre painting was also observed at this level (ibid., p. 45).

3.5.7. Kültepe

Kültepe (ash mound) consists of two mounds and is located on the Sinjar Plain of Northern Iraq, 6 km west of Yarim Tepe. The site was found during the survey conducted by the Soviet Archaeological expedition. Between the years 1975 and 1976, the settlement was excavated by N.O. Bader. One of the mounds, namely Kültepe II, was eroded by the Wadi Sharai and not excavated. The other mound, Kültepe 1, located 100 m from the wadi was subjected to excavation. Kültepe 1 covers an area of 60 x 80 m and rises about 2-2.5 m above the ground. The settlement did not provide any radiocarbon dates. The material from the lowest level is similar to material from Sotto and Umm Dabaghiyah while the upper three levels have been related to archaic Hassuna culture (Bader, 1993b, p. 55-56).

Four cultural levels were delineated at the site. The uppermost level 4 contained a 1 m thick layer of fragmentary rectangular structures. In level 3, rectangular structures with plaster floors were found. Level 2 contained circular ovens and a thick ashy layer associated with the fire installations. A large residential complex and related storage units were recovered from Level 1. Regularly aligned rectilinear structures with pise walls measured 2.5 x 5.5 m. The walls and the floor are mud-plastered. Internal walls divide the building into three equal spaces. The area situated to the right of the entrance is devoted to the storage facilities. The floors and walls of the easternmost subdivision of the building are also mud-plastered (ibid., 56-57).

All the small finds were collected from the lowest level 1. Two marble vessels, a deep bowl and a spherical vessel, were recovered from a secure context. Among the other finds, clay spindle whorls, bone awls and needles were documented. Stone items included a bead, a bracelet, a palette, pestles, grinding stones, and a fragment of an alabaster vessel (ibid., p. 59).

Undecorated and coarse cooking vessels characterized the lowest level (Fig. 12). Coarse pottery sometimes involved molded decoration. Rarely, organic tempered and thin-walled pottery was inventoried from the same level. The surfaces of this type are burnished and sometimes painted. The clay is well levigated, but due to the low firing temperature, the sherds are friable. Painted decoration was observed in the form of a red band across the rim. In some cases, the vessel was covered with ochre. The pottery assemblage of level 1 relate to specimens discovered from Tell Sotto's Period 4. Throughout Levels 2-4, the pottery reflected the archaic Hassuna culture. The vessels transformed from carinated profiles into spherical forms with narrow necks and vertical rims. The decoration found on the vessels was also become more complex (ibid., p. 58-59).

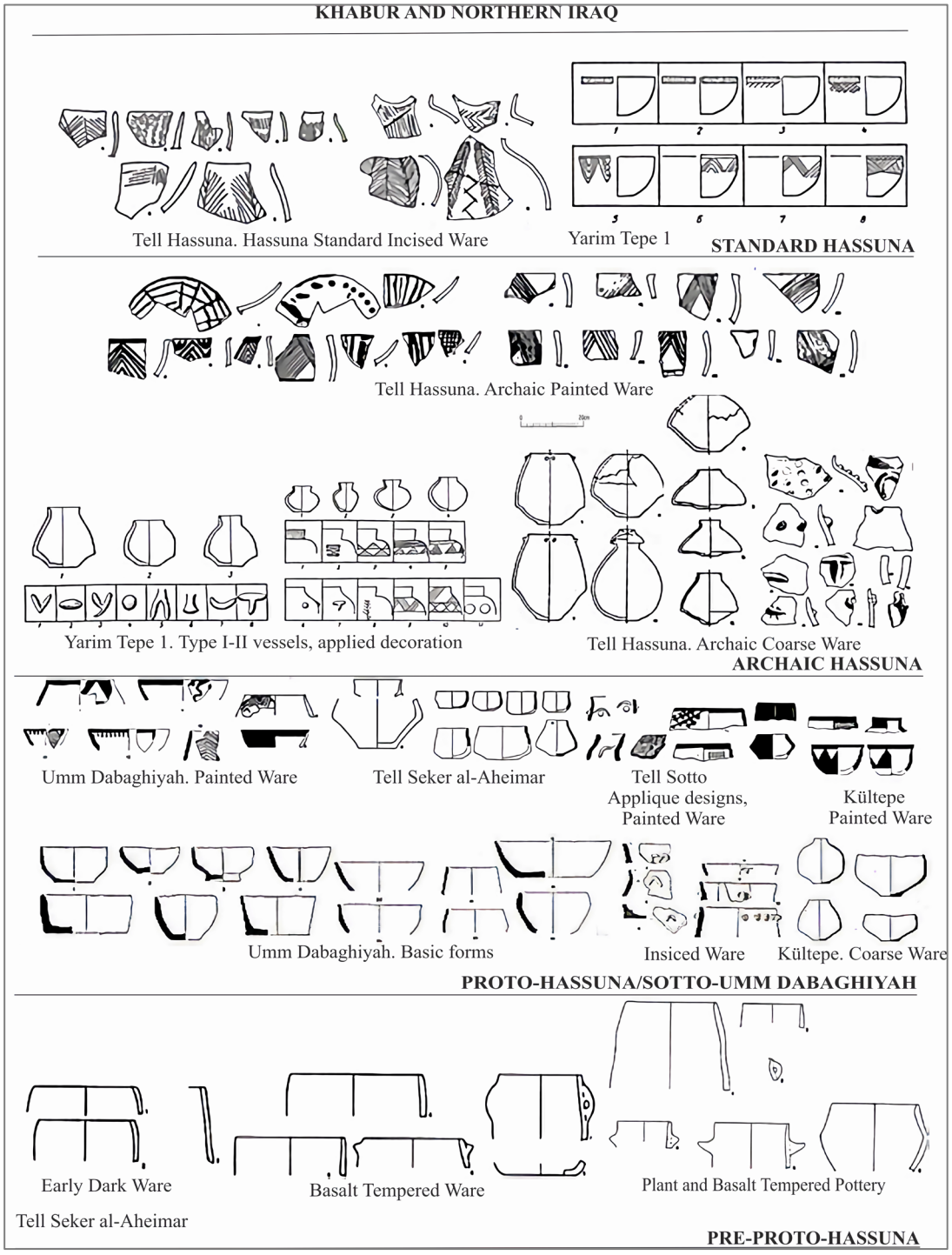

Figure 12. Pottery from Standard Hassuna-Pre-Proto Hassuna Periods (Nishiaki & Le Mière, 2005: Figs. 9-10, Merpert & Munchaev, 1993: Fig. 6.18: a-d, 6.20; Lloyd et al., 1945: Fig.6-8, 10; Kirkbride, 1971: Plts. X-XI, XIII; Bader, 1993a: Figs. 3.5.-3.9; Bader, 1993b: Figs. 4.3. 4.4)

3.6. Central Turkey

The Anatolian Neolithic produced various sites in Central Anatolia dated between the years ca. 8500-5500 BC. The Neolithic of Central Anatolia has often been evaluated as the intermediate region between the Fertile Crescent and Europe. However, ongoing research projects in Central Anatolia reveal that the early neolithisation in this region is distinct and differs from that of the Levant in fundamental aspects (Başgelen & Özdoğan, 1999; Düring & Marciniak, 2006). The site of Çatalhöyük in Central Anatolia is addressed in this chapter with reference to the diversified use of clay within the settlement.

3.6.1. Çatalhöyük

Founded on the banks of the Çarşamba Stream that irrigates the Çumra Plain in Central Turkey, Çatalhöyük is located southeast of the modern city of Konya. Two mounds are located side by side, one to the east and one to the west. Çatalhöyük is a large mound with the size of 450x275 m. Çatalhöyük East is 13.5 ha and 21 m high. The mound Çatalhoyuk was discovered during the Konya Plain surface survey campaign by James Mellaart in 1958 and was excavated from 1961-65, again under the management of Mellaart with the support of the British Institute of Archeology. Since 1993 an international team of archaeologists, led by Ian Hodder, has been carrying out new excavations and research. The excavation works are still in progress in four zones. These are: Zone 4040, the Southern Zone, Zone TP and Zone BACH. The East Mound dates from 7400 to 6200/6000 cal. BC and the West Mound dates to 6000-5500 cal. BC (Düring & Marciniak, 2006, p. 176; Hodder, 2012b, p. 303; http://www.catalhoyuk.com/).

In the early building levels XII–VI, the structures are made of loam. They are clustered together yet separated by alleys and courtyards. Entry into the structures

was made from their roofs. The buildings have a long occupational history as evident from the rebuilding activities. The buildings remained on the same spot with the same interior arrangements for hundreds of years. Inside the clustered neighbourhoods, the living rooms and modular units of the households are well-defined. Some of the living rooms have fire installations. Ovens were built adjacent to the walls. Ladder entrances were placed close by the ovens and possibly served as chimneys. Living rooms house intramural sub-floor burials and wall paintings. For the most part, the living rooms were confined by outer walls. The adjoining rooms, which often served for storage, are located by the main rooms. The continuity observed in the buildings in earlier levels was abandoned after level V (Düring & Marciniak, 2006, p. 176-177, 180).

In Çatalhöyük, clay was used for a great variety of purposes from sculpture to slingshots and wall embossments. Anthropomorphic or semi-anthropomorphic figurines and figurines believed to represent hunting themes are amongst finds made from baked or sun-dried clay. The wide variety of statuettes unearthed was both painted and unpainted and included animal figures. In addition to the baked clay stamp seals and clay balls (the latter possibly used as slingshots), clay was also commonly used in other ways that included wall embossments and the construction of decorative elements such as horned bulls' heads. The collection that dates to before the 8th millennium is comprised of animals. After 7000 BC, below level V, stone anthropomorphic figurines emerged at the outset of the excavations. Obese human figures are depicted either standing or sitting and sometimes wear elaborate clothing. The shapes consist of seated figures in phallic shape, figures in association with animals, adults holding children, and multiple figures attached to each other (Lesure, 2011).

The archeometric analysis of 101 diagnostic sherds through level XII to level VIII/VII, dated ca. 7070-6700/6600 cal. BC, has been carried out by S. Özdöl and determined to be within the Early Tradition horizon at Çatalhöyük (Fig. 13). Two groups of wares have been identified amongst the early ceramic tradition that probably derived from each other in terms of their clay origin. However, except for

some unique examples, they differ from each other only in their temper rates (Özdöl, 2006, p. 136).

The most characteristic pieces of the earliest settlement layers, Ware 1-Vegetal Tempered Coarse Ware, are plant tempered. Ware 1 comprises the 75% of the assemblage. The paste used for this group of pieces contained, besides the plant temper, fine sand particles in varying rates as the secondary content, which is probably inherent in clay. Straw was identified as the major plant temper. Vegetal temper was used abundantly and as well-mixed into the paste. The clay of such plant-tempered pieces further contained mineral particles such as calcite, quartz, mica, etc. in addition to the typical straw, which is most probably indigenous to the clay. Apart from this, barely visible, thin black particles with a vitreous gloss are also considered amongst the characteristic features of this group of pieces. Archeometric analyses suggest that this group was most probably produced from a local clay source of lake (lacustrine) origin. The ceramic clay and quality of paste are mostly rough and loose; they feature a porous structure especially due to straw temper. A majority of the pieces has been identified as soft and uneven. Almost all the pieces were subjected to a surface treatment process even if only in the form of low-quality smoothing or of wet wiping. The interior surfaces, on the other hand, were less treated. The surface colors are typically comprised of buff, light brown and shades of grey; surface colors such as reddish pink, brown, etc. are very rare (ibid., p. 137-141).

Ware 2, the so-called Gritty Coarse Ware, is separated into two classes. Ware 2a-Gritty Ware is represented by a total of 5 pieces within the group of finds from layers XII-VIII. The sand content in this group is more prominent than in Ware 1 and Ware 2b, and the paste is free of plant temper. The paste color and the presence of calcite and shell content indicate that the clay used for this group of pieces is of lacustrine origin, just like Ware 1. The members of this mineral-containing group are uneven and present an irregular coloring, a soft paste, and an irregular core. Slip has not been applied to the specimens from this group. The exterior surfaces of the pottery present horizontal or irregular traces of smoothing, while the interior surfaces present traces

of wiping or low-quality smoothing. The surface colors are grayish buff and grayish brown while the core color is dark grey (ibid., p. 141-142).

Ware 2b, namely the Gritty Vegetal-Tempered Coarse Ware, is represented by 14 specimens from layers XI-VIII. Mineral temper in the size of fine-intermediate sand is more dominant than the plant temper in the surveyed pieces. No grit temper was encountered within the paste. Moreover, the shell content is also prominent in this group. The texture of the paste is coarse, loose and porous. The specimens are substantially uneven, and almost all specimens present a soft texture. Again, almost all specimens were somehow smoothed, but with low quality. Exterior surfaces have irregular and mat, untraced smoothing, while the interior surfaces are either patted or smoothed with low quality in some pieces. The exterior surface color is typically mottled, grayish buff, while the interior surface color is typically not mottled, but has a single color such as gray or black buff (ibid., p. 142-143).

Jars commonly used for cooking and storage purposes within the shape repertoire of the early Neolithic pottery tradition are scarcely found in Çatalhöyük. Vessel shapes are comprised of thick-walled bowls apart from one hole-mouth jar from Level VIII. The most common shapes are deep or shallow bowls, hemispherical bowls, and open bowls. Bowls with an inturned rim are the most frequently encountered profile. The bases are flat, and the pottery has no handles at all (ibid., p. 147-151).

The period defined as Middle Tradition at Çatalhöyük comprises Levels VIII/VII through Levels IV/III and is dated to 6700/660-6400/6300 cal. BC (Fig. 11). Four ware groups have been distinguished between Levels VII-IV. These groups are: Ware 3-Dark Ware With Calcite, Ware 4-Light Ware With Calcite, Ware 5-Dark Gritty Ware, and Ware 6-Red Fine Ware (Özdöl, 2012, p. 27).

Many similarities have been detected between the Early and Middle Traditions, except for the fact that the Middle Tradition pots are mineral tempered and have thinner walls. This has especially been observed in the cooking pots within Ware 5. The majority of sherds from all groups are dark faced, burnished, and slipped. The main vessel shapes noted are jars followed by bowls. Wares 3 and 4 have a sandy

texture and a buff fabric made from the local clay. The main vessel shapes discovered are open bowls. The so-called light-faced bowls and jars from Ware 4 and 5 are defined as a fine ware (ibid., p. 27, 31-32). Ware 5 constitutes the majority of the Middle Tradition assemblage and has harder fabrics and light colored surfaces in hues of light brown, buff or reddish. Ware 5 and Ware 6 pieces are mineral tempered and burnished. Ware 6 defined as the finest and hardest ware is constituted only 4% of the assemblage. The sherds are mainly tempered with grit and the surfaces are red-slipped (ibid., p. 30).

The Late Tradition, dated ca. 6400/6300 through 6000/5900 cal. BC, corresponds to levels IV and III (Fig. 13). The cream or orange slipped sherds of Ware 4, and Ware 6 of the Middle Tradition, have been evaluated as the pioneers of the Late Tradition although they do not display the latest characteristics of the more developed shapes and slipping styles. The surfaces are mostly burnished and red slipped. The main forms are S-shaped bowls and jars. "Vertically perforated tubular lugs, non-perforated lugs with hook-shaped upturned tips, slightly raised bases and ring-bases are characteristic of this tradition (ibid: 51)."

3.7. Stages of Ceramic Development in the Near East in a Comparative View

In terms of technological changes and patterns of variability, different qualities are observed in the emergence and development processes of pottery containers in the Near East. Here we will consider four developmental phases by analyzing important characteristics of different processes. Developmental trajectories of the evolution of pottery containers fit into the chronological range of the pottery in each context and to the chronology of the Near East (Table 1). These developmental trajectories depend on the frequency and similarity of the data sampled. The overall characteristics of the assemblages along with the key groups were organized into a descriptive comparison from the available data from the published reports.

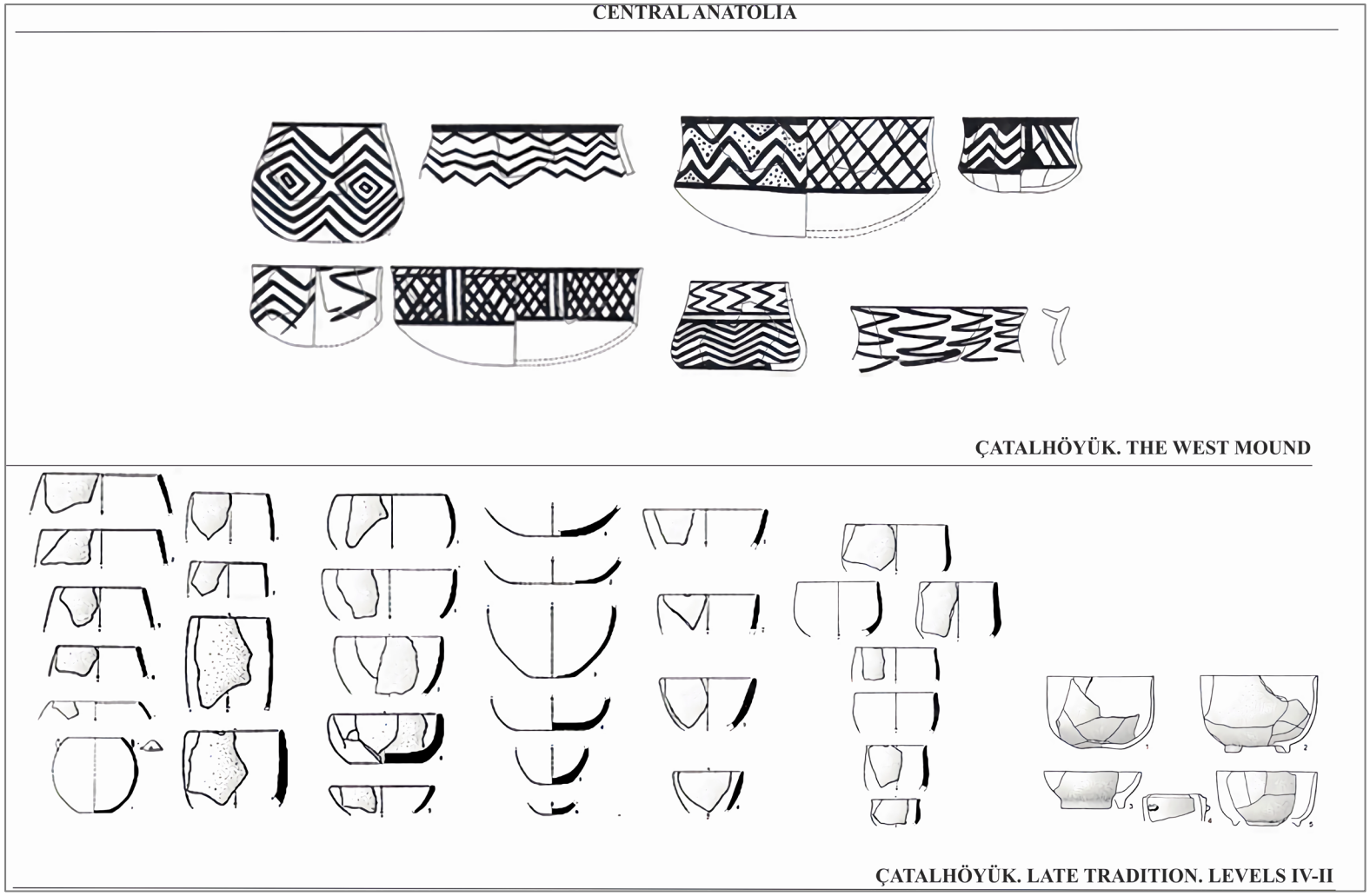

Figure 13. Pottery from Çatalhöyük. Late-Early Traditions (Özdöl, 2006: Plts: 1-132; Mellaart, 1961: Figs. 11-13).

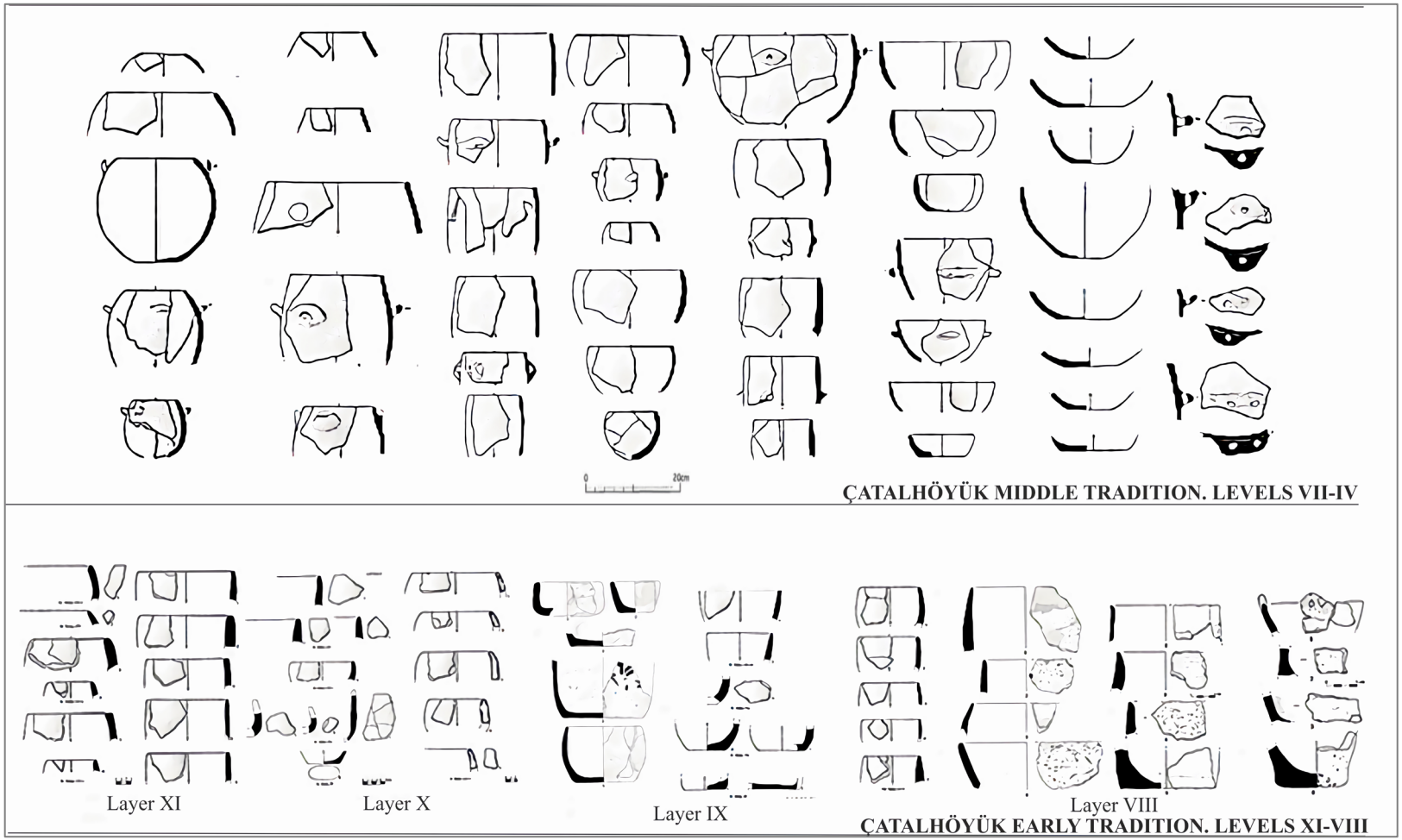

Figure 13. (Continued)

3.7.1. Phase I: 7000-6600 BC

The archaeological data discussed in Chapter 3 would suggest that where the earliest pottery containers are encountered, they are found as completely formed products with particularly executed shapes. These shapes are primarily simple mouth bowls and jars that reflect no process of trial and error. The choice of temper and color might differ but are consistent in different regions; however, the majority had dark surface shades. These shades ranged from black to brown-red, especially in the Syro-Cilician region. They were greyish black in sites along the Euphrates, Khabur and Upper Tigris. Along the Euphrates and to its East, lighter colors with paint or slip make up significant proportions amongst the dark wares, while they are very rare items in the West of the Euphrates.

The common feature of the first pottery in the Near East is a shape that is composed of a simple mouth bowl with a rim that is small in diameter. At this very early stage, the sites of Syro-Cilicia and Northern Mesopotamia share other common features such as the predominant choice of mineral temper and surface burnishing, together with varying proportions of dark color. Although small quantities of plant tempered coarse wares can be observed in Syro-Cilicia, the pottery is abundantly dark- mineral tempered burnished wares, sometimes decorated with pointille impressions closer to the rim. Along with these, sherds with a red slip that cover the rims and the inner portion of the pots are present.

Along the Upper Euphrates, in sites such as Halula, Tell Sabi Abyad, Mezraa Teleilat, and Akarçay Tepe, mineral tempered pottery was being produced. This pottery is burnished; convex or straight-sided bowls sometimes with lugs would appear to be the main feature. Some of this pottery can be light colored (pale to yellow-brown). However, in the initial Pottery Neolithic strata of Tell SabiAbyad I, the majority of the early mineral ware is reported to be grey to dark grey. The earliest pottery repertoire consisted of simple convex-sided bowls with straight walls.

Table 1. Comparative chronology of the Early and the Late Neolithic periods of the Near East (Based on Akkermans, 1988, 1989, 2003, 2006; Arimura et al., 2000, 2001; Bader, 1993a, 1993b; Balossi, 2004; Bashilov et al., 1980; Campbell, 2017; Caneva & Sevin, 2004; Cruells, 2008, Karul et al., 2001; Kirkbride, 1972, 1973, 1975; Lloyd et al., 1945; Merpert & Munchaev, 1987, 1993; Miyake, 2003; Nieuwenhuyse, 2007; Nishiaki & Le Mière, 2005; Özdoğan, 2011; Tsuneki et al., 2000).

	app. 7000-6600 BC	6600-6200 BC	6200-6000/ 5900 BC	(6000- 5900-5500)-(5500-5200 BC)	-5000 BC (?) (Late to Post Halaf)
Syro-Cilicia and the Lebanese Coast	Hama M36-27 Rouj2A AmuqA1	Ramad IIIA Hama M26-16 Ras Shamra VB Byblos1A Rouj2B AmuqA2	Ramad IIIB Hama M26-16 Apamea VA Ras Shamra VA Byblos1A Rouj2C	Ramad IIIC Apamea IV Ras Shamra IVC Byblos1B Rouj2D AmuqB1-B2 Yarmukian in the southern desert	Hama L Apamea IV Ras Shamra IVB Byblos Late Neo. Rouj3 AmuqC-D Wadi Rabah
Mersin	XXXIII-XXXI	XXX-XXVIII	XXVII-XXVI	(XXV-XXIV)-(XXIII-XX)	XX-XIX
Central Anatolia	Çatal E. XXII-VII Can Hasan III	Çatal E. VI-II Pınarbaşı Bor Köşk Höyük Tepecik	Pınarbaşı Bor Köşk Höyük Tepecik	Çatal West Can Hasan I Köşk Höyük Tepecik	Güvercinkayası(?)
Balikh Valley	SAI OPIII A13-A8, SAII L. 3-1, SAIII tr. H9-7	SAI OPIII A5-A1 Tell Assouad VIII-VII Tell Damishliyya, P. 2 Tulul Breilat Tell Mafraq Slouq	SAI OPIII B SAI OPI P15-8 SAI OPI L.8-6 (L.6: Burnt Village)	SAI OPIII L.C SAI OPI L.5-1	Balikh
Middle Euphrates and Southeastern Turkey	Mezraa Teleilat IIIA Akarçay Tepe-Layer 1	Mezraa Teleilat IIC Salat Camii Yanı-Phase I	Mezraa Teleilat IIB	Mezraa Teleilat IIA	
Khabur and N Iraq	Tell Şeker el Ahmar 7-15 Pre-Proto Hassuna	Kashkashok II Telul eth-Thalathat II Ginnig Tell Sotto Umm-Dabaghiyah Proto Hassuna	Hassuna-Samarra	Early and Late Halaf	Post Halaf Ubaid

The mineral tempered pottery has red slipped or painted decoration with parallel diagonal lines, alternating diagonal lines, and crosshatching and zig-zag waves, which may be the precursor of painted pottery of Northern Mesopotamia that increase (in number) at the end of the millennium (Nieuwenhuyse et al., 2010).

The final stage of the long, pre-pottery activity in Tell SabiAbyad II is represented by the pottery sherds obtained from pit A. The coarse and organic-tempered pottery consists of rounded bowls, vertical pots with loop handles, vertical pots without loop handles and small hole-mouth pots. The surface colors range from buff to brown, but some reddish and orange colors were present. The surface treatments are limited to burnishing. Few sherds have smoothed surfaces (Verhoeven & Akkermans, 2000).

The coarse, plain, and plant tempered vessels (CMPT ware) were recovered from the deep soundings at Tell SabiAbyad I in operation III. The main vessel shapes recorded are convex-sided bowls, hole-mouth pots and vertical pots with loop handles. No form of decoration was found. A similar type of coarse and plant tempered ware was discovered in other sites of the Balikh valley, along the Euphrates, in northeastern Syria, on the Khabur and at Tell Sabi Abyad II. The rest of the pottery assemblage from operation III was mineral tempered and consisted of convex-sided bowls. In comparison with the plant temper ware, the mineral tempered specimens have thin walls and well smoothed or burnished surfaces. The surface colors are gray-brown to orange-brown. The clay fabric of the mineral tempered pottery can be linked to the dark colored, mineral tempered wares (the so-called series Noire) of Tell Halula and other Pottery Neolithic sites on the Euphrates (Akkermans et al., 2006).

The so-called mineral tempered "Black Series" from Akarçay Tepe was recovered from the Phase III layers. The pots in this series have brownish or grayish surface colors. The exterior and interior surfaces are often burnished. The shapes are limited to small bowls. A very few burnished or slipped sherds with vertical incisions were also present (Arimura et al., 2001).

The earliest pottery from Mezraa Teleilat was found in the final stages of Phase III. Along with the coarse and mineral tempered ware, finely burnished sherds were identified. The surface colors of the burnished sherds were noted as reddish brown and therefore similar to the DFBW. The most common profiles were the hole-mouth pots. However, this latter pottery was rare and has been interpreted as having been imported (Özdoğan, 2009).

The so-called Black Series recovered from Akarçay Tepe and Tell Halula has been identified as the earliest pottery from the middle Euphrates region. Some scholars correlate the early pottery from Mezraa Teleilat and Kumartepe with the Black Series. The main characteristics of the type include calcite or mica tempering in high quantities and black colored-burnished surfaces (Odaka, 2013).

These features and calcite and mica tempering and black colored-burnished surfaces are not observed on the pottery of Syro-Cilicia at this stage. However some red washed and impressed wares at Amuq A may be associated with the later development of the so-called Brittle Paint at Amuq B; the latter is similar to the Sabi Abyad pottery as well as the much later developed cream painted wares. However, mineral tempered Kerkh Ware, attested to the Rouj 2a period, was found in Tell el-Kerkh 2. The main tempering materials noted were sand, mica, and grit. The dark-colored surfaces are either smoothed or burnished. The vessel shapes are comprised of shallow bowls and deep bowls. The surfaces colors are mainly grayish-brown without any decorative elements (Tsuneki & Miyake, 1996).

The earliest pottery, the so-called Sandy Ware recovered from the lowest Neolithic layers of Yumuktepe, is grit tempered. The light colored pottery is usually burnished and slipped. Globular small jars and bowls with simple rims are the main vessel shapes. Impressed decoration occasionally was observed along with incisions (Caneva, 2004; Balossi, 2006).

In Northern Iraq, traditionally considered to be the heartland of the later popular painted pottery traditions, we know of no sites with such an early production. At Khabur, Pre-Proto Hassuna levels of Tell Seker al-Aheimar are represented by the

mineral tempered Early Dark Ware. The simple shapes primarily consist of closed and hole-mouth pots along with convex bodies and large flat bottoms. Dark surfaces are black or grey and strongly burnished. The assemblage is plain and not decorated. Basalt Tempered Ware as the second class is also tempered with volcanic minerals, mainly with basalt. The sizes of the inclusions are large and compacted, and therefore the pottery is heavy. The principal surface colors ranges from dark beige to dark brown, but reddish brown examples are also present. The shapes display a variance similar to the Early Dark Ware except some have concave bodies and some others has forms of lugs. No decoration was observed in the earliest levels; painted decoration rarely emerges at later stages (Nishiaki & Le Mière, 2005).

On the other hand, in the early levels of Çatalhöyük East (XXII-VII), chaff and sand tempered wares can be found together. At this site pottery from the early stages is mostly light colored with chaff temper. These early pots of Central Anatolia are light grey or cream to buff in color, and they are burnished with thick walls (10mm or more), although thinner walls were produced toward the end of the early sequence. One interesting aspect of this pottery at Çatalhöyük is that the chaff and sand tempered pots had identical shapes. They were mainly deep bowls (typically tubular), but basins, small cups, and rare whole mouth jars (rim dia: appr 5-20cm) were also found. This may indicate that the potters did not distinguish between different tempers when producing pots that were identical in shape (Özdöl, 2006).

3.7.2. Phase II: 6600-6300/6200 BC

Immediately following the first introduction of ceramics in the region, two opposing trends mark their development: one is the development of regionalized differentiation, and the other is the result of cross-influences. In Syro-Cilicia and Central Anatolia dark-mineral wares dominate. In some areas, specifically the sites in Rouj Basin dated to the Rouj 2b period, pottery containers occurred together with white ware produced from lime-plaster. In some instances, the dark

burnished wares are plastered with this lime paste. White wares are commonly found in sites along the Lebanese coast together with dark burnished wares. One can postulate that their main area of emergence may have been these areas which are close to locations where lime plaster was intensely used for the ritualistic purposes of skull plastering and associated house renovation.

In contrast to the early mineral wares in Northern Mesopotamia, the evidence from sites such as Tell Sabi Abyad, Akarçay Tepe and Mezraa Teleilat demonstrate that the majority of the ceramic assemblages in this region are composed of light surface colored and vegetal tempered ware.

The Pre-Halaf, or the so-called Balikh II, pottery from Tell Sabi Abyad exhibits a great variety of categories. The main groups consist of DFBW, Grey-Black Ware, Mineral Coarse Ware and Standard Ware. The mineral tempered DFBW is comparable to the Levantine DFBW has been determined to have been imported. The Grey-Black Ware has grey or black surface colors. The surfaces are burnished. The fine fabric is tempered with small mineral and plant inclusions. The Mineral Coarse Ware is tempered with large mineral inclusions. The burnished surfaces have buff to grey colors. The Standard Ware is tempered with plant inclusions. The surface colors range from buff to reddish-pink. The surfaces are either burnished or smoothed. Another common surface treatment is red or brown slipping. The shape analyses for the diagnostic sherds of all the ware groups present some basic features like convex or straight bodies, concave or straight necks, flat bases, and a few carinations. The main decorative elements consist of impressions, incisions, appliques, pattern-burnishings, and painting (Le Mière & Nieuwenhuyse, 1996).

The early "local" pottery of Mezraa Teleilat appears after the dark wares were uncovered in Phase IIC. The coarse chaff tempered ware has lighter surface colors ranging from buff to dull pinkish. The forms are quite similar to the hole-mouth pots. In phase IIC1, straw tempered vessels with barely burnished surfaces were recorded. The prototypes of the sand-tempered wares, husking trays, and red slipped-burnished pottery appeared in the same phase (Aytek, 2008).

The chaff-tempered coarse ware represented the phase II pottery of Akarçay Tepe. The burnished or smoothed surfaces are light in color. The large vessels have thick walls and flat bases. The forms consist of hole-mouth bowls, hemispherical bowls, jars and shallow plates. The pottery assemblage exhibited a change in Phase IIb. The sherds were of fine sandy clay with a mixed temper. Some sherds have burnished surfaces. The latest sequence, Phase I, is predominated by the fine wares. The slipped, slipped and burnished, washed, painted plain burnished and DFBW were among the fine ware category. The Coarse Ware was still present in this phase. The simple coarse ware had thick walls and was tempered with chaff. Also, some mineral tempered and burnished sherds and a husking tray were present at this stage. A variety of forms included shallow bowls with round bases, rounded bowls, hole-mouth bowls, low collared bowls and carinated bowls. The decorative elements noted were impressed, incised and applied designs (Arimura et al., 2000; Özbaşaran & Duru, 2011).

In the Upper Tigris region, very early pottery was recovered from Salat Camii Yanı. The most frequent group of finds of the earliest PN phase, Phase 1, was predominantly mineral tempered and burnished ware. The well-fired pots have black or buff surface colors. The main shapes consist of hole-mouth jars and deep and closed forms with flat bases. A limited number of fine vegetal and mineral tempered pieces were found in the same phase. The plant-tempered pieces dominated in Phase 2. Grit temper accompanied the plant inclusions. The surfaces are often smoothed. The surface colors are reddish brown to buff. The vessel forms are simple. They consist of hemispherical bowls, hole-mouth jars, and deep jars. The bases are usually thick and flat. It is notable that the pottery with these properties closely resembles the oldest pottery group recently discovered in the region that extends from the Euphrates river basin to the Khabur plain. In phase 3, vegetal tempered coarse ware still dominates the collection. The fine ware groups from this phase correlate with the Proto-Hassuna assemblage. A few painted pottery sherds exhibited mineral temper. The thin walls have burnished or smoothed surfaces. The decorative elements include chevrons and vertical zigzag lines. The burnished ware has dark surface colors and mineral temper associated

with the DFBW. The so-called red washed ware is tempered with vegetal and mineral inclusions. The thin vessel walls have washed surfaces. Carinated profiles can be observed in the last two groups (Miyake, 2006, 2008, 2011).

Tell Seker el-Aheimar has been recognized as a key-site in the Khabur valley. The stylistic and technological development of the pottery containers has been observed at the site is associated with the development of proto-Hassuna wares in this region. Here it was noted that a type of fine pottery with small mineral inclusions appeared together with chaff-tempered coarse ware. Furthermore, the dark burnished wares as well as painted decoration were present in significant quantities (Nishiaki, 2001).

The pottery assemblage identified as the Hassuna-type ceramic tradition was found in central and northern Mesopotamia and is associated with the level 1a assemblage from the key site of Tell Hassuna. The straw tempered, and coarse-double ogee storage jars dominated the level 1a assemblage. A few burnished pots were found in the same level. Decoration was observed in the form of applied crescents, blobs and nipple spouts (Lloyd & Safar, 1945).

In recent years some researchers have attempted to clarify the homogeneity and variation within the Proto-Hassuna core area. The excavations at Tell Sotto, Kültepe and Umm Dabaghiyah have yielded identical pottery that preceded the Archaic Hassuna assemblage. Since the time that researches began to make clarifications, the Sotto-Dabaghiyah nucleus area has begun to be used as a term for avoiding a perception that displays Tell Hassuna as a center of a core area (Campbell, 1992; Nieuwenhuyse, 2013). Here, we will use the same comparative description proposed by Campbell and Nieuwenhuyse that analyzed the pottery sequence with Proto-Hassuna label.

The so-called Proto-Hassuna pottery assemblage can be observed in a vast geographical area including the Jebel Sinjar (Umm Dabaghiyah, Tell Sotto, YarimTepe 1, Kültepe), the Tigris valley, east of the Tigris valley, and in northeastern Syria. The Proto Hassuna wares in Northern Iraq and the general

region along the East of the Euphrates are indicated by the presence of plant-tempered Coarse Ware, large double ogee jars with carinated profiles and concave lower bodies, husking trays, and the use of applied and painted decoration. The simple vessel forms consist of open platters, hemispherical bowls, and ogee jars. Applied decoration appears symbolic with horn-like motifs, moon or eye-brow like crescents, and human and animal figures (almost like an applied version of figurines). Painted pottery is rare, but when paint is found it has usually been applied along the rims of cream slipped pots in red to brown designs. A few examples of mineral tempered and burnished ware appear in many Proto-Hassuna sites (Nieuwenhuyse, 2013; Campbell, 1992).

The pre-Halaf pottery production in Syro-Cilicia has been recognized as a regional culture. The stratigraphic correlation of the sites principally was established on the basis of Dark Faced Burnished Ware (DFBW). The re-evaluation of the DFBW horizon by Balossi-Restelli (Balossi, 2004, 2006) provides a clearer picture for the definition and sphere of the DFBW. The analyses were based on the comparative data from the site of Yumuktepe, and contemporary settlements from Syria, Amuq, and the Rouj basin. Although Coarse Ware and Red Washed Impressed Ware that are typically found in Rouj and Amuq are absent in Yumuktepe, the DFbW indicated a strong bond between the regions. The levels XXIX-XXVIII of Yumuktepe presented a large amount of mineral tempered DFbW. The main vessel forms consisted of hole-mouth jars, bowls with inverting walls, and large plates. The vessel surfaces are minutely burnished. The surface colors exhibited various hues of brown, reddish brown and scarlet brown. Several sherds were decorated with fingernail impressions (Balossi, 2006).

The levels Jk3 28-25 from Judaidah represented the Amuq phase A. The mineral tempered DFBW constitutes 79-84% of the selected sherds. The surface colors are mostly black, but dirty yellowish brown and gray-brown buff sherds were also apparent. The main vessel form noted was straight-sided bowls. Some collared jars, hemispherical bowls, and hole-mouth vessels were also present. Some sherds have

clay band applications, and various sherds have rounded clay blobs close to their lips. The surfaces were wet-smoothed before the horizontal burnishing application.

Decorated sherds exhibit impressions in the form of lunate, elliptic and square designs. The chaff Coarse Simple Ware constitutes 8-13% of the selected pottery bulk. The surfaces were wet-smoothed and vary in color from orange-buff to light yellow-orange buff to dirty orange-brown buff. The core is black and the paste well fired. Deep bowls, ovoid jars, and collared jars are the main vessel forms. The decorative elements consist of clay bands across the rims, impressions with a rope effect, and blobs of clay (Braidwood & Braidwood, 1960).

DFBW is the most remarkable pottery assemblage that was found in Rouj 2b periods along with Coarse Ware. Along with variation in decoration, color, and temper, we see that the assemblages were still dominated by simple bowls and jars, while new shapes, specifically the necked jars, begin to make their rare appearances in all regions. Along with the necked jars, carinated bowls, shallow plates, rare red slipped and pattern burnished sherds and Hassuna style husking trays may be seen along the Upper Euphrates sites. However, ledge handles and impressed and rim band decoration continued in Syro Cilicia with the beginning of applied decoration in buttons and crescents appearing in varying degrees. In both regions, there are indications of a separation of coarse and fine vessels. Therefore, mineral tempered coarse vessels are usually assigned to cooking purposes.

At later levels of Çatalhöyük East (VII-VI), however, composite influences are evident. Firstly, the chaff tempered wares of the early levels diminish and disappear by Level VI, whereas the mineral tempered wares begin to dominate. These wares are still mostly composed of deep globular bowls or hole-mouth jars with darker and better burnished surfaces and with thinner vessel walls that were quartz tempered. From Level IV onwards, brown and red burnished surfaces are also included in the pottery assemblage. Rare carinated profiles and applied decoration (bull's heads) are seen in later level V; however, impressed decoration or necked jars are absent. From Phase IV onwards, vessels with

incised lines under the rims and footed vessels or ring based vessels appear. The vases have lugs and handles but the distinct separation between cooking and consumption pots are not observed at Çatalhöyük. In fact, the craftsmanship in burnishing or paste preparation is not of high quality (Özdöl, 2006).

3.7.3. Phase III: 6300/6200-6000/5900 BC

In the last quarter of the 7th millennium BC, the ceramic technology, form and decoration of pottery became increasingly varied and complex in Northern Mesopotamia. This is arguably due to competitive emulation or better skills in potmaking which continued throughout the 6th millennium BC (Campbell, 2007; Nieuwenhuyse, 2007). During this time, painting began to be a more popular technique of decoration in the East of the Euphrates. Ultimately, by the end of this transitional period, innovations in ceramic technology, vessel shapes, and decorative styles led to what archaeologists have termed Early Halaf pottery, i.e. ceramics with dark paint on a light colored base and distinctive shapes, such as straight sided and carinated vessels, along with open plates (Cruells, 2008; Campbell, 1992; Akkermans, 1993).

At this time, the dark colored-mineral tempered wares are intensely darker in Syro-Cilicia whereas a preference for dark colors is not observed in Central Anatolia. These dark wares are to be contrasted with the still existent white plastered wares, some of which which may have been decorated with red paint in some of the Syro-Cilician sites (excluding the sites to the north of the Rouj Basin). The dark-mineral wares, sometimes with impressed decoration or red-slip, continued to be the main elements in these regions. However, their numbers begin to decrease with the introduction of pattern burnished pottery, which may be considered as a Syro-Cilician version of the painted pottery traditions of Northern Mesopotamia. In fact, the characteristic Early Halaf bowl, a straight sided or carinated bowl painted with a crosshatched zone in the middle, is

very similar to the straight sided pattern burnished bowls. The common shapes are jars with short-everted necks or high cylindrical or flaring necks, shallow bowls and carinated vessels, which were common at Rouj 2c, along with the applied, incised decoration, and husking trays with rare evidence of anthropomorphic vessels known from Northern Mesopotamian sites.

Interestingly, in the Upper Euphrates, at Mezraa Teleilat, mineral-sand tempered wares again become the majority as opposed to the intermittently dominating chaff wares. Globular bowls and jars with collar necks, carinated bowls, and flaring necked jars develop alongside husking trays. Mineral ware is sometimes impressed around the upper body of the vessel; later the whole vessel surface was impressed. Although rarely, red slip on the necks and shoulders is also present and at times reminds us of the Hassuna style painting around the necks which appeared as wavy lines and may be considered together with the Hassuna-like incised decoration present on globular vessels.

The distinction between Coarse and Fine wares is well developed at this stage in all regions. In some areas of the Syro-Cilician coast, such as at Yumuktepe, there may be a separation of color-shape preferences. For example, pinkish wares were mostly reserved for necked jars while dark wares were mostly reserved for bowls and hole-mouth jars. In Balikh, Samarra style fine painted ware increases. The shapes include hemispherical bowls, carinated vessels and necked jars. Crosshatching, chevrons, and herringbone patterns sometimes similar to those on impressed pots are present as paint decoration. Anthropomorphic vessels, although rare, may be related to pedestaled, footed, necked and carinated vessels.

3.7.4. Phase IV: 6000/5900-5000 BC

By the beginning of the 6th millennium BC, Halaf ceramics regularly appeared in many regions of North Mesopotamia, the Northern Levant, southern Iraq and

Western Iran, albeit in differing proportions to the local wares. In the easterly regions of Northern Mesopotamia, such as in northern Iraq, the ceramic assemblage of a given site might be dominated almost entirely by the painted or unpainted versions of the Halaf ware.

Indeed, the typical wares of the Northern Mesopotamian painted traditions (Hassuna-Samarra-Halaf), such as the cream and fine painted wares, begin to replace dark wares in Syro-Cilicia. Impressed decoration or red slip becomes extremely rare. The dark ware becomes restricted to black and red burnished sherds, while white ware disappears. Among the remaining burnished wares, the pattern burnishing that entered into the scene in the previous stage becomes well developed. The later Halaf phase is defined by open plates, shallow bowls, jars, pedestal bases and polychrome paint with painting often covering the whole vessel surface and in multiple bands.

Carinated profiles, necked jars, low plates-trays, jars with strainers, husking trays and pedestals that were probably used with open or straight sided bowls are common. In North Iraq, straight sided and cream bowls are more frequently produced in Early Halaf. In later Halaf, carinated vessels decrease and hemispherical bowls and jars increase in number.

At Çatalhöyük West, painted pottery shapes and decorative elements are quite in tune with the above trends. As in Syro-Cilicia, at this site, painted pottery occurs together with monochrome pottery burnished with incised and white filled decoration. Pottery of Central and Western Anatolia is abundantly red or brown slipped, burnished, and tempered with chaff, mineral or both. Cream wares with red paint or red burnished wares with cream/white paint make their appearance in both Central and Western Anatolia. Impressions can be seen on darker and possibly coarser wares although painting and applied decoration is rare.

Based on the above descriptive evaluation of the comparative data, the next chapter of the thesis will discuss the results in relation to the aims of the thesis, i.e. whether the earliest pottery has symbolic functions and if so, how should it be interpreted.

CHAPTER 4

DISCUSSION

As mentioned previously, the archaeological study of pottery has been often restricted to the typologies based on formal characteristics of the pottery. The analyses contain the detailed readings of surface treatments and colors and technical examination of the paste and the shape. Then, variables like thickness, height, and diameter need to be measured. The decorative traits and style also need a careful review (Santacreu, 2014, p. 181). In this context, we encounter classification terms such as *Coarse Ware, Dark-Faced Burnished Ware, Red Slipped Ware, or terms such as Hassuna, Samarra and Halaf* in an attempt to indicate painted traditions that flourished at the end of the 7th millennium and the first half of the 6th millennium BC. Although recent research has made some of these terms unusable, their original ideas and labels about regional and cultural entities and circulation of material culture still apply in some way (Nieuwenhuyse, 2013, p. 111).

However, recently a substantial number of researchers examine the role of ritualized food consumption events as well as public feasts in the Near Eastern Neolithic communities (Budja, 2007; Nieuwenhuyse et al., 2010; Balossi, 2015; Balossi, 2017). A symposium called "The emergence of pottery in West Asia: the search for the origin of pyrotechnology," which was held at the University of Tsukuba in 2015, brought together experts who examined Neolithic pottery in the named region. The experts reached the consensus that the earliest pottery was not used for storage. Due to the small size and open shapes of the earliest vessels, it was proposed that the early pots could not efficiently serve to store goods. On the other hand, the experts agreed that some of the earliest pots were suitable for food processing and cooking (Tsuneki et al., 2017).

Through the transitional period from PPNB to the early part of the Pottery Neolithic Period, dark colored, often burnished and mineral tempered wares were present at sites like Akarçay Tepe and Tell Seker al-Aheimar. This mineral tempered pottery preceded the plant tempered pottery (Le Mière, 2009, p. 74). The dark color of the early mineral tempered pottery was achieved through the mastery of firing temperatures. Therefore, the selection of dark colors was probably intentional (Le Mière, Özbaşaran, & Picon, 2017, p. 36). The tempering materials include crushed calcite, basalt, limestone, and volcanic inclusions. The shapes were mostly simple and consisted of closed forms, with few instances of vertical forms. Open forms are not observable. The closed shapes attested are mainly of the hole-mouth type without any neck but frequently with attached lugs. Decoration is quite rare (Le Mière, 2009, p. 74-75; Le Mière, 2017: 23).

Archaeological data from Tell Sabi Abyad, Yumuktepe, and Ain el Kerkh indicates that pottery was at the center of ritualized food sharing events during the initial development of pottery. The earliest pottery found in Tell Sabi Abyad, Early Mineral Ware (EMW), has mostly been recovered from household contexts. Interestingly, the earliest pottery is defined as a "fully developed" material. The well-finished and decorated EMW has been evaluated as a more refined pottery category compared to the subsequent plain and coarse wares. Instead of functioning as cooking or storage ware, the use of EMW has been attributed to daily commensal events at the household level. These special occasions may include rituals or honoring guests through the material proxy of pots. The pots may have served as an identity reflection within and beyond the local community (Nieuwenhuyse et al., 2010, p. 83; Nieuwenhuyse, 2017, p. 39, see also Pollock, 2015, p. 2).

At Yumuktepe, various stages of development have been observed in pottery production. The earliest pottery found at the site, the so-called "Sandy Ware," has light colored, slipped and burnished surfaces. Since this earliest pottery container did not functional usefully on fire, Balossi Restelli proposes that the earliest pottery is multifunctional and served as a cultural expression. Following the disappearance of

the light colored Sandy Ware, various sub-types of DFBW dominated the pottery repertoire of Yumuktepe throughout the 7th millennium BC. The comparative analyses of the DFBW indicate different forms of commensalities.

The well-documented pottery repertoire from Yumuktepe supports evidence for commensal events within the site, particularly towards the end of the 7th millennium BC. As argued by Balossi Restelli, the consumption vessels are loaded with symbolic expression about particular social contexts that positioned this fine-paste drinking ware at the center of ritual drinking. The comparative analyses of the paste and morphological types of the so-called Dark Faced Burnished Ware (DFBW) indicate different forms of commensalities. Thus, the prime emphasis of communal dining can be attributed to polished-fine DFBW via the presence of elaborate shapes, specifically goblets. On the other hand, the unpolished and plain DFBW with simple shapes and relatively larger vessel sizes is associated with daily consumption and serving purposes (Balossi Restelli, 2015, p. 92-95).

Dark Faced Unburnished Ware recovered from trench SA was clearly connected to food consumption as a symbolically charged material. Fine Dark Faced Burnished Ware that appeared at the end of the millennia, therefore, has been linked with communal feasts and commensality (Balossi Restelli 2015: 92-95, Balossi Restelli 2017).

The well-finished and often decorated Early Mineral Ware (EMW) from Tell Sabi Abyad preceded the later development of coarsely made and plain wares. In this sense, it has been proposed that the quality of production deteriorated over time. The interpretation regarding the EMW is that they are unlikely to have been used in storage because architectural units in Neolithic communities traditionally functioned as storage facilities. The presence of lugs and traces of soot on EMW may imply that these pottery containers were used for cooking purposes. On the other hand, only some pieces of the EMW were relatively amenable to daily culinary uses of these vessels. In terms of the prestige value of EMW, it is probably relevant to consider the special uses of these wares. The special uses of these pots fit into the scenario that they appealed to particular community members since they filled a cultural niche that

was required for non-local communication and cooperation. The uniqueness of decorative elements on each sherd of EMW reveals the possibility of associating the pots with particular individuals or events. This allows us to understand that pots were used as identity reflections that functioned as prestige items during commensal events (Nieuwenhuyse et al., 2010, p. 83; Nieuwenhuyse, 2017).

Similarly, the intentionally broken pieces of fruitstands and long necked-jars that were recovered from the *ritual pits* at Tell Ain el-Kerkh further suggest commensal events at the site. As the vessel shapes are associated with in liquid containers, the use of the vessels has been attributed to possible ritual activities. The vessels may have served to hold and serve drinks during these events (Balossi Restelli, 2015, p. 97).

Further investigation on the different uses of consumption vessels was carried out on three ritual pits from the late Pottery Neolithic levels of Tell Ain el-Kerkh. The ash-filled pits contained fragmentary pottery pieces that intentionally had been broken and carefully placed there. The pit deposits included fruitstands and long necked-jars with patterned and burnished decoration. Balossi Restelli claims that these necked jars and fruitstands were probably used for holding liquids and serving drinks during ritual activities. Having said that, food and eating practices have been excluded from these communal gatherings. All these events could be regarded as acts of commensality which correspond to social communality performed by several contributers (ibid., p. 97).

Marie Le Mière believes the dark colored, often burnished and mineral tempered ware from the Jezirah and the northern Levant was mostly used in cooking activities. Le Mière further proposes that the early mineral tempered pots were used as a part of long-distance exchange or resource acquisition. The pots may even have intentionally been put into circulation from village to village. The replacement of the mineral tempered ware by the plant tempered ware that is unsuitable for cooking may imply a break in exchange networks. So, the technical qualities defined as proper to cooking ware were revived over the course of time (Le Mière & Picon, 2003; Le Mière, 2009; Le Mière, 2017).

Stuart Campbell also discusses the processes during the emergence of pottery that witnessed the stages of experimentation, invention and repetitive abandonment in early phases followed by sustainable production in later phases. Campbell argues that new ways of display were linked to new ways of food preparation and consumption. These new ways of display and food preparation play an important role in the emergence of pottery in the Northern Levant, Cilicia, the Euphrates valley and the Balikh valley (Campbell, 2017, p. 181-182).

Stuart Campbell's chronological interpretation suggests a date of pottery production around 6900-6850 cal. BC including sites in Upper Mesopotamia and the Northern Levant. The invention of pottery has been interpreted as having gone through two phases. The earlier phase witnessed experimentation, invention and repetitive abondonment followed by sustainable production in later phases. New ways of display and fixing of status possibly drove the emergence of pottery in the Northern Levant, Cilicia, the Euphrates valley and the Balikh. According to Campbell, new ways of display may have been linked to the new ways of food preparation and consumption as well as the proliferation of specific items (Campbell, 2017, p. 181-182). So, display should be considered one of the functions of early pottery as an eye-catching material that served to link various regions and circles (Nieuwenhuyse & Campbell, 2017, p. 179).

Based on the above context and the review given in Chapter 2, the complex question of the symbolic significance of pottery needs to be re-addressed for the Neolithic societies of the Near East. Thomas (1999) argues that pottery use and circulation is a reflection of systems of meaning invoked in social contexts of food consumption. According to Thomas, "invention" of artifacts, such as pottery, indicate emergence of new ways of thinking, classifying and understanding pre-existing reality (Thomas, 1999, p. 225). Childe (1965) was probably one of the first archaeologists who recognized the symbolic significance of pottery for Neolithic communities when he wrote that the conversion of mud or dust into "stone" like qualities "may have prompted some philosophical questions as to the meaning of substance and sameness" (Childe, 1965, p. 90).

As discussed in Chapter 2 and 3, pottery emerges within the existing material context of the use and development of various related materials and products, such as limestone, sun-dried clay or mud-brick, figurines and plaster. All of these materials were used in various contexts to construct a symbolic environment through which issues of identity, belonging and social connections were invoked. Therefore, it is not surprising that these materials are transformed due to the shift in the social context in which they are deeply rooted. Clearly, there is a shift in the perception of the communities from the Early Neolithic to the Later Neolithic.

From the perspective of social change, the transition from the early Neolithic towards the later Neolithic has been interpreted as a time period of re-organization around the concept of "house". During the later PPNB, social relations of production and consumption may have begun to be centrally instituted within the house (Watkins, 1990, 2004; Flannery, 2002; Kuijt et al., 2011). Therefore, the increasing economic and symbolic independence of households may have led them to leave the place-communities as social pressures increased. This shift can be related to the gradual transformation of PPNB traditions, or the so called "collapse". In fact, the emergence of a diversity of portable objects may be understood within this context, as these households could strategically use their resources, both symbolic and economic, in negotiation of new social relations.

Negotiation of the boundaries of communal and individual social identity with references specific to gender and ancestry appears to be common in early Neolithic. However, the conceptual package of house should be structured as a social unit that based on a specific group of people who were specified by their sex and age. This social configuration was probably increasingly structured as economic independence was gained with increased reliance on domesticates and also with regard to a specific ancestry and gender that may have emerged by the end of the PPNB. Indeed, the so called "PPNB collapse" may be related to this symbolic and economic centralization within the house units whose ties with the rituals of communal ancestry weakened. The emergence of the concept of house culminated in the development of a new social landscape in the aftermath of the PPNB.

In this context, the attachment to the large and long-lived place-communities in such a fluid landscape of mobility may reflect a re-enactment of the select practices and beliefs of the PPN for cooperation. Demonstrations of social continuity through attachment to long-lived places may have become signals of success and prestige through which hierarchical claims to various forms of control and decision making could have been shaped. As a matter of fact, the interactions within such diversity and fluidity of social landscape may have been the foundation of a highly visual symbolic assertion of identities through portable items. The first ceramics in the Near East have emerged at a multiple locations in this context, at about the same time span of the beginning of the 7th millennium BC. The evidence from the earliest Neolithic in the Near East suggests that there is a relationship between the weakening of the skull cult and the dissociation of adult burials from settlement contexts. There is also emergence of a new material domain of portable items, including ceramics that highlighted construction of new relationships between houses.

Further, the fact that the emergence of first pottery occured almost simultaneously in a wide region of the Near East may have been the result of highly structured negotiations of communal vs gendered identities on the background of the development of house. Based on the unique evidence of the Çatal face pot, one could argue that at least some pots are related to the "heads" and ancestral substances. In this sense, community may accept its social transition through eating or drinking from pots. Also, use of bucrania motif on pots, associated with competitive displays, signalled the successful continuity and thus prestige of house. The variations in color, temper and particular nature of the development of shapes and decor may indicate that the concepts of ancestry, body and food were negotiated very differently in different regions. In this sense then, strong regionalized traditions may be developed in the east and the west of the Euphrates.

Immediately following the first introduction, the pottery traditions went through a period of regionalization which was also marked by gradual inflitration of cross-influences. In the West, there was a long time period of obsession with dark-mineral wares with strong burnishing, (sometimes in association with white wares or white

paint), sometimes decorated with impressions, that resisted the inflitration of light color and paint. In the East, the pottery shapes may have been similar to those of the West, but they involved lighter colors with red to brown paint usually along the rim of a cream slipped pot. This was followed by a dominance of light colored- chaff tempered wares, with more complex shapes of carinated and necked vessels and use of paint, incisions and applied decor. Some of these shapes and decorative elements also appeared in the West, however they were produced in the traditions of the local dark wares until the spread of painted traditions in these regions in the early half of the 6th millennium BC.

Along with this variation in decoration, color and temper, we see that the assemblages may still be dominated with simple bowls and jars, while new shapes, specifically the necked jars, begin to make their rare appearances in all regions. Along with the necked jars, globular bowls and jars with collar necks, carinated bowls, shallow plates, rare red slipped and pattern burnished sherds and Hassuna style husking trays may be seen along the Upper Euphrates sites; whereas ledge handles, rim band decoration and impressed decoration continue in Syro-Cilicia with the entrance of select themes of applied decoration. Antropomorphic vessels, although rare may be related to pedestaled, footed, necked and carinated vessels. The use of red slip on the necks and shoulders of vessels reminds of the Hassuna style painting around necks as wavy lines. At the same time, there are indications of a separation of coarse and fine vessels; with possible use of mineral tempered coarse vessels in cooking. In my opinion, this resistance in the west is possibly associated with strong taboos and related practices and displays involved in construction of communal ancestry, food and gender.

When we closely look at the development of settlement patterns along the Euphrates and Syro-Cilicia, we may be able to see that new settlements appeared by the end of the PPNB, such as Kerkh and Tell Sabi Abyad, continued their existence as loosely agglomerated communities throughout the Halaf Period. However, it has been difficult to identify such steady development of settlements along the Tigris and Northern Jazira. With the exception of Çayönü, which is located closer to the

intersection of Tigris and Euphrates catchments at the far north, it has been difficult to identify PPNB settlement in these regions. This situation is interesting, especially considering the existence of some of the first settlements in the region, such as Qermez Dere, Hallan Çemi and Körtik Tepe. While new data from sites such as Salat Cami could have changed this picture, the survey conducted in North Jazira would indicate that the settlement in these regions did not proliferate before the mid 7th millennium BC.

Recent studies suggest that a climatic episode called 8.2 ka BP but effective between 8.6-8.0 ka BP may have brought a cooler-drier climate to the Eastern Mediterranean possibly with a significant negative impact on the subsistence strategies of both settled farmers and the remaining hunter-gatheres of the region. On the one hand, this may have facilitated mixed farming and herding as well as new practices of food production, such as the secondary products along with domestication of cattle (Evershed et al., 2008; Greenfield et al., 1988, 2010; Sherratt, 1983). On the other hand, the last hunter-gatherers of the region may have been gradually attracted toward those communities that demonstrated successful survival through mixed subsistence and settlement strategies during the time period surrounding the harsh conditions. In fact, the development of a landscape that is dotted with communities that used similar ceramics but widely varied in their subsistence practices may have been an outcome of this situation. The introduction and increasing complexity of pottery production during the 7th and 6th millennium BC may indicate that the formal context of food preparation and consumption had become a significant medium for the construction of social cooperation, but more significantly it was also a practice to negotiate social divisions when diverse communities with different social and economic practices began to exchange commodities, people and food with greater frequency. It may be said that some communites, especially those in the West of the Euphrates, were resistant to infiltration of some concepts associated with particular practices and values surrounding material displays of gender and ancestry.

Both Campbell (2008, 2010) and Wengrow (1998) suggest that the rarity and fine craftsmanship found on finely made pottery, together with the emergence of

explicitly "female" shaped vessels may indicate "elite" contexts of segregated decision making which may be related to exchange of partners as well as commodities. Arguably, this became possible through close control of reciprocal acts of hospitality within the walls of increasingly male-oriented buildings where a range of richly decorated serving vessels could be found (Wengrow, 1998). Actually, the highly crafted ceramic vessels that highlighted female bodies may have been used in these special contexts of food consumption where decision making regarding partner exchanges, especially that of females (and their productive and reproductive labor) was practiced. The plain stone vessels, which are rare craft items in the 6th millennium BC, may have been used in these contexts in stark contrast to the busy decoration of clay vessels which narrated stories of the phallocentric domain. In this context, the clay figurine heads may have been broken when females were ready to perform their social roles in marriage, reproduction and food preparation, all of which may have been displayed in communal contexts of food consumption, which were so important in the building of new alliances and perpetuation of houses. In these events, competitive claims to knowledge of ancestry and gender may have been pronounced through the skill demonstrated in the production of pots and their food contents.

All pots may have been strategically displayed in reference to each other as well as in reference to other artifacts at specific events possibly associated with complex rituals of death and regeneration where food was on display in highly structured contexts of consumption. Many of the forms such as globular shapes, carinated vessels and necked jars may have subtly communicated with straight sided, carinated and necked vessels, as they emphasized particular aspects of knowledge, skill and readiness, situated within in particular understandings of gendered displays.

The introduction and fast spread of the Halaf tradition would appear to have occurred on this background. The Halaf tradition carried the select images of the stamps on to the painted pottery and began to narrate the stories of ancestry and gender in much more complex and competitive ways and these stories were recognizable to a wide region. Overall, we may be looking at a situation where there was a shift from

ancestral vessels bringing communities together (by replacing skulls and architectural elaboration), toward emergence of vessels carrying messages of ancestry-fertility-gender-house, all of which are narrated from the pot-producers' experience.

We may suggest that the PPNA stories that connected wild animals and humans were re-narrated with reference to the ever-emergent politics of "place" and "house" in terms of ancestry and gender. I suspect that this may be due to a search for a common past to form new relationships in the new landscape of formerly remote communities. In the landscape of independent house communities, ideas of cooperation may have ruled, nevertheless against strongly competitive and conservative local traditions. The proliferation of pottery along with associated imagery in a wide region of the Near East and south-east Europe may suggest that these communities negotiated a common ground through taboos concerning "food", "body" and "place", some of which may have been expressed through practices of food preparation, serving and consumption (Twiss, 2008; Asouti & Fuller, 2013; Wright, 2014; Hodder & Meskell, 2010, 2011).

During these events, material culture may have acted together with displays of food and body which negotiated various aspects of gender and ancestry. These concerns may have been pronounced during communal celebrations of life-cycles, such as initiation, marriage, death. These ceremonies may have been guided by those who specialized in the ancestral knowledge and who carried the skill to transform the powers of the past, in order to enhance fertility, regeneration and continuity, in the present.

In this context, a certain set of rules and taboos may have been activated in an attempt to enhance social inclusion within specific grids of social power. Insiders and outsiders to these groups were possibly differentiated with reference to new terminologies of kinship and personhood that was negotiated through the situated histories of place, food and body. In such contexts, displays of "appropriate" behavior and skill may have become important in demonstration of similar understandings of the past and the present. For example, the preparation and

consumption of food as well as body may have taken place in context of strict observation of rules with regard to skill and knowledge required in age and gender domains. In such a context, stamps, ceramics and other associated items may have been used to demonstrate an adherence to certain beliefs and taboos pertaining to preparation and consumption of food or other items with regard to sexual difference and gender (Atakuman, 2015). These taboos may have developed when diversity of small and mobile communities with different social and economic practices began to more frequently exchange commodities, people and food during the 7th millennium BC.

In sum, pottery and associated material culture of the 7th millennium BC may reflect local interpretations of a convergent conceptual domain that began to center on the social boundaries with reference to "house" and gender differences stemming from the history of its construction (Fig. 14). This history of concern with gendered domains was increasingly entangled with shifts in sexual division and hierarchical control of labor as well as resource access. In such a context, the material differentiation in displays of female and male bodies with regard to their segregated experience, practice and knowledge may have become pronounced. Nevertheless, it is very difficult to describe this situation in terms of geographical or chronological divisions, common to the traditional academic treatments of the time period. As the situation suggests a transformation that was taking place at different rates and in different ways in different places, creating a social landscape that was dotted with divergent practices and beliefs. I suspect that these differences were brought to a common ground through beliefs concerning "body" which were expressed in taboos of food preperation and consumption, that may be represented in the associated use of pottery and stamps both in domestic and public contexts.

In this context, we may also claim that the wide scale adoption of the so called "Neolithic Package" in Western Anatolia and the Balkans during the 7th millennium BC, was the outcome of a cultural attraction. This may be an interaction of formerly non-sedentary communities into relations with those who established a more secure basis for social and economic capital accumulation through a successful

manipulation of communal vs personal identities. We cannot assume however that the similar shapes or decoration found in these regions can necessarily be interpreted along similar lines although we may guess that similar notions were negotiated. As mentioned earlier, it would be very dificult to describe this situation in terms of "migrating packages", universally acceptable dualities or evolutionary stages; as the situation suggests a transformation that was taking place at different rates at different places, creating a social landscape that was dotted with communities that held divergent practices and beliefs.

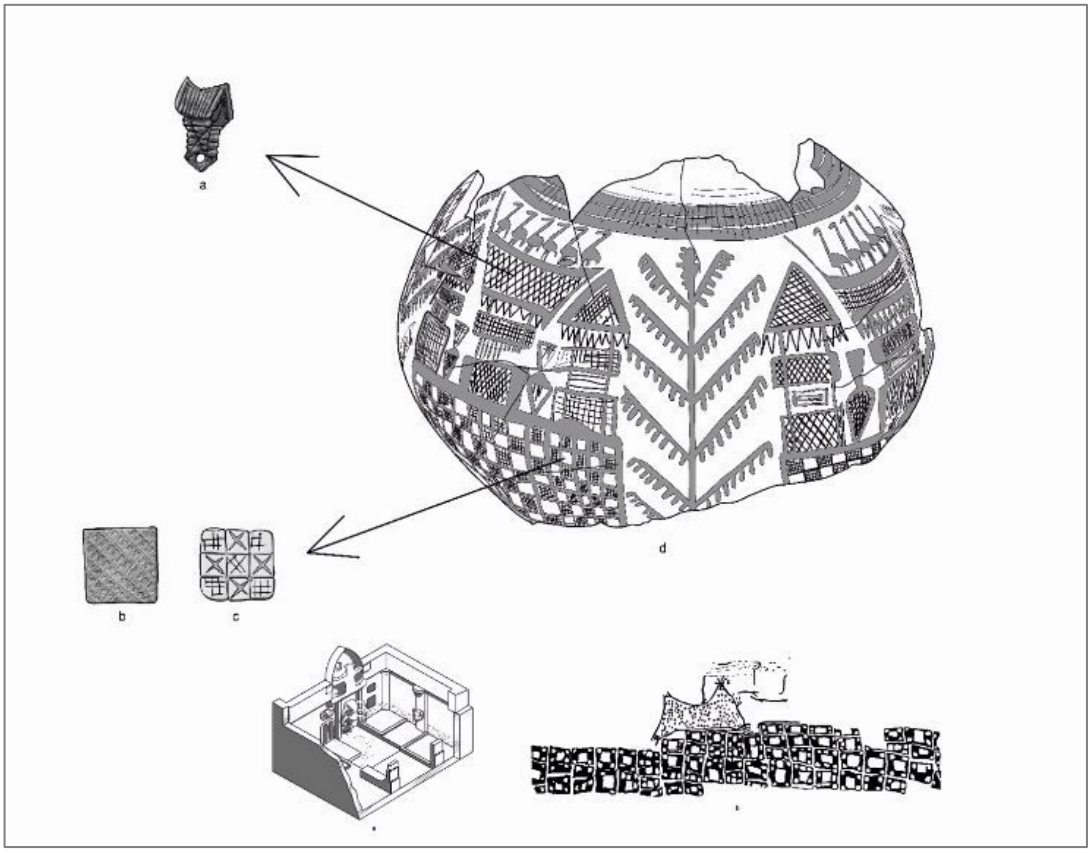

Figure 14. Similar narratives expressed on pottery and stamps of the 6th millennium BC and wall paintings of the late PPNB a) Arpachiyah; b) Domuztepe; c) Arpachiyah; d) Domuztepe "house pot"; e) Çatalhöyük house reconstruction; f) Wall painting from Çatalhöyük (Based on Atakuman 2015: Figures 14, 16)

CHAPTER 5

CONCLUSION

The aim of this thesis has been to investigate the social and symbolic role of early pottery in the Near East. By comparatively analyzing the earliest ceramics found at the sites from the Northern Levant, Northern Mesopotamia and Anatolia, I evaluated the developmental stages of ceramic use in the Near East. More importantly, I examined the relationship of pottery form and technology to the plaster and figurine technologies. Based on the arguments presented throughout the chapters, I came to a conclusion that the emergence of pottery is not an independent "technological invention" necessitated by the agricultural lifestyle. Instead, it is a "symbolic technology" that is deeply embedded in the earlier Neolithic belief and ritual. In other words, pottery restates a relationship between "the human body" and "the house", as an alternative to the Early Neolithic relationship that was formed between "the dead", "the house" and "the communal buildings". As such, pottery must have been an important agent in the negotiation of new social relations in the new economic context of agriculture. Whereas its form evoked familiar ancestral concepts, its portability and use at various social scales facilitated new types of relations to be formed between and within communities. In this context, the reason why pottery was such a late introduction in the Near East may not be due to a lack of knowledge of materials or a lack of need, instead, the reason is more likely to be cultural one, which requires a further contextual evaluation of the shifts in social structure and belief.

In this context, the use of particular materials, the choice of which was inherently meaningful, and the continuity of particular symbolic references should be seen as the mechanisms by which meanings were articulated, created and maintained throughout the PPN and PN. The earliest pottery played a significant role and entangled within the wider context of this network of materiality. Pots referenced

past traditions and at the same time created new meanings within their contemporary contexts. These new meanings are evident in the integration of ceramics within existing modes of practice that were considered as appropriate for particular forms of material culture and within the newly established contexts of use that came about through the inception of ceramics. In terms of the beginnings of pottery production, increasingly complex array of consumption activities was particularly important. These strands of meaning provide authentication for certain forms of social negotiation, such as shared consumption. In this regard, pottery containers could be viewed as objects that negotiate symbolic relations that are further entangles with cultural issues such as the symbolic establishment of space and social structure.

I would suggest that the new image-material domain introduced with the pottery is a reflection of new definitions of personhood and community around the concept of house. Different concepts may have been steered throughout the Neolithic by manipulating animal related origin myths toward anthropocentric myths and associated re-ordering of communal and personal identities. In this transformation, we may suggest that the PPNA stories that connected wild animals and humans were re-narrated with reference to the ever-emergent politics of "place" and "house" in terms of ancestry and gender. I suspect that this may be due to a search for a common past to form new relationships in the new landscape of formerly remote communities. In the landscape of independent house communities, ideas of cooperation may have ruled, nevertheless against strongly competitive and conservative local traditions. The proliferation of pottery along with associated imagery in a wide region of the Near East and south-east Europe may suggest that these communities negotiated a common ground through taboos concerning "food", "body" and "place", some of which may have been expressed through practices of food preparation, serving and consumption (Twiss, 2008; Asouti & Fuller, 2013; Wright, 2014; Hodder & Meskell, 2010, 2011). During these events, material culture may have acted together with displays of food and body which negotiated various aspects of gender and ancestry.

REFERENCES

Akkermans, P.M.M.G. (1988). The soundings at Tell Damishliyya, in M., Loon (eds.), *Hammam et-Turkman I : Report on the University of Amsterdam's 1981-84 excavations in Syria* (Uitgaven van het Nederlands Historisch-Archaeologisch Instituut te İstanbul ; 63), 19–67. İstanbul: Nederlands Historisch-Archeologisch Instituut te Istanbul.

Akkermans, P.M.M.G. (1989). The Neolithic of the Balikh Valley, northern Syria: A first assesment. Paléorient, 15(1), 122-134. DOI: 10.3406/paleo.1989.4490

Akkermans, P.M.M.G. (1993). *Villages in the Steppe : Later Neolithic settlement and subsistence in the Balikh Valley, northern Syria* (Archaeological series; 5). Ann Arbor, Mich.: International Monographs in Prehistory.

Akkermans, P.M.M.G. (2013). Tell Sabi Abyad, or the ruins of the white boy. A short history of research into the late Neolithic of northern Syria, in D., Bonatz & L., Martin (eds.), *100 Jahre archäologische Feldforschungen in Nordost-Syrien: Eine Bilanz: Internationales Symposium des Instituts für Vorderasiatische Archäologie der Freien Universität Berlin und des Vorderasiatischen Museums der Staatlichen Museen zu Berlin vom 21. Juli bis 23. Juli 2011 im Pergamonmuseum : Für das Institut für Vorderasiatische Archäologie der Freien Universität Berlin und das Vorderasiatische Museum der Staatlichen Museen zu Berlin* (Schriften der Max Freiherr von Oppenheim-Stiftung ; Heft 18), 29-43. Wiesbaden: Harrassowitz Verlag.

Akkermans, P., & Schwartz, G. (2003). *The archaeology of Syria : From complex hunter-gatherers to early urban societies (c. 16,000-300 BC)* (Cambridge world archaeology). Cambridge, UK ; New York: Cambridge University Press.

Akkermans, P. M. M. G., Cappers, R., Cavallo, C., Nieuwenhuyse, O.P., Nilhamn, B. Otte, I. (2006). Investigating the Early Pottery Neolithic of northern Syria: New evidence from Tell Sabi Abyad. American Journal of Archaeology, 110, 123–156. Stable URL: https://www.jstor.org/stable/40026362

Arimura, M., Balkan-Atlı, N., Borell, F., Cruells, W., Duru, G., Erim-Özdoğan, A., …, & Özbaşaran, M. (2000). A new neolithic settlement in the Urfa region: Akarçay Tepe, 1999. Anatolia Antiqua, 8, 227-255.

Arimura, M., Balkan-Atlı, N., Borell, F., Cruells, W., Duru, G., Erim-Özdoğan, A., … & Özbaşaran, M. (2001). Akarçay Tepe Excavations, in N. Tuna and J. Öztürk (eds.), *Illısu ve Karkamış Baraj Gölleri Altında Kalacak Arkeolojik Kültür Varlıklarını Kutarma Projesi 1999 Yılı Çalışmaları*, 327-357. Ankara: Orta Doğu Teknik Üniversitesi.

Asouti, E., & Fuller, D. (2013). A Contextual Approach to the Emergence of Agriculture in Southwest Asia. Reconstructing Early Neolithic Plant-Food Production. Current Anthropology, 54(3), 299-345.

Atakuman, Ç. (2013). Deciphering Later Neolithic stamp seal imagery of Northern Mesopotamia. Documenta Praehistorica*, XL,* 247–264. https://doi.org/10.4312/dp.40.20

Atakuman, Ç. (2014). Architectural Discourse and Social Transformation During the Early Neolithic of Southeast Anatolia. Journal of World Prehistory, 27, 1–42. https://doi.org/10.1007/s10963-014-9070-4

Atakuman, Ç. (2015). From Monuments to Miniatures: Emergence of Stamps and Related Image-bearing Objects during the Neolithic. Cambridge Archaeological Journal, 25, 759–788. https://doi:10.1017/S0959774315000396

Aytek, Ö. (2008). *Mezraa Teleilat kazısı bulguları ışığında, güneydoğu Anadolu ve kuzey Suriye ilk çanak çömlekli neolitik dönem bitkisel katkılı çanak çömlek sorunu* (Master's Thesis). İstanbul Üniversitesi Sosyal Bilimler Enstitüsü.

Aytek, Ö. (2010). Technology and Typology of the early local pottery of Mezraa Teleilat, in P., Matthiae & L. Romano (eds.), *Proceedings of the 6th International Congress of the Archaeology of the Ancient Near East: 5 May – 10 May 2009, "Sapienza", Università di Roma (Volume 3)*, 287–294. Wiesbaden: Harrassowitz Verlag.

Bader, N.O. (1993a). The early agricultural settlement of Tell Sotto, in N. Yoffee & J.J. Clark, (eds.), *Early stages in the evolution of Mesopotamian civilization: Soviet excavations in northern Iraq*, 41 – 54. Tucson and London: University of Arizona Press.

Bader, N.O. (1993b). Results of the excavations at the early agricultural site of Kültepe in northern Iraq, in N. Yoffee and J.J. Clark, (eds.), *Early stages in the evolution of Mesopotamian civilization: Soviet excavations in northern Iraq*, 55 – 62. Tucson and London: University of Arizona Press.

Bader, N.O. (1993c). Tell Maghzaliyah: An Early Neolithic Site in Northern Iraq, in N. Yoffee and J.J. Clark, (eds.), *Early stages in the evolution of Mesopotamian civilization: Soviet excavations in northern Iraq*, 7– 40. Tucson and London: University of Arizona Press.

Bailey, D. (2000). *Balkan prehistory: Exclusion, incorporation and identity.* London; New York: Routledge.

Bailey, D. (2005). *Prehistoric figurines: Representation and corporeality in the Neolithic*. London; New York: Routledge.

Baird, D. (2004). Settlement expansion on the Konya Plain, Anatolia 5th-7th centuries AD, in L., Lavan, W., Bowden & C., Machado, C. (eds.), *The Late Antique Countryside*, 219– 246. Oxford: Brill.

Balossi, F. (2004). New data for the definition of the DFBW horizon and its internal developments. The earliest phases of the Amuq sequence revisited. Anatolica, XXX: 109-149.

Balossi Restelli, F. (2006). *The development of "cultural regions" in the Neolithic of the Near East : The "dark faced burnished ware horizon"* (BAR international series; 1482). Oxford: Archaeopress.

Balossi Restelli, F. (2015). Eating at Home and "Dining" Out? Commensalities in the Neolithic and Late Chalcolithic in the Near East, in S., Pollock (eds.), *Between feasts and daily meals: towards an archaeology of commensal spaces* (Berlin Studies of the Ancient World ; volume 30), 75-95. Berlin, Germany: Edition Topoi.

Balossi Restelli, F. (2017). Yumuktepe early ceramic production: Dark versus light coloured Wares and the construction of social identity, in A. Tsuneki, O. Nieuwenhuyse, S. Campbell (eds.), *The emergence of pottery in West Asia*, 107–121. Oxford & Philadelphia: Oxbow Books.

Banning, T. (1998). The neolithic period: Triumphs of architecture, agriculture and Art. Near Eastern Archaeology, 61(4), 188–237. DOI: 10.2307/3210656

Bar-Yosef, O. (2011). Climatic Fluctuations and Early Farming in West and East Asia. Current Anthropology, Vol. 52/4, 175–193. DOI: 10.1086/659784

Barnett, W., & Hoopes, J. (1995). *The emergence of pottery: Technology and innovation in ancient societies (Smithsonian series in archaeological inquiry)*. Washington: Smithsonian Institution Press.

Bashilov, V.A., Bolshakov, O.G., & Kouza, A.V. (1980). The earliest strata of Yarim Tepe 1. Sumer, 36(1-2), 43-64.

Başgelen, N., & Özdoğan, M. (1999). *Neolithic in Turkey: The cradle of civilization: New discoveries* (Ancient Anatolian civilizations series; 3). İstanbul: Archaeology and Art Publications.

Bernbeck, R. (2017). Merging clay and fire: Earliest evidence from the Zagros Mountains, in A. Tsuneki, O. Nieuwenhuyse, S. Campbell (eds.), *The emergence of pottery in West Asia*, 122–146. Oxford & Philadelphia: Oxbow Books.

Bienert, H.D. (1991). Skull cult in the prehistoric Near East. Journal of Prehistoric Religion 5: 9–23.

Bonogofsky, M. (2003). Neolithic plastered skulls and railroading epistemologies. Bulletin of the American Schools of Oriental Research, 331, 1–10. Stable URL: http://www.jstor.org/stable/1357755

Bonogofsky, M. (2005). A bioarchaeological study of plastered skulls from Anatolia: New discoveries and interpretations. International Journal of Osteoarchaeology, 15, 124–135. DOI: 10.1002/oa.749

Bonogofsky, M. (2006). Complexity in context: Plain, painted and modeled skulls from the Neolithic Middle East, in M. Bonogofsky (eds.), *Skull collection, modification and decoration, European Association of Archaeologists. Annual Meeting 2005: University College Cork* (BAR international series; 1539), 15–28. Oxford: Archaeopress: Hadrian Books.

Braidwood, R. J., Braidwood, L. (1960). *Excavations in the plain of Antioch*. Chicago: University of Chicago Press.

Broman Morales, V. (1990). *Figurines and other clay objects from Sarab and Çayönü* (Oriental Institute communications ; no. 25). Chicago, Ill.: Oriental Institute of the University of Chicago.

Brown, J. A. (1989). The beginnings of pottery as a socio-economic process, in S.E. van der Leeuw & R. Torrence (eds.), *What's New? A closer look at the process of innovation*, 203–224. London: Unwin Hyman.

Budja, M. (2006). The transition to farming and the ceramic trajectories in Western Eurasia. From ceramic figurines to vessels. Documenta Praehistorica, 33, 183-201. DOI: 10.4312/dp.33.17

Budja, M. (2007). The dawn of ceramics. In M. Blečić, M. Črešnar, B. Hänsel, A. Hellmuth, E. Kaiser & C. Metzner-Nebelsick (eds.), Scripta praehistorica in honorem Biba Teržan, 41–55. Ljubljana, Narodni muzej Slovenij, Situla, 44.

Budja, M. (2010). The archaeology of death: From 'social personae' to 'relational personhood'. Documenta Praehistorica, 37(1), 43-54. DOI: 10.4312/dp.37.4

Campbell, S., Baird, D. (1990). Excavations at Ginnig and the aceramic to early ceramic neolithic sequence in north Iraq. Paléorient, 16(2), 65–78.

Campbell, S. (1992). *Culture, chronology and change in the later neolithic of north Mespoptamia* (PhD Thesis). University of Edinburgh.

Campbell, S. (2008). Feasting and dancing: gendered representation and pottery in later Mesopotamian prehistory, in Bolger, D. (eds.), *Gender through time in the ancient Near East* (Gender and archaeology series). Lanham, MD: AltaMira Press.

Campbell , S. & A. Fletcher (2010). Questioning the Halaf - Ubaid transition, in Carter, R., & Philip, G.(eds.), *Beyond the Ubaid: Transformation and integration in the late prehistoric societies of the Middle East* (Studies in ancient oriental civilization ; no. 63), 69 – 83. Chicago, Ill.: Oriental Institute of the University of Chicago.

Campbell, S. (2017). Absolute dating and the early pottery of South-west Asia, in A. Tsuneki, O. Nieuwenhuyse, S. Campbell (eds.), *The emergence of pottery in West Asia*, 165–187. Oxford & Philadelphia: Oxbow Books.

Campbell, S., Daems, A. (2017). Figurines in prehistoric Mesopotamia, in T. Insoll (eds.), *The Oxford handbook of prehistoric figurines* (Oxford handbooks). Oxford [United Kingdom] ; New York: Oxford University Press.

Caneva, I., & Sevin, V. (2004). *Mersin–Yumuktepe : A reappraisal (Collana del Dipartimento (Università degli studi di Lecce. Dipartimento di beni culturali) ; 12)*. Galatina: Congedo.

Chapman, J. (2000). *Fragmentation in archaeology : People, places, and broken objects in the prehistory of south eastern Europe*. London ; New York: Routledge.

Childe, V. (1965). *Man makes himself*. London: Watts.

Contenson H. de (1963). *New correlations between Ras Shamra and Amiq (Amuq)*. American Schools of Oriental Research, 172, 35–40.

Conroy, R. (2005). *Consuming symbols: a study into the appearance and early role of ceramics in southeastern Turkey, northern Syria and northern Iraq from a social perspective* (PhD thesis). University of Manchester.

Cruells, W., (2008). The Proto-Halaf: Origins, Definition, Regional Framework and Chronology, in J. M. Cordoba, M. Molist, M. C. Perez, I. Rubio & S. Martínez, (eds.), *Proceedings of the 5th International Congress on the Archaeology of the Ancient Near East* (3-8 april 2006), Vol III, 671–689. Madrid: UAM, Ediciones.

Crown, P.L., Wills, W.H. (1995). Economic intensification and the origins of ceramic containers in the American Southwest, in W.K. Barnett and J.W. Hoopes (eds.), *The emergence of pottery technology and innovation in ancient societies*, 241–254. Washington: Smithsonian Institution.

Çilingiroğlu, Ç., (2005). The concept of "Neolithic Package": considering its meaning and applicability, in M. Budja (eds.), *12th Neolithic Studies*, 1–13. Documenta Praehistorica, 32. DOI: 10.4312/dp.32.1

Dietler, M., Hayden, B. (2001). *Feasts: Archaeological and ethnographic perspectives on food, politics, and power*. Washington: Smithsonian Institution Press.

Düring, B. S., & Marciniak, A. (2006). Households and communities in the central Anatolian Neolithic. Archaeological Dialogues 12(2): 165-187. doi:10.1017/S138020380600170X

Evershed, R.P., Payne, S., Sherratt, A.G., Copley, M.S., Coolidge, J., Urem-Kotsu, D., ……. Burton, M.M. (2008). Earliest date for milk use in the Near East and southeastern Europe linked to cattle herding. Nature, 455(7212), 528-531. DOI: 10.1038/nature07180

Flannery, K.V. (2002). The origins of the village revisited: from nuclear to extended households. American Antiquity 67(3): 417-433. DOI: 10.2307/1593820

Fletcher, B., Baird, D., Spataro, M. & Fairbairn, A. (2017). Early Ceramics in Anatolia: Implications for the Production and Use of the Earliest Pottery. The Evidence from Boncuklu Höyük. Cambridge Archaeological Journal 27(2): 351-369. DOI: 10.1017/S0959774316000767

Gamble, C. (2007). *Origins and revolutions : Human identity in earliest prehistory*. New York: Cambridge University Press.

Goren, Y., Goring-Morris, A.N., & Segal, I. (2001). The technology of skull modelling in the Pre-Pottery Neolithic B (PPNB): Regional variability, the relation of technology and iconography and their archaeological implications. Journal of Archaeological Science, 28(7), 671–690. doi:10.1006/jasc.1999.0573

Gourdin, W.H., Kingery, W.D. (1975). The beginnings of pyrotechnology: Neolithic and Egyptian lime plaster. Journal of Field Archaeology, 2(1–2), 133–150. DOI: 10.1179/009346975791491277

Greenfield, H. (2010). The Secondary Products Revolution: The past, the present and the future. World Archaeology, 42(1), 29-54. DOI: 10.1080/00438240903429722

Haaland, R. (1997). Emergence of sedentism: New ways of living, new ways of symbolizing. Antiquity, 71(272), 374-385.

Haddow, S.D., Knüsel C.J. (2017). Skull retrieval and secondary burial practices in the neolithic Near East: Recent insights from Çatalhöyük, Turkey. Bioarchaeology International, 1(1–2), 52–71. DOI: 10.5744/bi.2017.1002

Hauptmann,H. (1999). The Urfa Region, in Başgelen, N., Özdoğan, M. (eds.), *Neolithic in Turkey: The cradle of civilization: New discoveries* (Ancient Anatolian civilizations series ; 3). İstanbul: Arkeoloji ve Sanat Yayınları.

Hayden, B. (1990). Nimrods, piscators, pluckers, and planters: The emergence of food production. Journal of Anthropological Archaeology, 9(1), 31–69.

Hayden, B. (1995). The emergence of prestige technologies and pottery, in W. K., Barnett, and J. W. Hoopes (eds.), *The emergence of pottery. Technology and innovation in ancient societies (Smithsonian series in archaeological inquiry)*, 257–265. Washington: Smithsonian Institution Press.

Henrickson, E.F., McDonald, M.M.A. (1983). Ceramics form and function. An ethnographic search and an archaeological application. American Anthropologist, 85, 640–643. http://dx.doi.org/10.1525/aa.1983.85.3.02a00070

Henry, D.O. (2013). The Natufian and the Younger Dryas, in O. Bar-Yosef & F.R. Valla (eds.), *Natufian foragers in the Levant Terminal Pleistocene social changes in Western Asia*, 584–610. Michigan: International Monographs in Prehistory, Archaeological Series 19.

Hodder, I., and Meskell, L. (2011). A "Curious and Sometimes a Trifle Macabre Artistry" Some Aspects of Symbolism in Neolithic Turkey. Current Anthropology, 52(2), 235–263. Stable URL: http://www.jstor.org/stable/10.1086/659250

Hodder, I. (2012a). *Entangled : An archaeology of the relationships between humans and things*. Malden, MA: Wiley-Blackwell.

Hodder, I. (2012b). Çatalhöyük. A summary of recent work concerning architecture, in B, Söğüt & A., Tırpan (eds.), *Stratonikeia'dan Laginaya : Ahmet Adil Tırpan armağanı = From Stratonikeia to Lagina ; Festschrift in honour of Ahmet Adil Tırpan*, 303–314. İstanbul: Ege Yayınları.

Huysecom, E., Rasse, M., Lespez, L., Neumann, K., Fahmy, A., Ballouche, A., ... & Soriano, S. (2009). The emergence of pottery in Africa during the 10th millennium cal BC: new evidence from Ounjougou (Mali). Antiquity 83, 905–917. DOI: 10.1017/s0003598x00099245

Iwasaki, T., Nishino, H., & Tsuneki, A. (1995). The prehistory of the Rouj Basin, Northwest Syria. A Preliminary Report. Anatolica; Annuaire International Pour Les Civilisations De L'Asie Antérieure, 21, 143–187.

Karul, N., Ayhan, A. and Özdoğan, M. (2001). 1999 excavations at Mezraa Teleilat, in N. Tuna and J. Öztürk (eds.), *Illısu ve Karkamış Baraj Gölleri Altında Kalacak Arkeolojik Kültür Varlıklarını Kutarma Projesi 1999 Yılı Çalışmaları*, 144–174. Ankara: Orta Doğu Teknik Üniversitesi.

Kingery, D., Vandiver, P.B. & Prickett, M. (1988). The Beginnings of Pyrotechnology, Part II: Production and Use of Lime and Gypsum Plaster in the Pre-Pottery Neolithic Near East. Journal of Field Archaeology, 15(2), 219-243. DOI: 10.1179/009346988791974501

Kirkbride, D. (1972). Umm Dabaghiyah 1971: A preliminary report. An early ceramic farming settlement in marginal north central Jezira, Iraq. Iraq 34(1), 1–15. Stable URL: http://www.jstor.org/stable/4199926

Kirkbride, D. (1973). Umm Dabaghiyah 1973: A third preliminary report. Iraq 35(2): 205–209. Stable URL: http://www.jstor.org/stable/4199965

Kirkbride, D. (1975). Umm Dabaghiyah 1974: A fourth preliminary report. Iraq 37(1): 3–10. Stable URL: http://www.jstor.org/stable/4199999

Knappett, C., & Malafouris, L. (2008). *Material Agency: Towards a Non-Anthropocentric Approach*. Boston, MA: Springer US.

Knappett, C. (2011). *An archaeology of interaction : Network perspectives on material culture and society*. Oxford ; New York: Oxford University Press.

Knappett, C., Malafouris, L., & Tomkins P. (2010). Ceramics (as containers), in D. Hicks and M. Beaudry (eds.) *The Oxford Handbook of Material Culture Studies*, 582–606. Oxford: Oxford University Press.

Kuijt, I. (1996). Negotiating equality through ritual: A consideration of late Natufian and Pre-Pottery Neolithic A period mortuary practices. Journal of Anthropological Archaeology, 15, 313–336. DOI: 10.1006/jaar.1996.0012

Kuijt, I. (2000). Keeping the peace: Ritual, skull caching, and community integration in the Levantine Neolithic, in I. Kuijt (eds*.), Life in Neolithic Farming Communities: Social organization, identity, and differentiation*, 137–164. London: Kluwer Academic / Plenum Publishers.

Kuijt, I. (2001). Place, death, and the transmission of social memory in early agricultural communities of the Near Eastern Pre-Pottery Neolithic, Archeological Papers of the American Anthropological Association, 10(1), 80–99.
DOI: 10.1525/ap3a.2001.10.1.80

Kuijt, I. (2008). The regeneration of life: Neolithic structures of symbolic remembering and forgetting, Current Anthropology 49(2), 171–197.
DOI: 10.1086/526097

Kuijt, I., Chesson, M.S. (2005). Lumps of clay and pieces of stone: Ambiguity, bodies, and identity as portrayed in neolithic figurines, in S., Pollock & R., Bernbeck (eds.), *Archaeologies of the Middle East : Critical perspectives (Blackwell studies in global archaeology* ; (4), 152–183. Malden, MA: Blackwell Pub.

Kuijt, I., Guerrero, E., Molist, M. & Anfruns, J. (2011). The changing Neolithic household: Household autonomy and social segmentation, Tell Halula, Syria. Journal of Anthropological Archaeology, 30(4), 502-522.
https://doi.org/10.1016/j.jaa.2011.07.001

Kuzmin, Y.V. (2002). The earliest centers of pottery origin in the Russian Far East and Siberia: review of chronology for the oldest Neolithic cultures. Documenta Praehistorica, XXIX, 37–46. DOI: 10.4312/dp.29.4

Le Mière, M. (1983). Pottery and white ware, in Akkermans, P., Boerma, J., Clason, A., Hill, S., Lohof, E., Meiklejohn, C., . . . Van Zeist, W. (eds.), *Bouqras Revisited: Preliminary Report on a Project in Eastern Syria*, 335-372. Proceedings of the Prehistoric Society, 49(1).

Le Mière, M. and Nieuwenhuyse, O. (1996). The Prehistoric Pottery, in P.M.M.G. Akkermans (eds.), *Tell Sabi Abyad: The Late Neolithic settlement. Report on the excavations of the University of Amsterdam (1988) and the National Museum of*

Antiquities Leiden (1991-1993) in Syria (II), 119-284. İstanbul: Nederlands Historisch Archaeologisch Instituut.

Le Mière, M. and Picon, M. (2003). Appearance and first development of cooking and "noncooking" Ware concepts in the Near East, in S. Di Pierrro, V. Serneels, M. Maggetti (eds.), *Ceramic in the society, proceedings of the 6th European meeting on Ancient Ceramics 3-6 October 2001*, 175-188. Fribourg, Fribourg University Press.

Le Mière, M. (2009). Early Neolithic pottery from the Near East: The question of temper and its implications, in L. Astruc, A. Gaulon, L. Salanova (eds.), *Methodes d'approche des premieres productions ceramiques: etude de cas dans les Balkans et au Levant, Berichte de Kolloquiums in Nanterre, Maison de l'Archeologie et de l'Ethnologie, 28. Februar 2006*, 73-80. Rahden/Westf.: VML GmbH.

Le Mière, M. (2017). The earliest pottery of West Asia: Questions concerning causes and consequences, in A. Tsuneki, O. Nieuwenhuyse, & S. Campbell (eds.), *The emergence of pottery in West Asia*, 18–26. Oxford & Philadelphia: Oxbow Books.

Le Mière, M., Özbaşaran, M. & Picon, M. (2017). Dark and light colour in early Near Eastern pottery: from technique to decoration, in O., Nieuwenhuyse, I., Mateiciucová, & W., Cruells (eds.), *Painting pots, painting people : Late Neolithic ceramics in ancient Mesopotamia*. Oxford ; Havertown, PA: Oxbow Books.

Lesure R. (2011). *Interpreting ancient figurines: Context, comparison and prehistoric art*. New York: Cambridge University Press.

Lloyd, S., Safar, F., & Braidwood, R.J. (1945). Tell Hassuna. Excavations by the Iraq Government Directorate General of Antiquities in 1943-4. Journal of Near Eastern Studies, 4, 255–289.

Lupton, D. (1996). *Food, the body, and the self*. London ; Thousand Oaks, Calif.: Sage Publications.

Matthews, R., & European Center for Upper Mesopotamian Studies. (2000). *The early prehistory of Mesopotamia, 500,000 to 4500 BC* (Subartu; 5). Turnhout, Belgium: Brepols.

Merpert, N.Y., and Munchaev, R.M. (1987). The earliest levels at Yarim Tepe I and Yarim Tepe II in northern Iraq. Iraq, 49, 1–36.

Merpert, N.Y., and Munchaev, R.M. (1993). Yarim Tepe I, in N., Yoffee and J.J., Clark (eds.), *Early stages in the evolution of Mesopotamian civilization: Soviet excavations in northern Iraq*, 73–115. Tucson and London: University of Arizona Press.

Mills, B.J. (1989). Integrating functional analyses of vessels and sherds through models of ceramic assemblage formation. World Archaeology, 21(1), Ceramic Technology, 133–147.

Miyake, Y. (2003). Pottery, in T. Iwasaki and A. Tsuneki (eds.), *Archaeology of the Rouj basin: A . Al-Shark 2. Regional study of the transition from village to city in northwest Syria*, *Vol. I, Department of Archaeology, Institute of History and Anthropology*, 119–141. Tsukuba: University of Tsukuba.

Miyake, Y. (2005). Archaeological survey at Salat Cami Yanı. Anatolica, 31, 1-17. DOI: 10.2143/ANA.31.0.2011750

Miyake, Y. (2007a). 2005 Yılı Diyarbakır İli, Salat Camii Yanı Kazısı, *28. Kazı Sonuçları Toplantısı 2. Cilt,* 283–294. Ankara: T.C. Kültür ve Turizm Bakanlığı Kültür Varlıkları ve Müzeler Genel Müdürlüğü.

Miyake, Y. (2007b). Salat Cami Yanı: Dicle havzası'nda çanak çömlekli neolitik döneme ait yeni bir yerleşme, in M. Özdoğan and N. Başgelen (eds.), *Türkiye'de neolitik dönem. Yeni kazılar, yeni bulgular*, 37–46. İstanbul: Arkeoloji ve Sanat Yayınları.

Miyake, Y. (2008). 2006 yılı Diyarbakır İli, Salat Camii Yanı Kazısı, *29. Kazı Sonuçları Toplantısı 3. Cilt*, 211-222. Ankara: T.C. Kültür ve Turizm Bakanlığı Kültür Varlıkları ve Müzeler Genel Müdürlüğü.

Miyake, Y. (2009). Diyarbakır İli, Salat Camii Yanı Kazısı, *30. Kazı Sonuçları Toplantısı, 2. Cilt*, 101–112. Ankara: T.C. Kültür ve Turizm Bakanlığı Kültür Varlıkları ve Müzeler Genel Müdürlüğü.

Miyake, Y. (2011). Salat Cami Yanı. A pottery neolithic site in the Tigris Valley, in M. Özdoğan, N. Başgelen & P. Kuniholm (eds.), *The neolithic in Turkey. New excavations & new research. The Tigris basin*, 129–149. İstanbul: Archaeology & Art Publications.

Montana, G. (2017). Ceramic raw materials, in A. Hunt (eds.), *The oxford handbook of archaeological ceramic analysis*, 87–101. Oxford: Oxford University Press.

Moore, A.M.T (1978). *The Neolithic of the Levant* (PhD thesis). University of Oxford.

Morsch, M.G.F. (2002). Magic figurines? Some remarks about the clay objects of Nevali Çori, in H., Gebel, B., Hermansen, C., Jensen (eds), *International Congress on the Archaeology of the Ancient Near East, Magic practices and ritual in the Near Eastern Neolithic: Proceedings of a workshop held at the 2nd International Congress on the Archaeology of the Ancient Near East (ICAANE), Copenhagen University, May, 2000* (Studies in early Near Eastern production, subsistence, and environment ; 8), 145–162. Berlin: Ex oriente.

Nakamura, T., Taniguchi, Y., Tsuji, S., & Oda, H. (2001). Radiocarbon dating of charred residues on the earliest pottery in Japan, in I., Carmi & E., Boaretto (eds.), *Proceedings of the 17th International 14C Conference*. Radiocarbon 40, 1129–1138. https://doi.org/10.1017/S0033822200041783.

Naumov, G. (2008). The vessel as a human body: Neolithic anthropomorphic vessels and their reflection in later periods, in I., Berg (eds.), *Breaking the mould: challenging the past through pottery*, 93–101. Oxford: British Archaeological Research.

Nieuwenhuyse, O.P. (2007). *Plain and painted pottery : The rise of late Neolithic ceramic styles on the Syrian and northern Mesopotamian plains (Papers on archaeology of the Leiden Museum of Antiquities; 3)*. Turnhout, Belgium: Brepols.

Nieuwenhuyse, O.P., Akkermans, P.M.M.G., & van der Plicht, J. (2010). Not so coarse, nor always plain. The earliest pottery of Syria. Antiquity, 84, 71–85.

Nieuwenhuyse, O.P. (2013). The Proto Hassuna culture in the Khabur headwaters: A western neighbour's view, in Y. Nishiaki, K. Kashima, & M. Verhoeven (eds), *Neolithic archaeology in the Khabur Valley, Upper Mesopotamia and beyond* (Studies in early Near Eastern production, subsistence and environment; 15), 110–138. Berlin, Ex oriente.

Nieuwenhuyse, O.P. (2017). The Initial Pottery Neolithic at Tell Sabi Abyad, Northern Syria, in A. Tsuneki, O. Nieuwenhuyse, S. Campbell (eds.), *The emergence of pottery in West Asia*, 27–39. Oxford & Philadelphia: Oxbow Books.

Nieuwenhuyse, O.P., Campbell, S. (2017). Synthesis: The Emergence of Pottery in West Asia, in A. Tsuneki, O. Nieuwenhuyse, S. Campbell (eds.), *The emergence of pottery in West Asia*, 167–191. Oxford & Philadelphia: Oxbow Books.

Nilhamn B., Astruc L., Gaulon A. (2009). White ware – Near Eastern plaster containers, in L. Astruc, A. Gaulon, L. Salanova (eds.), *Méthodes d'approche des premières productions céramiques : étude de cas dans les Balkans et au Levant ; table-ronde de la Maison de l'Archéologie et de l'Ethnologie (Nanterre, France), 28 février 2006 = Methoden zur Untersuchung der ersten Keramikproduktion : Beispiele auf dem Balkan und der Levante ; Berichte des Kolloquiums in Nanterre, Maison de l'Archéologie et de l'Ethnologie, 28. Februar 2006* (Internationale Archäologie. Arbeitsgemeinschaft, Symposium, Tagung, Kongress ; Bd. 12), 63–72. Rahden: VML, Verlag Marie Leidorf.

Nishiaki, Y. (1991). Chipped stone artifacts, in T. Matsutani (eds.), *Tell Kashkashok: The Excavations at Tell No.2*, 40–58. Tokyo: The University of Tokyo.

Nishiaki, Y., Le Mière, M. (2005). The oldest pottery neolithic of upper Mesopotamia: new evidence from Tell Seker al-Aheimar, the Khabur, northeast Syria. Paléorient 31(2): 55-68. Stable URL: https://www.jstor.org/stable/41496739

Nishiaki, Y. (2016). Tell Seker al-Aheimar (Hassake), in Y., Kanjou & A., Tsuneki, A. (eds.), *A history of Syria in one hundred sites (Archaeopress archaeology)*, 69–72. Oxford: Archaeopress Publishing.

Odaka, T. (2013). Neolithic pottery in the northern Levant and its relations to the east, in Y., Nishiaki, K., Kashima, & M., Verhoeven (eds.), *Neolithic archaeology in the Khabur Valley, Upper Mesopotamia and beyond* (Studies in early Near Eastern production, subsistence, and environment ; 15), 205–217. Berlin: Ex oriente.

Odaka, T. (2017). The emergence of pottery in the northern Levant: A recent view from Tell el-Kerkh, in A. Tsuneki, O. Nieuwenhuyse, S. Campbell (eds.), *The emergence of pottery in West Asia*, 82–94. Oxford & Philadelphia: Oxbow Books.

Orton, C., Tyers, P., & Vince, A. (1993). *Pottery in Archaeology*. Cambridge: Cambridge University Press.

Oudemans, T.E.M. (2007). Applying organic residue analysis in ceramic studies – a functional approach, in A. van As, C.L. Hofman, G.A. London, M.J. Versluys, (eds.), *Leiden Journnal of Pottery Studies* (23), 5–20. Leiden: Faculty of Archaeology, Leiden University.

Ökse, T. (2012). *Önasya arkeolojisinde çanak çömlek : Teknik özellikler, biçimler, Türkçe, İngilizce, Almanca ve Fransızca terimler*. Galatasaray, İstanbul: Arkeoloji ve Sanat Yayınları.

Özbaşaran, M. and Duru, G. (2011). Akarçay Tepe: A PPNB and PN settlement in the middle Euphrates – Urfa, in M. Özdoğan, N. Başgelen, P. Kuniholm (eds.), *The neolithic in Turkey: New excavations and new research: The Euphrates Basin* , 165–202. İstanbul: Archaeology and Art Publications.

Özdoğan, M., Özdoğan, A. (1993). Pre-Halaf pottery of southeastern Anatolia, with special reference to the Çayönü sequence, in M. Frangipane, H. Hauptmann, M. Liverani, P. Matthiae & M. Mellink (eds.), *Between the rivers and over the mountains*, 87-103. Rome: Archaelogica Anatolica et Mesopotamica Alba Palmieri Dedicata.

Özdoğan A. (1999). Çayönü, in Başgelen, N., Özdoğan, M. (eds.), *Neolithic in Turkey: The cradle of civilization: New discoveries* (Ancient Anatolian civilizations series ; 3), 35–63. İstanbul: Arkeoloji ve Sanat Yayınları.

Özdoğan, M. (2009). Earliest use of pottery in Anatolia, in D. Gheorghiu (eds.), *Early Farmers, Late Foragers and Ceramic Traditions: On the Beginning of Pottery in the Near East and Europe*, 22–43. Cambridge: Cambridge Scholars Publish.

Özdoğan, M. (2011). Mezraa Teleilat, in M. Özdoğan, N. Başgelen, P. Kuniholm (eds.), *The neolithic in Turkey: New excavations and new research: The Tigris Basin*, 203–260. İstanbul: Archaeology and Art Publications.

Özdoğan, M., Karul, N., & Özdoğan, E. (2011). Mezraa Teleilat 2002 Kazıları, in N. Tuna, J. Greenhalg, J.Velibeyoglu (eds.) *Ilısu ve Karkamıs Baraj Gölleri Altında Kalacak Arkeolojik Kültür Varlıklarını Kurtarma Projesi 2002 Yılı Çalışmaları*, 35–119. Ankara: Orta Doğu Teknik Üniversitesi.

Özdoğan, M. (2014). A new look at the introduction of the Neolithic way of life in Southeastern Europe. Changing paradigms of the expansion of the Neolithic way of life. Documenta Praehistorica, XLI, .33-49. DOI: 10.4312\dp.41.2

Özdöl, S. (2006). *Anadolu'da erken neolitik dönem çanak çömlek kültürleri ve Çatalhöyük örneği* (PhD Thesis). Ege Üniversitesi.

Özdöl, S. (2012). *The development and traditions of pottery in the Neolithic of the Anatolian plateau : Evidence from Çatalhöyük, Süberde and Erbaba* (BAR international series ; 2439). Oxford: Archaeopress.

Pollock, S. (2015). *Between feasts and daily meals: towards an archaeology of commensal spaces (Berlin Studies of the Ancient World ; volume 30)*. Berlin, Germany: Edition Topoi.

Renfrew, C., Bahn, B. (2005). *Archaeology: The key concepts*. New York: Routledge.

Rhodes, D. (1963). *Clay and Glazes for the Potter*. Philadelphia: Chilton Company.

Rice, P.M. (1987). *Pottery Analysis: a source book*. Chicago: The University of Chicago Press.

Rice, P.M. (1996). Recent ceramic analysis: 1. Function, style, and origins. Journal of Archaeological Research, 4(2), 133–163.

Rice, P.R. (1999). On the origins of pottery. Journal of Archaeological Method and Theory, 6/1, 1–54. DOI: 10.1023/A:1022924709609

Rice, P.M. (2005). *Pottery Analysis, second edition: a source book*. Chicago: The University of Chicago Press.

Riis, P.J. & Thrane, H. (1974). *Sūkās. III, The Neolithic periods*. København: Munksgaard.

Roffet-Salque, M., Dunne, J., Altoft, D., Casanova, E., Cramp, L., Smyth, J., ... Evershed, R. (2017). From the inside out: Upscaling organic residue analyses of archaeological ceramics. Journal of Archaeological Science: Reports, 16, 627–640. https://doi.org/10.1016/j.jasrep.2016.04.005

Rollefson G.O. (2000). Ritual and social structure at Neolithic ‘Ain Ghazal, in I., Kuijt, (eds.), *Life in Neolithic farming communities : Social organization, identity, and differentiation* (Fundamental issues in archaeology), 165 – 209 . New York: Kluwer Academic/Plenum.

Rosenberg, M., Peasnall, B.L. (1998). A report on soundings at Demirköy Höyük: an Aceramic Neolithic site in eastern Anatolia. Anatolica 24: 195−207. DOI: 10.2143/ANA.24.0.2015480

Rosenberg, M., Redding, R.W. (2000). Hallan Çemi and early village organization in eastern Anatolia, in I., Kuijt, (eds.), *Life in Neolithic farming communities : Social organization, identity, and differentiation* (Fundamental issues in archaeology), 39 – 62 . New York: Kluwer Academic/Plenum.

Roux, V. (2017). Ceramic manufacture: the Chaîne Opératoire approach, in A. Hunt (eds.), *The Oxford handbook of archaeological ceramic analysis*, 101–113. Oxford: Oxford University Press.

Santacreu, D. (2014). *Materiality, techniques and society in pottery production : The technological study of archaeological ceramics through paste analysis*. Warsaw, Poland: DE GRUYTER OPEN.

Schmidt, K. (2007). *Taş Çağı avcılarının gizemli kutsal alanı Göbekli Tepe, En eski tapınagı yapanlar*. İstanbul: Arkeoloji ve Sanat Yayınları.

Shepard, A. (1965). *Ceramics for the archaeologist*. Washington, D. C.: Carnegie Institution of Washington.

Skibo, J. (2013). *Understanding pottery function (Manuals in archaeological method, theory, and technique)*. New York, NY: Springer.

Pavlů, I. (1996). *Pottery origins. Initial forms, cultural behavior and decorative styles*. Prague: KAROLINUM, Vydavatelstvf Univerzity Karlovy.

Sassaman, K.E. (1993). *Early pottery in the Southeast: Tradition and innovation in cooking technology*. Tuscaloosa: The University of Alabama Press.

Shanks, M., Tilley, C. (1992). *Re-constructing archaeology: Theory and practice*. London: Routledge.

Sherratt, A. (1983). The secondary exploitation of animals in the Old World. World Archaeology, 15(1), 90–104.

Smith, P. (1974). Ganj Dareh Tepe. Paléorient, 2(1), 207–209.

Thomas, J. (1993). Discourse, totalization and “the Neolithic”, in C. Tilley, *Interpretative archaeology* (Explorations in anthropology). Providence: Berg. Interpretive archaeology: A reader. London: New York: Leicester University Press.

Thomas, J. (1999). *Understanding the neolithic*. London; New York: Routledge.

Thomas, J. (2000). *Interpretive archaeology: A reader*. London: New York: Leicester University Press.

Thuesen, I. (1988). *Hama: Fouilles et recherches de la fondation Carlsberg 1931–1938. The Pre-and Protohistoric periods*. Kobenhavn: National Museet.

Thuesen, I., & Gwozdz, R. (1982). Lime plaster in Neolithic Hama, Syria. A preliminary report. Paléorient, 8(2), 99-103.
DOI: http://dx.doi.org/10.3406/paleo.1982.4325

Tilley, C. (1996). *An ethnography of the Neolithic : Early prehistoric societies in southern Scandinavia (New studies in archaeology)*. Cambridge; New York: Cambridge University Press.

Tite, M.S. (1999). Pottery production, distribution, and consumption: The contribution of the physical sciences. Journal of Archaeological Method and Theory, 6(3), 181–233.

Trigger, B. (1989). *A history of archaeological thought*. Cambridge University Press.

Tsuneki, A., and Miyake, Y. (1996). The earliest pottery sequence of the Levant: New data from Tell el-Kerkh 2, Northern Syria. Paleorient, 22(1), 109–123.
doi: 10.3406/paleo.1996.4629

Tsuneki, A., Hydar, J., Miyake, Y., Akahane, S., Nakamura, T., Arimura, M., Sekine, S., (1997). First preliminary report of the excavations at Tell el-Kerkh, northwestern Syria. Bulletin of the Ancient Orient Museum, 18, 1–37.

Tsuneki, A., Hydar, J., Miyake, Y., Akahane, S., Arimura, M., Nishiyama, …, & Yano, S. (1998). Second preliminary report of the excavations at Tell el-Kerkh, northwestern Syria. Bulletin of the Ancient Orient Museum, 19, 1–40.

Tsuneki, A., Hydar, J., Miyake, Y., Hudson, M., Arimura, M., Maeda, O., Odaka, T., Yano, S. (1999). Third preliminary report of the excavations at Tell el-Kerkh, northwestern Syria. Bulletin of the Ancient Orient Museum, 20, 1–31.

Tsuneki, A., Hydar, J., Miyake, Y., Maeda, O., Odaka, T., Tanno, K., Hasegawa, A. (2000). Fourth preliminary report of the excavations at Tell el-Kerkh, northwestern Syria. Bulletin of the Ancient Orient Museum, 2, 1–36.

Tsuneki, A., (2012). Tell el-Kerkh as a neolithic mega site, ORIENT, XLVII, 29–65.

Tsuneki, A. (2017). The significance of research on the emergence of pottery in West Asia, in A. Tsuneki, O. Nieuwenhuyse, S. Campbell (eds.), *The emergence of pottery in West Asia*, 10–17. Oxford & Philadelphia: Oxbow Books.

Tsuneki, A., & Nieuwenhuyse, O., & Campbell, S. (2017). *The emergence of pottery in West Asia*. Oxford: Oxbow Books.

Twiss, K.C. (2008). Transformations in an early agricultural society: Feasting in the southern Levantine Pre-Pottery Neolithic. Journal of Anthropological Archaeology, 27(4), 418-442.

Vandiver, P.B. (1987). Sequential slab construction; a conservative Southwest Asiatic ceramic tradition, ca. 7000-3000 B.C. Paléorient, 13 (2): 9–35. Stable URL: https://www.jstor.org/stable/41492252

Verhoeven, M. (2002). Ritual and ideology in the Pre-Pottery Neolithic B of the Levant and southeast Anatolia. Cambridge Archaeological Journal 12(2), 233 - 258.

Verhoeven, M. and Kranendonk,P. (1996). The excavations: Stratigraphy and architecture , in Akkermans, P.M.M.G. (eds.), *Tell Sabi Abyad, the late Neolithic settlement : Report on the excavations of the University of Amsterdam, 1988, and the National Museum of Antiquities Leiden, 1991-1993, in Syria* (Uitgaven van het Nederlands Historisch-Archaeologisch Instituut te İstanbul ; 76), 25–118. İstanbul: Nederlands Historisch-Archaeologisch Instituut te İstanbul.

Verhoeven, M., Akkermans, P., & Rijksmuseum van Oudheden te Leiden (2000). *Tell Sabi Abyad II : The pre-pottery Neolithic B settlement : Report on the excavations of the National Museum of Antiquities, Leiden in the Balikh Valley, Syria (Uitgaven van het Nederlands Historisch-Archaeologisch Instituut te İstanbul; 90)*. Leiden: Nederlands Historisch-Archaeologisch Instituut.

Watkins, T. (1990). The origins of house and home?. World Archaeology, 21, 336-347. https://doi.org/10.1080/00438243.1990.9980112

Webster, G. (2008). Culture history: A culture-historical approach, in R.A. Bentley, H.D.G. Maschner & C. Chippindale (eds.), *Handbook of archaeological theories*, 11–27. Lanham, MD: AltaMira.

Wengrow, D. (1998). The changing face of clay: Continuity and change in the transition from village to urban life in the Near East. Antiquity, 72(278), 783-795.

Willey, G.R., Phillips, P. (1958). *Method and theory in American archaeology*. Chicago: University of Chicago Press.

Wright, K. (2000). The social origins of cooking and dining in early villages of western Asia. Proceeding of the Prehistoric Society, 66, 89–121.

Wu, X., Zhang, C., Goldberg, P., Cohen, D., Pan, Y., Arpin, T., & Bar-Yosef, O. (2012). Early pottery at 20000 years ago in Xianrendong Cave, China. Science 336, 1696-1700.

APPENDICES

A. POTTERY PRODUCTION STAGES

The social dimension of the pots is often evaluated under the term Chaîne Opératoire, which was introduced by André Leroi-Gourhan in 1964, and further developed by Pierre Lemonnier. Chaîne Opératoire provides a theory of operational sequence in which operational acts convert raw material into a finished product since several stages are used in the manufacturing process (Roux, 2017, p. 101-103). The most common phases considered in ceramic Chaîne Opératoire are clay selection and extraction, paste preparation, modeling, drying, surface treatment, and firing (Santacreu, 2014, p. 59).

The primary raw material of the pottery, clay, is correlated with decomposing rocks, and exposed plasticity when mixed with some amount of water. The sedimentary rocks or soils also contain extremely small particles of clay. Clay minerals can also result from preexisting minerals (Montana, 2017, p. 87, 90). Clay is obtained from alluvial layers formed by microcrystalline granules comprised of chipped rocks due to mobility arising from water and thermal differences in. Clay is found either in the pure form (kaolin) or in tributary alluvium deposits and slime and clay deposits mixed with other organic and inorganic substances present in nature. As a tributary also sweeps rocks that are washed away along its flow path, the clay further contains lime, mica and metal oxides. The color of the clay might vary depending on the metal oxides it contains. It might be yellowish, reddish (clay containing iron oxide), in shades of brown, greenish (clay containing copper oxide) or black (clay containing manganese dioxide). Kaolin, pure clay, on the other hand, is white in color (Rhodes, 1963, p. 2-7).

One of the most important properties of clay is its ability to be shaped after being mixed with water. This is called plasticity. The property of plasticity is lost when the

absorbed water is removed from the clay during the drying process. The shape given might remain in its form after drying; the material is shaped with the paste obtained by kneading the clay and water mixture (cohesion). However, as the clay particles converge after dehydration, the volume diminishes (contraction). If any material obtained from clay paste is subjected to heat that exceeds 2000 ^{0}C, then such material undergoes an irreversible transformation and losses its plasticity feature (Rice, 1987, p. 58-63).

Clay is one of the few materials which have no value of their own; it is formed into a container after being subjected to various phases. The value of the raw material is put there by the potter. Clay is a substance featuring plasticity properties which attain workability and form-taking features when mixed with an adequate amount of water. It retains its form when dried. Pulped into a paste and kneaded, clay is worked into the desired shape after the potter allows the clay to mature for some time. Then the shaped pot is allowed to dry. The surface of the pot might be subjected to certain processes or decorated. The structure of the ceramic is identified according to the traces left by all processes. This includes the mixing of the substances called the paste or sludge, the shaping techniques applied, the surface treatments and decorations applied during the drying phases and the firing of the pot on the pot surface or the crack section (Rhodes, 1963, p. 1; Ökse 2012, p. 16, 22).

The first stage of ceramic production is to pulverize the raw material and convert it into paste by mixing with water (Fig. 15)**.** After pulverization, water might be added to the clay either directly or after addition of tempers and then kneaded to form the paste (Ökse, 2012, p. 18).

The coarse component in a paste, added by potters to modify the properties of clay, is called temper (Fig. 16). It is an action of adding material. Potters add these substances to modify the properties of clay for manufacture and use. Combining of raw materials into a pottery paste has significant stylistic, technological and functional implications for the pottery making process and for the uses of the products. The characteristics of temper are considered through identification of the material by its shape, size range and amount (Rice, 1987, p. 406, 409).

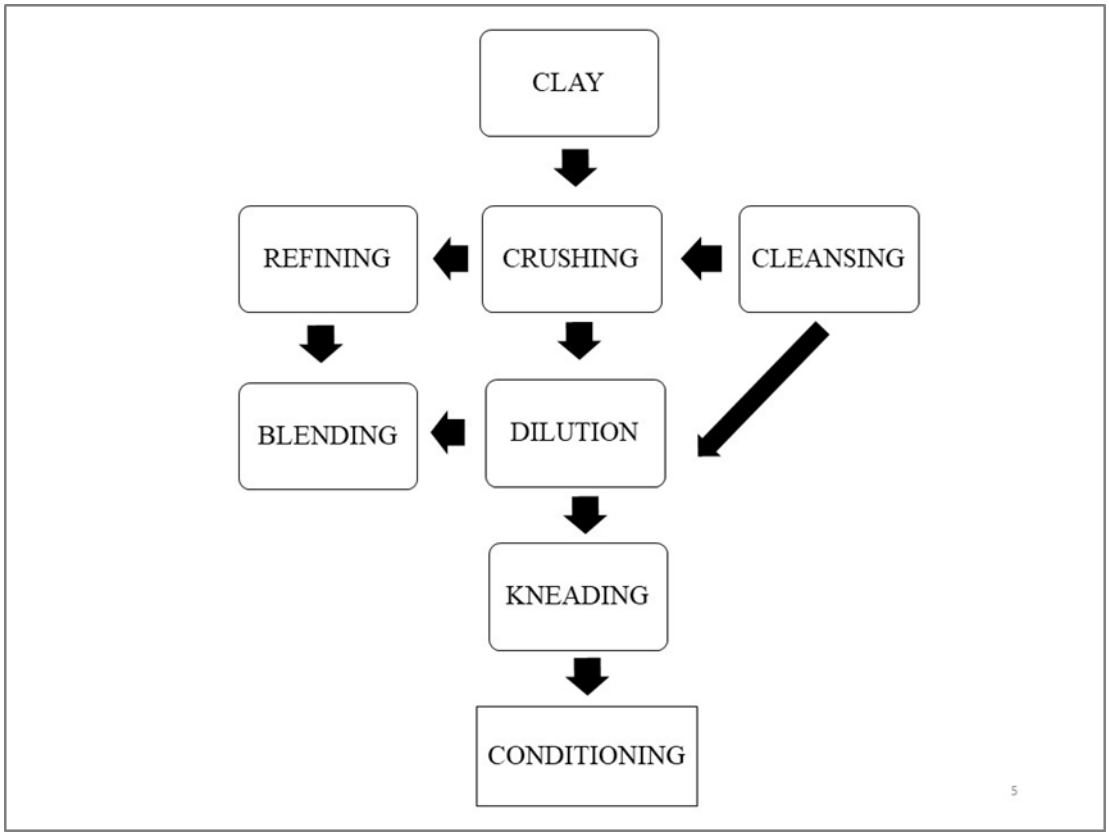

Figure 15. Steps involved in the preparation of the paste for clay vessels (adapted from Tuba Ökse, 2012).

ORGANIC TEMPER		INORGANIC TEMPER	
	EFFECT		**EFFECT**
HALM:	COARSE POROSITY	**GRIT:**	WHITE, RED, BLACK HARDS PIECES
CHAFF:	FINE POROSITY	**QUARTZ:**	HALF TRANSPARENT, SHINY HARD PIECES
GRAIN:	GAPS	**SAND:**	LITTLE BLACK DOTS
SHELL:	FRAGILE WHITE PIECES	**LIMESTONE:**	CRUMBLING WHITE PIECES
		MICA:	WHITE, YELLOW SHINY GRAINS
		GROG:	VARIENT TEXTURE SUBDIVISIONS

Figure 16. Characteristics of organic and inorganic temper (adapted from Tuba Ökse, 2012).

There is no universally accepted terminology for pottery shapes. However, prehistoric pottery was handmade and exhibits some basic methods. The oldest

technique employed in shaping the vessels was hand-made shaping. It is the method whereby the paste is taken into one palm and then shaped with the other hand by dishing. After the shaping of the vessel, piece addition and finishing operations were applied. Irregular fluctuations are observed in the horizontal axis of the walls of vessels shaped by applying this method (Ökse, 2012, p. 30). A much used coiling technique is an additive process wherein the pot is created by rolling the clay into ropes. Pinching is another technique where small paste particles are brought together and compressed. By inserting the fingers into the clay, the lump of clay opens and then one needs to squeeze the clay between the thumb and fingers or between the fingers and both hands. Repeating this action shapes the clay into the desired form (Rice, 1987, p. 125; Rice, 2015, p. 135).

The coil construction technique is used for shaping the vessel from long strips of clay. They are superposed to form the walls of the vessel. Generally, vessels of large size are manufactured with this method, such as storage jars. Coil construction has two general advantages. It provides uniformity of wall thickness from the start. Also, it allows for the use of less plastic clay than is required. However, if the clay dries before the application of the next coil, the join will not be strong (Rice, 1987, p. 128; Shepard, 1965, p. 59; Rice, 2015, p. 136).

In the molding technique, the material selected as a mold needs to be a flammable substance like a basket. The interior or exterior side of the mold is smeared with clay. Then, it is put into the kiln where the traces of the molding material remain on the surface of the vessel. This method can also be applied by using an excavated pit as a mold. The technique in which clay paste is poured into a model and shaped by compaction, and then removed from the mold and left for drying is particularly used for vessels with relief decoration (Ökse, 2012, p. 31; Rice, 2015, p. 138).

Firing of the shaped vessel provides resistance against external factors, such as water, etc. and causes the clay to petrify and consolidate. Various processes might be applied to the surface of the vessel during various stages of drying and firing after shaping the vessel **(**Fig. 17**).** After shaping an earthenware vessel, the paste used is wet due to its water content. A wet vessel is left to dry in shade prior to firing. If the

vessel is exposed to firing before drying, the paste very rapidly loses its humidity; it shrinks quickly and then cracks due to irregular shrinkage. Cracked and slotted ceramic surfaces might occur as a result of rapid drying of a low-tempered paste or shrinkage of the surface of the paste during the re-drying process after excessive dampening of the dried vessel when processes were applied to its surface. The drying stages vary depending on the humidity rate of the paste, that is to say, its softness (Ökse, 2012, p. 40).

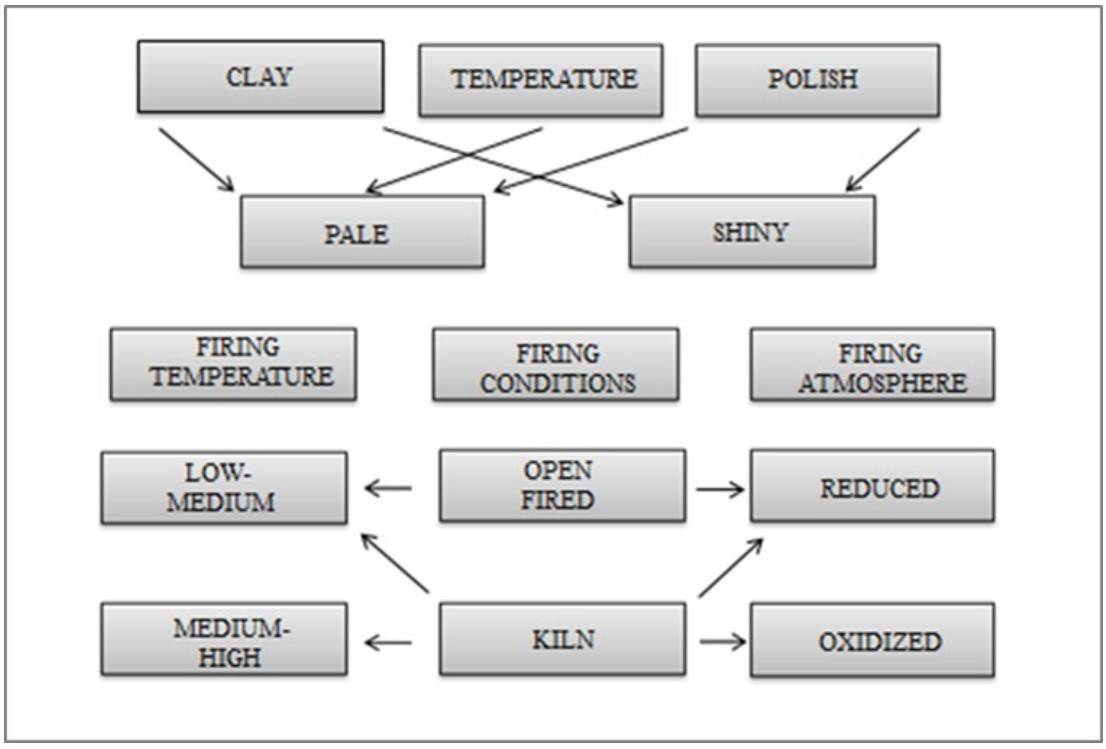

Figure 17. Drying and firing processes of the clay vessels (adapted from Tuba Ökse, 2012).

Firing of an earthenware vessel is performed at different heat levels under various fire and airflow environments. Therefore, the medium in which the vessels are fired, the airflow and heat also differentiates the quality of the vessels. The firing quality of the ceramics is identified depending on the heat. Open hearths have been evaluated

as the most primitive ceramic firing method. In this method, the vessels are placed onto combustible materials, such as wood, which are placed inside an excavated pit, with the brim side facing downwards. The vessels are then covered with combustible materials such as bushes, branches, manure, etc. and ignited. The vessels are left in the hearth after firing for up to 24 hours which they are allowed to cool for 1-2 days (Ökse, 2012, p. 40, 41).

Although the firing temperature depends on the quantity of the combustible materials and the firing duration, the temperature should not exceed 750-800 0C. It does, and then all sides of the vessel cannot receive the uniform amount of oxygen. The surface of the vessel attains a speckled appearance due to different firing colors and soot formation. There are several rural areas in Anatolia where this oldest firing technique is still in use (Shepard, 1965, p. 214).

Kiln firing is provided by enclosed ceramic kilns with holes and chimneys that allow for draughts and have firing sections. The sections in which the vessels are placed are separated from each other via grating. This not only assures firing of the vessels with more regular heat and oxygen, but it also keeps the vessels from coming into contact with the combustible materials. Ceramic kilns are categorized according to different characteristics that depend on the heat generated and the uniformity of the draught.The temperature generated in kilns used for pottery should not exceed approximately 850 ^{0}C. The color of the ceramics fired inside a kiln varies depending on the draught and the heat. On the other hand, the heat generated on the firing medium of the vessel, the position of the vessel inside the kiln and the firing duration influence the hardness and durability of the vessel. Ceramics fired at a temperature not higher than 500 ^{0}C easily fall apart as they do not solidify sufficiently. Although the firing degrees of the pieces discovered during archeological studies cannot be determined for certain by employing the field methods, some properties reveal approximate values. These are properties such as the degree of hardness of the piece, the appearance of the broken piece and fresh crack. (Ökse, 2012, p. 42-49).

The method of surface finishing and the stages of accomplishment depend on the purpose of the vessel and whether or not it is to be decorated. The finishing may be

completed just after the shaping when clay is still plastic. Or it may be completed after the vessel has become leather-hard or dry. Finishing serves to remove irregularities left from the forming and shaping of the vessel. Technically, the simplest finish is produced by hand alone after the vessel is formed when the paste is still plastic. A slip is a liquefied suspension of clay and/or other materials in water which is applied before firing to form a thin coating. Color additions that coat the entire vessel surface are also described as slips; the color of the slips depends on the composition and temperature at which they are fired to maturity. Usually, a slip differs in color from the body of a vessel; if distinctly colored, a slip can be applied only for this reason (Rice, 1987, p. 149-150). A slip has various functions in the production and decoration of ceramics. It serves as a means of mixing the components of a clay body. Slips may actually serve as decoration, to improve fit or to reduce permeability. Application of a slip can produce a high-gloss surface finish. In addition, the sections of unfired wares, like handles and spouts, can be joined by the use of a slip. White or light-colored slips may provide a smooth surface for the successive painted decoration. The application of slips to pottery surfaces is especially an efficient way to improve heating efficiency and to reduce permeability (Rice, 1987, p. 150; Orton et.al., 1993, p. 221; Tite, 1999, p. 187).

B. THE CRITERIA FOR UNDERSTANDING POTTERY USE

The criteria for understanding when is a vessel used for storage, transfer, cooking, food processing, serving and display has always been a matter of interest in pottery studies. The term *function* is inclusive of diversified activities, competence and structural components of pottery (Rice, 1996, p. 139). Different variables of functional classes of pottery containers are coupled to the size, vessel breakage, and replacement-curation rates. Moreover, functional analyses are used to detect vessel distribution in each class. The rates of site abandonment and the patterns of reoccupation, and domestic cycles are also examined (Mills, 1989, p. 134).

Although the primary function of pottery is generally connected with food related activities, the overall use was presumably oriented towards multi-functional purposes. The primary function of pottery may have changed over time and served secondary functions, all of which can be detected by use-alterations (Skibo, 2013, p. 2-5). Therefore, the functional analyses of pottery must include the function intended by the potters, as interpreted by archaeologists within the scope of actual context and state of recovery (Rice, 1996, p. 140). Some vessels may have been intended for multiple uses outside of more than one category. An example of this is cooking vessels made for an export trade that may exhibit some characteristics like uniform size or shapes based upon the stacking availability of transport containers (Orton et al., 1993, p. 218).

The tenuous relation between pottery form and function has been accepted as the genesis for current functional analyses. The vessel forms are indirect indicators of use as the function and morphology of ceramic vessels of the functional class rely on the morphological boundary conditions, and cross-cultural morphological data is broadly upheld (Henrickson & McDonald, 1983, p. 630-631). General terms like *storage jar* or *cooking pot* combine the analyses of form and function. The functional features of a pottery vessel include the orifice/mouth and the base. The secondary elements like handles, feet, spouts and ridges are often related to the functional

assessments. It has also been acknowledged that the form of a piece of pottery is an indicator of the vessel's use-life and function as evident from the morphological features like content, transportability, stability and capacity (Rice, 2015, p. 419, 421).

Most samples samples in the storage-vessel category are notable for their large size and capacity and ability to be transported given their heavy weight. The orifices and necks of storage vessels are usually not prescribed in restricted forms. The content of storage vessels may reflect aspects of their intended functions. Vessels designed for long-term storage usually have thick walls and bases that provide relative stability. Compared to dry storage vessels, liquid storage vessels have taller forms that enable the pouring out of the vessel's contents (Rice, 2015, p. 422).

Cooking vessels, on the other hand, are generally designed to resist heat without cracking. These vessels, utilized for food processing, have forms based on their functionality. These forms include rounded contours, coarse texture, and thin walls, all of which create resistivity and lessen the stress of pounding or stirring activities. Nonetheless, the shapes and thicknesses of cooking pots are highly variable given that they depend on the available resources and cultural traits (Oudemans, 2007, p. 2). Archaeological assestments have mainly hypothesized that cooking pots tend to have simple profiles, thin walls and no sharp wall contours. Coarse tempers such as calcined shell and crushed potsherd are usually favored for cooking pots as these inclusions have comparatively lower coefficients of thermal expansion. The open orifices allow access for adding or removing contents while slightly restricted necks conform to boiling containers since this neck shape reduces evaporation and prevent boiling over of the vessel's contents. (Rice, 2015, p. 422, 424).

Organic residue analysis has been used to address the actual uses of pottery containers in order to comprehend their functions. Invisible or amorphous organic remains can be studied by using chromatographic, spectrometric and isotopic methods. These kinds of evaluations can reveal otherwise hidden carcass fats, plant oils or waxes, for instance. Organic residue analysis also has been used as an analytical tool in determining the production, decoration, repair and technological variations of pottery containers. Various commonly found types of sealants like wax,

resin and bitumen were known during the early Neolithic. Beeswax samples recovered from the Early Nolithic collared flasks from Kuyavia (Poland) provide information on the use of this agent as a waterproofing material. Ceramics with applied bitumen paint decoration that found in Tell Sabi Abyad (dated ca. 6100 BC) suggested trade network with northern Iraq as the area known for the sources of origin (Roffet-Salque et al., 2017, p. 629, 638).

C. TURKISH SUMMARY / TÜRKÇE ÖZET

Bu tez çalışması MÖ 7500-6000 zaman aralığında Kuzey Mezopotamya, Güneydoğu Anadolu ve Kuzey Levant'ta çanak çömleğin ilk ortaya çıkış sürecindeki sosyal ve sembolik unsurları anlamayı amaçlamaktadır. Bahsi geçen dönem Çanak Çömleksiz Neolitik B'den başlayarak Erken ve Geç Çanak Çömlekli Neolitik dönemi kapsayarak bölgenin tanınmasını Koyu Yüzlü Açkılı Mal grubu, çizi bezemeli, tarak-baskılı, kabartmalı ve boyalı çanak çömlek gelenekleri aracılığıyla gerçekleştirir.

Çanak çömlek, Çin'de GÖ 19,000'de avcı-toplayıcılar tarafından kullanılmaya başlanmış olsa da, Yakındoğu'da çanak çömleğin ortaya çıkışı ve yayılımı için on bin seneden daha fazla bir (MÖ 7000) geçmesi gerekmiştir. Bu zaman dilimi aynı zamanda bölgede tamamen yerleşik ve tarıma dayalı bir yaşam biçiminin, başka bir deyişle Neolitik yaşam tarzlarının, ortaya çıkışı ile de eş zamanlıdır. Bu bağlamda, birçok araştırmacı bu yeni yaşam tarzının, yeni teknolojileri gerekli kıldığını, dolayısıyla çanak çömleğin gıda maddelerini işlemek ve saklamak üzere "icat edildiğini" iddia etmiştir. Bu tartışmada haklılık payı olmasına rağmen, yorumlamada eksik kısımlar bulunmaktadır. İlk olarak, MÖ 9. binyılın başlarında, bölgede insan ve hayvan şekilli heykelciklerin yapımından anlaşıldığı kadarıyla, pişmiş toprak teknolojisinin bilinmekte ve yaygın olarak kulanılmaktadır. Benzer biçimde, kireçtaşının yüksek sıcaklıklara ısıtılıp söndürülmesiyle elde edilen alçının da, kile benzer biçimde, mimaride ve ölü bedenlerinin sıvanmasında yaygın olarak kullanıldığı bilinmektedir. Bu koşullarda, "neden seramik üretiminin iki bin yıl daha beklemek zorunda kaldığı" sorusu merak uyandırıcıdır. İkincisi ve muhtemelen daha da önemlisi, pek çok farklı yerleşim yerinde kaydedilen ilk çömlekler pişirme ve saklama işlevinden ziyade servis (serving) ve sergileme (display) ile ilişkili görünmektedir. Aslında, erken dönem çömleklerin çoğu belirli yüzey renklerine sahip; boyama ya da açkılama gibi yüzey işlemleri uygulanmış küçük kaselerden oluşmaktadır. Bu veriler bize çanak çömleğin yemek paylaşımı gibi özel durumlarda kullanılan sembolik bir amacı olduğunu düşündürmektedir.

Çanak çömlek üretiminin başlangıç süreci genellikle işlevsel ihtiyaç ile bağlantılı olarak değerlendirilmiş ve seramik analizleri işlevsel ya da tipolojik bakış açılarını ön planda tutarak kronoloji inşa etmeye çalışmıştır. Bununla birlikte, sosyal-sembolik bakış açıları, tanınmasına rağmen, seramik kullanımı ve işlevinin nihai sentezine çoğunlukla dâhil edilmemiştir. Lakin özellikle Yakındoğu'da çanak çömleğin meydana çıkış sürecinde muhtelif yerlerde görülmeye başlanan seramik bezeme ve şekillerindeki sembolik anlamı ve bunun arka planındaki sosyal yapıyı görmezden gelmek olanaksızdır. Çanak çömlek yapımı için gerekli olan teknolojinin PN'ten önceki bin yıllık dönemde pişim ile hazırlanan kireç sıvanın binalarda kullanılması, kil ile oynanarak heykelcik yapılması, taş ve organik malzemeden yararlanarak kaplar yapılması gibi örnekler yoluyla bilindiği söylenebilir. Ancak, çanak çömlek, geç Çanak Çömleksiz Neolitik içinde belirli bir dönemde yaygın hale gelmiştir.

Buna bağlı olarak, tez çalışmasında çanak çömlek üretiminin başlangıcında etkili olan sosyal ve sembolik süreçleri anlamak adına Mezraa Teleilat, Akarçay Tepe, Tell Sabi Abyad, Tel el-Kerkh, Tell Seker el-Aheimar, Mersin-Yumuktepe, Çatalhöyük, Umm Dabagiyah, Yarim Tepe ve benzeri yerleşim yerleri hakkında yayınlanmış çanak çömlek envanteri üzerinde yoğunlaşan bir yöntem bilim kullanmayı tercih ettik. Karşılaştırmalı inceleme ile sözü geçen yerleşim yerlerinde bulunan çanak çömleğe ait biçim, teknoloji ve bezeme özelliklerini anlamayı hedefledik. Bununla birlikte, ilgili materyal kültürü ve önceden var olan taş kap kullanımı, alçılama, heykelcik yapımı gibi teknolojileri tartışarak özellikle sembolik kullanım ve ortaya çıkmakta olan çanak çömlek biçimlerinin arasındaki bağlantı üzerinde durduk.

Aslında seramikler insanlığın bilinen en eski teknolojik yeniliklerinden biridir. İlginç bir şekilde, en eski örnek faydacı değil, ritüel amaçlı kullanım içindir. Örneğin, Üst Paleolitik dönemde Avrasya'da bulunan avcı-toplayıcı alanlarında, küçük insan şekilli heykelciklerin, yaklaşık GÖ 26.000 dolaylarında kullanıldığı düşünülmektedir (Budja 2010: 43). Bilinen en eski seramik, bir başka deyişle "çanak çömlek" kapları, Çinli avcı-toplayıcılar tarafından yaratılmıştır. Seramik kaplar Çin'de GÖ 20.000-19.000 civarında kullanılmıştır (Wu vd., 2012, s. 1696-1700). Japonya'da "Yeni

Jōmon çanak çömleği" genellikle yaklaşık GÖ 16.500 civarına tarihlenen mağara meskenlerinden ele geçmiştir (Nakamura v.d., 2001, s.1129-1138). Kuzey Afrika'nın en eski seramikleri onuncu ila dokuzuncu binyılın başlarına uzanmaktadır (Huysecom v.d., 2009, s. 911-915).

Medeniyetin beşiği olarak anılan Yakındoğu'ya ise seramik teknolojileri paradoksal olarak oldukça geç ulaşmıştır. Bu bölgede bulunan en eski seramiklerin de bir tür ritüel amaç için kullanılmış olduğu olgusu bulunmaktadır. Ateşe dayanıklı kilden yapılmış heykelciklere, Çanak Çömleksiz Neolitik B Dönemi (M.Ö. 8500-7500) yerleşim yerlerinde rastlanmıştır. Ayrıca, bu dönemde, Yakındoğu topluluklarının kireç veya alçı sıva malzemelerle seramik teknolojilerinin elemanlarını kullanarak objeler ve mekânlar oluşturduğunu bilmekteyiz. Malzeme ve teknoloji bilgisine rağmen, "çanak çömlek", Yakındoğu kültürel sahnesine geç bir giriş yapmıştır. Çanak çömleğin en erken kullanımı, PPNB evresinin sonunda başlar ve M.Ö. 7000 civarında tamamen gelişmiş bulunan Neolitik yaşam tarzı ile örtüşür.

Yakındoğu'da görülen ilk çanak çömlekler, M.Ö. 7. binyılın başında Çatalhöyük, Tell Sabi Abyad, Tell el-Kerkh, Mezraa-Teleilat ve Tell Seker el-Aheimar gibi yerleşim yerlerinden ele geçmiştir. Bahsi geçen zaman aralığı, Erken Neolitik dönemin ardından (M.Ö. 10.000-7000) evcilleştirilmiş hayvan ve bitkilere dayalı yaşam biçimleri ile bilinen toplulukların görülmesi ile aynı zamana denk gelmektedir. Bu nedenle, birçok araştırmacı, çanak çömleğin yaygın olarak görülmeye başlamasını, hayvanların evcilleştirilmesi ve yerleşik yaşama geçilmesi ile bağlantılı olarak yeni gıda türlerinin ve yeni gıda işleme yöntemlerinin ortaya çıkışının; depolama ve pişirme tekniklerinin çoğalmasının bir sonucu olabileceğini savunmaktadır.

Binlerce yıl boyunca, Yakındoğu'nun çevre bölgelerinde, yerleşik ve tarımsal etkinliğe dayalı yaşam tarzını henüz benimsememiş olan avcı-toplayıcı topluluklar tarafından çömleklerin erken kullanımları göz önüne alındığında, Yakındoğu'da çanak çömleğin ortaya çıkış sürecinin neden tarıma ve yerleşik düzene geçişi beklemek zorunda kaldığının nedenlerini anlamak kolay değildir.

Göbekli Tepe, Nevali Çori ve Jerf el-Ahmar gibi yerleşim yerlerinde gördüğümüz üzere, Yakındoğu'daki Erken Neolitik toplulukları, özenle yapılmış buluntuların üretiminde; anıtsal mimari yapıların inşasında, kireç sıva üretimi için ateşin kontrolünde ve hatta heykelcik üretiminden anlaşılacağı üzere çanak çömlek teknolojileri konusunda ustalık gerektiren bilgiye sahiptiler. Nitekim MÖ 9. binyıla tarihlenen Demirköy'de (Rosenberg & Peasnall, 1998) bulunan çömlek kırıkları; MÖ 9. binyılın sonlarına tarihlenen Boncuklu Höyük 'ten çıkan pişmiş toprak kap parçaları (Fletcher vd., 2017) veya MÖ 8. binyıla tarihlenen Ganj Dareh'te görülen kabaca yapılmış çanak çömlekler ile kil nesnelerin bir arada kullanılması (Smith, 1974), bu toplulukların kil kapların yapımına dair çeşitli temel bilgilere sahip olduğunu önermektedir. Sonuç olarak, mevcut kanıtlar ışığında Yakındoğu'da görülen en erken çanak çömleğin, deneme-yanılma sürecini yansıtmayan, belirli biçimlerin uygulandığı, son derece özenli ürünler olduğu tartışması şaşırtıcı olmamalıdır. Ancak, tüm malzeme, teknoloji ve beceri bilgisine rağmen, MÖ 7. bin yıldan önce çanak çömlekten geniş bir şekilde yararlanmaya başlanılmamıştır.

Pek çok farklı yerleşim yerinde kaydedilen en erken çanak çömlekler pişirme ve saklama işlevinden ziyade servis (serving) ve sergileme (display) ile ilişkili görünmektedir (Appendix B). Aslında, erken dönem çömleklerin çoğu belirli yüzey renklerine sahip; boyama ya da açkılama gibi yüzey işlemleri uygulanmış küçük kaselerden oluşmaktadır. Katkı malzemesi, biçim ya da yüzey rengi seçimlerinde farklılıklar gözlenmesine rağmen, farklı bölgelerdeki mallar karşılaştırılabilir. Bu durum, teknolojik seçimlerin kültürel uygulamalarla sınırlı olabileceğini düşündürmektedir. Elimizdeki veriler bize çanak çömleğin, yemek paylaşımı gibi özel durumlarda kullanılan sembolik bir amacı olduğunu önermektedir.

Çanak çömleğin ortaya çıkışının, Neolitik dönemde geliştirilen tarımsal yaşam tarzının gerektirdiği bağımsız bir "teknolojik buluş" olmadığı sonucuna ulaşmamızı sağlayan yeterli delil bulunmaktadır. Aksine, çanak çömlek, sergileme ile alakalı sosyal bir teknoloji ve sembolik iletişimin bir parçası olarak yorumlanmalıdır. Diğer bir deyişle, sergileme ile ilgili diğer bazı ögeler, PPNB dönemindeki heykelcik ve alçı kullanımının sosyal bağlamında köklenmiş olabilir. Yakındoğu'da görülen en

erken çanak çömlek, PPNB döneminden aktarılan geleneklerin sergileme ve yemek paylaşımı bağlamında manipüle edilerek, ilk tarımsal toplulukların sosyal ihtiyaçlarını karşılamak üzere ortaya çıkmış olabilir.

Çanak çömlek, Erken Neolitik'te görülen inanç ve ritüele derinlemesine gömülmüş bir "sembolik teknoloji" olarak yorumlanabilir. Diğer bir deyişle, çanak çömlek, "insan bedeni" ve "ev" arasındaki ilişkiyi, Erken Neolitik'te görülen "ölü", "ev" ve "ortak yapılar" arasında oluşan ilişkiye alternatif olarak yeniden şekillendirmektedir. Bu nedenle, çanak çömlek, tarımın yeni ekonomik bağlamında kurulan yeni sosyal ilişkilerin müzakeresinde önemli bir etken olmalıdır. Çanak çömleğin biçimi ele alındığında, bilinen atalara ait kavramları çağrıştırır; taşınabilirliği ve çeşitli sosyal ölçeklerde kullanılması, topluluklar arasında ve içinde yeni tür ilişkiler kurulmasına olanak sağlar. Bu bağlamda, çanak çömleğin Yakındoğu'ya bu kadar geç bir giriş yapmasının nedeni, malzeme bilgisi eksikliği veya ihtiyaç eksikliğinden kaynaklanamayabilir. Bunun nedeni, büyük ihtimalle kültürel içeriklidir ve dolayısıyla sosyal yapı ve inançtaki değişimlerin bağlamsal değerlendirmesini gerektirmektedir.

Kil ve pişmiş toprak teknolojisinin gelişmekte olan bilgi düzeyi, PPN döneminde güneşte kurutulmuş kerpicin mimari bileşen olarak kullanılmasından belli olmaktadır. Erken Neolitik Dönem'de görülen mimari yapılar içinde, depolama amacıyla çukurların kil ile kaplanmasıyla üretilmiş, pişmemiş kilden "kaplar" bulunmuştur. Çayönü Tepesi'nde kerpiç hamurundan üretilen "ambar benzeri" kaplara rastlanmıştır (Özdoğan & Özdoğan, 1993, s. 93). Tell Maghzaliyah'ta pişmemiş kilden imal edilmiş, sabit kap olarak işlev gören "çanak biçimli" bir yapı meydana çıkarılmıştır (Bader, 1989, s. 351).

Çanak çömleğin ortaya çıkış süreci bazı araştırmacılar tarafından "Neolitik paket" adı altında bir araya toplanan, heykelcik, amulet, tılsım, bilezik, boncuk, taş kâse, perdah aleti, spatula, vb. kil, taş ve kemikten yapılan materyal kültür ögelerini de içine alan oldukça sembolik ve portatif taşınabilir nesnelerle beraber değerlendirilmektedir. Neolitik paketin ayrıntılı olarak incelenmesine imkân veren, kültüre alınan bitki ve hayvanlar ya da sürtme taş alet teknolojileri vb. ögeler, farklı bölgelerdeki

yerleşimlerin materyal kültür açısından benzerliklerini göstermek ve münferit gruplandırmalar yapmak üzere kullanılmıştır. Örneğin, gernik buğdayı, siyez, mercimek ve nohut gibi tarımı yapılan bitkiler "tarım paketi" adı altında etiketlenmiştir. Aynı şekilde, evcil koyun ve keçileri de bir "pakete" koymak mümkündür. Buna bağlı olarak, çanak çömlek yapımı teknolojileri, temel tarım bitkileri ve evcil çiftlik hayvancılığını içeren Neolitik paket terimi "Güneydoğu Asya, Anadolu ve Güneydoğu Avrupa Neolitik topluluklarında tekrar tekrar ortaya çıkan özelliklerin toplamı" olarak tanımlanabilir (Çilingiroğlu, 2005, s. 2-3).

Tahılların ehlîleştirilmesi ve yerleşik yaşama uyum sağlama, Güneybatı Asya Neolitikleşme sürecinin belirgin özellikleri arasında sayılmaktadır. Nüfus yoğunluğu, kaynak bolluğu veya hasat teknolojisindeki gelişmeler gibi çeşitli değişkenler ise ekolojik ve sosyal şartları değerlendirmek üzere kullanılmıştır. Son Buzul Çağı'nın sonucunda beliren uygun iklim koşulları, bazı grupların geçim stratejilerini genişletmiş olmalıdır. Örneğin, Bølling-Allerød (yaklaşık G.Ö. 14.500–13.000 / 12.800) salınımlarının oluşturduğu elverişli iklim şartları, Erken Natufian avcı-toplayıcı gruplarını yerleşik yaşam tarzına teşvik etmiş olmalıdır (Bar Yosef 2011, s. 180). Younger Dryas olayının (G.Ö. 13.000- 11.200) sebep olduğu iklim dalgalanmaları ve çevresel stres sonucunda, yerleşik yaşamı benimseyen bazı topluluklar, avcı-toplayıcı yaşam tarzına geri dönmüştür (Henry, 2013, s. 588). GÖ 8,6-8,0 tarih aralığında yaşanan ve 8.2 olayı olarak anılan diğer bir iklimsel değişikliğin Doğu Akdeniz'e getirdiği daha serin ve kuru hava şartları, bölgede yaşayan yerleşik çiftçilerin ve arda kalan avcı-toplayıcıların geçim stratejilerini olasılıkla olumsuz etkilemiştir. Bu etkiler, büyük baş hayvanların evcilleştirilmesinin yanı sıra ikincil ürünler gibi yeni gıda üretim uygulamalarının yanı sıra karma çiftçiliğe ve hayvanların otlatılmasına olanak sağlamış olabilir (Evershed vd., 2008; Greenfield vd., 1988, 2010; Sherratt, 1983).

İki önemli kronoloji ve terminoloji, Yakındoğu'daki Neolitik Dönem çalışmalarını ayırt etmektedir: Çanak Çömleksiz Neolitik (PPN) ve Çanak Çömlekli Neolitik (PN). PPN dönemi ayrıca PPNA (M.Ö. 10,000-8500) ve PPNB (M.Ö. 8500-7000) olarak ayrılmıştır. Çanak çömlek kaplarının ortaya çıkışı PN döneminin başlangıcını işaret

etmektedir (M.Ö.7000-5500). PPNA-PPNB-PPNC, Arkaik Neolitik, Çanak Çömleksiz Neolitik ve Seramik Neolitik gibi özel terimler Yakın Doğu kronolojisinin ortak karakterizasyonuna aittir (Cruells, 2008, s. 672, Atakuman, 2014, s. 2-3).

Çanak çömleğin ortaya çıkışına dair tartışmalı teoriler, çevresel değişimler, gıda üretim seçeneklerinde dönüşüm ve değişen ekonomik ve değişen sosyal ihtiyaçlara uyum sağlama ile ilgili süreç ve koşulları ele almaktadır. Neticede, tartışmalı işlevsel ve sembolik teoriler, seramik kapların ortaya çıkmasıyla ilgili çelişkili görüşlere yol açmıştır. Güncel teoriler ise geniş bir coğrafya içinde yerel bağlamda gelişen teknolojik unsurlara odaklanmaktadır. Yerleşim modelleri, arkeolojik çevre ve mimari gibi diğer etmenler de sıklıkla bu analizlere dâhil edilmektedir (Chapman, 2000; Gamble, 2007; Fowler, 2010; Knappett vd., 2010).

En erken çanak çömlek kapların teknolojik üretim seviyesi, uzun zamandır büyük bir tartışma konusu olmuştur. Bitkisel katkılı, sade ve kaba mallar, Yukarı Mezopotamya'da seramik üretiminin ilk aşamalarında, temel akım olarak yorumlanmıştır. Bununla birlikte, katkı maddelerinin kullanımına ilişkin güncel incelemeler, bölgedeki gelişim sürecinin göreceli karmaşıklığını ortaya koymaktadır. Güncel bilgiler ışığında, ilk çanak çömleğin özenle yapılmış ve mineral katkılı olduğunu söyleyebiliriz.

Yakındoğu'da çanak çömlek üretiminin başlangıcı ile ilgili yeni veriler, gelişmenin yaşandığı nükleer bölgeyi genişletmiş ve teknolojik gelişimin ilk aşamalarının anlaşılmasında katkı sağlamış bulunmaktadır. Rouj Havzası, Habur Vadisi, Balık Havzası, Güneydoğu Anadolu, Kuzey Irak, Amik ovası ve Orta Anadolu bölgelerinde yapılan kazılar ve araştırmalar, Yakın Doğu'da çanak çömlek üretiminin ilk aşamalarına dair daha somut analizler yapılmasına olanak sağlayan yeni bakış açıları sunmuştur.

Yakındoğu'da çanak çömleğin ortaya çıkışı ve gelişimi sürecinde teknolojik değişimler açısından farklı süreçler gözlenmektedir. Burada çanak çömleğin dört farklı gelişim evresini, farklı süreçler doğrultusunda gelişen önemli özelliklerine göre

ele alacağız. Ayrıca, çanak çömleğin evrimine ilişkin gelişimsel gidişatı, örneklenen verilerin sıklığına, benzerliğine, kronolojik aralığına ve Yakındoğu kronolojisine bağlı olarak değerlendireceğiz. Yayınlanmış olan kazı raporlarının mevcut verilerinden yola çıkarak farklı malzeme gruplarının ve hâlihazırda adlandırılmış olan başlıca grupların genel özelliklerini betimsel bir karşılaştırma yapmak üzere kullanacağız.

1. Evre: M.Ö. 7000-6600

Yakındoğu'da, en erken çanak çömleğin bulunduğu yerlerden gelen verilerden yola çıkarak bu kapların eksiksiz bir biçimde şekillendirilmiş ürünler olduğunu söylemek mümkündür. İlk evrede görülen kaplar genellikle basit ağızlı çanak ve çömleklerden oluşmaktadır. Diğer yandan, kullanılan katkı maddelerinin seçiminde ve yüzey renklerinde, bölgesel değişiklikler gözlemek mümkündür. Genel olarak, özellikle Kuzey Suriye-Kilikya bölgesinde, siyah ve kızıl-kahverengi renk aralığında, koyu yüzey renkleri gözlemlenmektedir. Fırat, Habur ve Yukarı Dicle bölgelerinde ise grimsi siyah yüzey renkleri hâkimdir. Fırat Havzası ve doğusu boyunca, boya ya da astar yardımı ile daha açık yüzey renkleri elde edilmiştir. Bu durum, Fırat'ın batısında nadir olarak gözlemlenmektedir.

Yakındoğu'daki ilk çömlekçiliğin ortak özelliği, basit ağızlı ve küçük çaplı çanak biçimidir. Bu çok erken aşamada, Kuzey Suriye-Kilikya ve Kuzey Mezopotamya bölgeleri, baskın mineral katkı seçimi, açkılama ve koyu yüzey renk seçimi gibi diğer ortak özellikleri paylaşmaktadır. Her ne kadar Kuzey Suriye-Kilikya bölgesinde az miktarda bitki katkılı kaba mal çeşitleri görünse de genel olarak çanak çömlek örnekleri koyu renkli, mineral katkılı ve açkılı mallardan oluşmaktadır. Ayrıca kap ağzında bulunan çentik-nokta baskı bezemelere ve ağız kısmına ince kırmızı astar sürülmüş parçalara rastlanmaktadır.

2. Evre: M.Ö. 6600-6300/6200

İlk evrenin hemen ardından, iki karşıt eğilimin geliştiğini görmekteyiz. Bu değişimlerden ilki bölgesel farklılaşmaya, ikincisi ise kültürler arası etkileşime işaret etmektedir. Kuzey Suriye-Kilikya bölgesinde ve Orta Anadolu'da koyu yüzeyli ve mineral katkılı malların ağırlıkta olduğu görünmektedir. Bazı bölgelerde, özellikle Rouj Havzası'ndaki Rouj 2b dönemine tarihlenen yerleşmelerde çanak çömlek, Vaiselle Blanche / Alçı Kaplar ile bir arada bulunmuştur. Bazı durumlarda koyu açkılı malların kireç-plaster ile sıvandığı görülmektedir. Levant bölgesinde ise Alçı Kaplar yaygın bir şekilde koyu açkılı mal grupları ile beraber ele geçmiştir. Kireç-sıvanın Levant bölgesinde, kült ritüelleri ile ilişkilendirilen kafatası sıvama uygulamalarında ve meskenlerin onarımında yoğun olarak kullanıldığı düşünülürse, Alçı Kaplar'ın ortaya çıktığı bölgenin Levant olması olasılığı göz önünde bulundurulabilir.

Kuzey Mezopotamya'daki erken mineral katkılı malların aksine, Tell Sabi Abyad, Akarçay Tepe ve Mezraa Teleilat gibi yerleşimlerde bulunan mal gruplarının çoğunluğu açık yüzey renkli ve bitkisel katkılı gruplardan oluşmaktadır.

3. Evre: M.Ö. 6300/6200-6000/5900:

M.Ö. 7. bin yılın son çeyreğinde, Kuzey Mezopotamya'da gözlemlenen çanak çömlek teknolojisi, form ve dekorasyon ögeleri çeşitlilik göstererek karmaşıklaşmıştır. Tartışmaya açık bir şekilde, bu değişimin M.Ö. 6. bin yıl boyunca devam eden rekabet ortamından kaynaklandığı savunulabilir (Campbell, 2007; Nieuwenhuyse, 2007). Bu süre zarfında, boya uygulamaları Fırat'ın doğusunda daha popüler bir dekorasyon tekniği olarak kullanılmaya başlamıştır. Sonuçta, bu geçiş döneminin sonunda, teknolojik, formsal ve dekoratif tarzda

görülen yenilikler, arkeologların Erken Halaf çömlekçiliği olarak adlandırdığı dönemi başlatmıştır. Bahsi geçen mal gruplarına örnek olarak açık renkli yüzey üzerinde koyu renkli boya ile bezenen düz kenarlı ya da omurgalı çanakları tabakları verebiliriz (Cruells & Nieuwenhuyse, 2005; Campbell, 1992, 1998; Akkermans, 1993).

Bu dönemde, koyu renkli ve mineral katkılı mal grupları Kuzey Suriye-Kilikya bölgesinde Koyu Mallar ile temsil edilmekteyken, aynı koyu renk saplantısı Orta Anadolu'da gözlenmemektedir. Bahsi geçen Koyu Mallar, Kuzey Suriye-Kilikya bölgesinde (Rouj Havzası'nın kuzeyindeki yerleşimler hariç), bazıları kırmızı boya ile kaplanmış olan ve bu evrede halen mevcudiyetini sürdüren Alçı Kaplar ile zıtlık göstermektedir. Her ne kadar mineral katkılı Koyu Mallar bu bölgede görülen ana unsur olmaya devam etse de açkı bezekli kapların bölgede tanınması ile beraber sayıca azalmaya başlamıştır. Açkı bezekli kapları, Kuzey Mezopotamya'da görülen boya bezemeli çanak çömlek geleneklerinin Kuzey Suriye-Kilikya bölgesindeki sürümü olduğunu düşünmek mümkündür. Aslında, karakteristik olarak düz kenarlı ya da omurgalı; ortada çapraz hatlar ile boyanarak dekore edilmiş Erken Halaf kâseleri, düz kenarlı ve açkı bezekli kaplara oldukça benzemektedir. Kap tipleri, genellikle kısa boyunlu ya da yüksek silindirik ya da genişleyen boyunlu çömlekler, sığ kâseler ve Rouj 2c'de yaygın olarak görülen omurgalı çanaklardan oluşmaktadır. Husking Tray kaplar, baskı-çizi-boya-kabartma bezekli mal grupları ve nadiren görülen insan şekilli kaplar, 3. Evrede gözlemlenen diğer önemli unsurlardır.

4. Evre: M.Ö. 6000/5900-5000

MÖ 6. binyıl başında, Halaf çanak çömleği, Kuzey Mezopotamya, Kuzey Levant, Güney Irak ve Batı İran'ın pek çok bölgesinde, yerel mallara oranı farklı olsa da düzenli olarak görülmeye başlanmıştır. Kuzey Irak'ta olduğu gibi Kuzey Mezopotamya'nın doğu bölgelerinde görülen mallar neredeyse tamamen Halaf çanak çömleğinin boyalı veya boyasız çeşitlerinden

oluşmuştur. Diğer yandan, Kahramanmaraş ve Kuzey Levant gibi Fırat'ın batısında bulunan bölgelerde, toplam buluntuların %35-40'a varan oranları erken açkılı mallardan oluşmaktadır.

Bu dönemde, Kuzey Mezopotamya boyalı çanak çömlek gelenekleri, (Hassuna-Samarra-Halaf) Kuzey Suriye-Kilikya bölgesinde sıkça görülen koyu renkli malların yerini almaya başlamıştır. İmpresso bezemeli ve kırmızı açkılı mallar ise nadiren görülmeye başlamıştır. Alçı Kaplar tamamen ortadan kalkmış; koyu mallar ise siyah ve kırmızı açkılı örneklerle sınırlanmıştır. Omurgalı çanaklar, boyunlu çömlekler, alçak tabak-tepsiler, süzgeçli çömlekler, Husking Tray türü kaplar ve muhtemelen açık formlu çanaklarla beraber kullanılan kaideler yaygın hale gelmiştir. Kuzey Irak'ta, düz gövdeli ve açık bej renkli çanaklar Erken Halaf döneminde görece yaygın olarak görülmektedir. Geç Halaf döneminde omurgalı çanaklar azalmış; küresel kâseler ve çömlekler artmıştır. Açkı bezekli ve boyalı kaplarda çoğunlukla zikzak, çapraz tarama ve üçgen bezeme motifleri gözlemlenmektedir.

Özetle, çanak çömlek, tarımın yeni ekonomik bağlamında kurulan yeni sosyal ilişkilerin müzakeresinde önemli bir aracı olmalıdır. Çanak çömleğin biçimi ele alındığında, bilinen atalara ait kavramları çağrıştırır; taşınabilirliği ve çeşitli sosyal ölçeklerde kullanılması, topluluklar arasında ve içinde yeni tür ilişkiler kurulmasına olanak sağlar. Bu bağlamda, çanak çömleğin Yakındoğu'ya bu kadar geç bir giriş yapmasının nedeni, malzeme bilgisi eksikliği veya ihtiyaç eksikliğinden kaynaklanamayabilir. Bunun nedeni, büyük ihtimalle kültürel içeriklidir ve dolayısıyla sosyal yapı ve inançtaki değişimlerin bağlamsal değerlendirmesini gerektirmektedir. MÖ 7. binyılın çanak çömleği ve ilgili maddi kültür, "ev" ve "ev"'in inşası sırasında açığa çıkan cinsiyet ayrımlarının oluşturduğu sosyal sınırlar etrafında birleşen bir kavramsal alanın yerel yorumlarını yansıtıyor olabilir. Cinsiyete giren alanlarla ilgili tarihçe, iş bölümünde cinsiyet ayırımı ve emeğin hiyerarşik kontrolünün yanı sıra kaynağa erişim konuları ile gitgide dolanık (entangled) hale gelmiştir. Bu bağlamda, yaşanan deneyim, uygulama ve bilgi düzeyindeki ayrımlar, kadın ve erkek

bedenlerinin farklılaşan gösteriminde belirgin hale gelmiş olabilir. Bu durumun farklı yerlerde; farklı oranlarda ve farklı şekillerde gerçekleşen bir dönüşüm olduğunu, ortak coğrafi veya kronolojik sınırlar ile durum değerlendirmesi yapan geleneksel akademik teoriler aracılığı ile gerçekleştirmek kolay değildir. Yiyecek hazırlama ve tüketme gibi tabularla ifade edilebilen "beden" ile ilgili inançların, evsel ve kamusal bağlamda çanak çömlek ve damga mühür gibi nesnelerin kullanımı aracılığıyla, farklılıkları ortak paydada buluşturmuş olması mümkündür.

Çanak çömlekle tanıtılan yeni imge-materyal alanının, bireysel kimliklerin ve toplumun, ev kavramı etrafında oluşan yeni kavramları, Neolitik dönem boyunca hayvanlarla ilgili köken mitlerini, insan merkezli mitlere yöneltip, toplumsal ve kişisel kimlikleri yeniden tanımlamış olmalıdır. Bu dönüşümde, vahşi hayvanları ve insanları birbirine bağlayan PPNA öykülerinin atalık ve cinsiyet ile bağlantılı olarak ortaya çıkan "mekân" ve "ev" tanımlamalarına atıfta bulunarak yeniden anlatıldığını önerebiliriz. Vaktiyle birbirinden uzakta yaşayan toplulukların artık yakınlaştığı bir ortamda, ortak bir geçmiş arayışı sayesinde yeni ilişkilerin kurulduğundan şüphelenmekteyim. Bağımsız ev topluluklarından oluşan bir ortamda gelişen iş birliği fikirleri, güçlü ve rekabetçi yerel geleneklere karşı hüküm vermiş olabilir. Yakındoğu ve güneydoğu Avrupa'nın geniş bir bölgesinde, çanak çömleğin ve ilişkili olduğu imgelemin yaygınlaşması, bu bölgelerde yaşayan toplulukların, "yemek", "beden" ve "mekân" ile bağlantılı olan yiyecek hazırlama, sunma ve tüketim uygulamalarıyla ifade edilmiş olması mümkündür (Twiss, 2008; Asouti & Fuller, 2013; Wright, 2014; Hodder & Meskell, 2010, 2011). Topluluğun yemek paylaşarak bir araya geldiği etkinliklerde, materyal kültür ögeleri ve yiyecek-beden gösterimleri beraber hareket etmiş, böylece katılımcılar cinsiyet ve soya ait çeşitli konuları müzakere etmiş olmalıdır.

D.TEZ İZİN FORMU / THESIS PERMISSION FORM

ENSTİTÜ / INSTITUTE

Fen Bilimleri Enstitüsü / Graduate School of Natural and Applied Sciences ☐

Sosyal Bilimler Enstitüsü / Graduate School of Social Sciences ■

Uygulamalı Matematik Enstitüsü / Graduate School of Applied Mathematics ☐

Enformatik Enstitüsü / Graduate School of Informatics ☐

Deniz Bilimleri Enstitüsü / Graduate School of Marine Sciences ☐

YAZARIN / AUTHOR

Soyadı / Surname : Yıldırım
Adı / Name : Burcu
Bölümü / Department : Yerleşim Arkeolojisi

TEZİN ADI / TITLE OF THE THESIS (**İngilizce** / English) :
The Social and Symbolic Role of Early Pottery in the Near East

TEZİN TÜRÜ / DEGREE: **Yüksek Lisans** / Master ■ **Doktora**/ PhD ☐

1. **Tezin tamamı dünya çapında erişime açılacaktır.** / Release the entire work immediately for access worldwide. ■
2. **Tez iki yıl süreyle erişime kapalı olacaktır.** / Secure the entire work for patent and/or proprietary purposes for a period of **two years.** * ☐
3. **Tez altı ay süreyle erişime kapalı olacaktır.** / Secure the entire work for period of **six months**. * ☐

* *Enstitü Yönetim Kurulu kararının basılı kopyası tezle birlikte kütüphaneye teslim edilecektir.*
A copy of the decision of the Institute Administrative Committee will be delivered to the library together with the printed thesis.

Yazarın imzası / Signature **Tarih** / Date