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Imagined inceptions: Of pottery and basketry in the Upper Mesopotamian late Neolithic

Koen Berghuijs and Olivier P. Nieuwenhuyse

Abstract

Scholars have long seen the relation between incipient pottery and basketry, or precursory organic container technology, as a kind of reactionary mimesis. The recent identification and detailed investigation of early ceramic sequences across Upper Mesopotamia have strongly reinvigorated the debate on the origins of Western Asian pottery. One particularly important insight has been that, when pottery eventually emerged in the region, this took place within a dense ‘container context’. Early ceramic containers established themselves alongside flourishing pre-existing container traditions, made in a wide range of materials including clay, bitumen, basketry, leather, wood, and stone. In this paper, we wish to accomplish two things. First, we shall argue that scholarship has long been biased, by simply *assuming* a direct continuity between pottery and predecessor containers made from organic materials. There is a long, honourable tradition of thought that assumes pottery to have emerged from basketry, via an experimental stage characterised by pottery-basketry hybrids. This we argue to be simplistic, and often even prejudiced. Second, we aim to present new evidence from the field that sits very uneasily with these long-held assumptions. As case-studies we will discuss the two Late Neolithic sites of Tell Sabi Abyad in Upper Mesopotamia and Shir in the Northern Levant.

Late Neolithic, basketry, pottery, Tell Sabi Abyad, Shir

“How fascinating the work of the antiquarian and archaeologist. To pick up even the fragments of the pottery of a long past age, brush off the accumulated dirt and read thereupon the relation its manufacture bore to a sister art, and then, slowly but surely, to decipher every method followed by primitive artists; to tell how spinner, weaver, net maker worked, and with what materials, and then to discover that every stitch of plain weaving, diaper weaving, twined weaving and coiled weaving known to modern art was used by these ignorant and savage people of the dark ages.” George Wharton James 1909: 18–19.

Introduction

When, how, and why prehistoric communities in ancient Western Asia adopted pottery containers has been widely theorised for over a century. The initial debates were often able to offer little more than broad-brush ‘arm chair’ speculation on the contributions of pottery to long-term human evolution (e.g., Morgan 1877). More recently, the identification and detailed investigation of early ceramic sequences across Upper Mesopotamia has strongly reinvigorated the debate (Le Mière and Picon 1998; Nishiaki and Le Mière 2005; Le Mière 2009, 2013; Yalman et al. 2013; Badreshany 2016; Nieuwenhuys and Campbell 2017; Nieuwenhuys 2018a). As has become clear, across the region communities adopted the sustained production of pottery between ca. 7000–6700 cal BCE in the form of excruciatingly limited quantities of well-crafted, mineral-tempered, visually conspicuous containers (Nieuwenhuys et al. 2010; Campbell 2017; Le Mière 2017; Odaka 2017; Tsuneki 2017). In the subsequent half millennium or so, this early horizon gave way to assemblages dominated by coarse, plant-tempered, mostly plain ceramics in increasing quantities (Nieuwenhuys and Campbell 2017; Nieuwenhuys 2018a).

Novel technologies and the social practices they afford become adopted to the degree that they fit pre-existing collective expectations and ways of doing (Brown 1989; Lemonnier 1989, 1992, 1993; Bernbeck 2017). One particularly important insight has therefore been that when pottery eventually emerged in Western Asia, this took place within a dense ‘container context’. Early ceramic containers established themselves alongside flourishing pre-existing container traditions, made in a wide range of materials including clay, bitumen, basketry, leather, wood, and stone (Le Mière and Picon 1998; Thissen 2007; Tomkins 2007; Özdoğan 2009; Tomkins, this volume). The production of plaster containers (*vaisselle blanche* or White Ware) involved shaping a soft light-coloured material around baskets for support as well as pyro-technology, seen as two key ingredients for early pottery too (Gourdin and Kingery 1975; Maréchal 1982; Kingery et al. 1988; Nilhamn and Koek 2013; Nilhamn, this volume). Most of these alternatives date back millennia before ceramic; pottery was the new kid on the block. This rich container context provided the crucial ‘seat in life’ (Bernbeck 2017) in which this innovation could become collectively accepted. Understandably, the new findings lead to fresh considerations which specific ‘stepping stones’ and innovative craft crossovers led prehistoric communities to adopt pottery.

In this paper, we wish to accomplish two things. First, we shall argue that scholarship has long been biased, by simply *assuming* a direct continuity between predecessor containers made in organic materials and pottery. Specifically, we shall be concerned with the relationship between early pottery and basketry. There is a long, honourable tradition of thought that assumes pottery to

have emerged from basketry, via an experimental stage characterised by pottery-basketry hybrids. This we argue to be simplistic, sometimes even prejudiced. Second, we aim to present new evidence emerging from the field that sits very uneasily with these long-held assumptions.

As case studies we discuss the two Late Neolithic sites of Tell Sabi Abyad in northern Syria and Shir in the Northern Levant. Excavations at these sites have exposed well-dated cultural sequences and extensive settlement data from the early 7th to the later 7th millennium. At both sites pots and baskets were available, as well as pottery-basketry hybrids. However, the relation between basketry and incipient pottery played out differently than established archaeological thought had led us to expect. Instead of representing primitive ‘experiments’ at the very opening stages of the Pottery Neolithic, limited numbers of pottery-basketry hybrids occur only much later in the sequence. More to the point, they emerge at a stage in which pottery production evolved rapidly, qualitatively, and quantitatively. After reviewing the evidence from the two sites, we will argue that rather than the *cause* for the adoption of pottery, the pottery-basketry hybrids represent its *result*.

Tales of pots and baskets

Scholars have long seen the relation between incipient pottery and basketry, or precursory container technology represented by organic materials more broadly, as a kind of reactionary mimesis. As Blitz (2015: 666) recently stated, “the shapes and textures of non-ceramic containers have been a source for ceramic vessel design attributes from their earliest appearance”. In fact, this theoretical stance has been around since the late nineteenth century, and it has remained remarkably unquestioned. Building on a long history of socio-evolutionary thought, this generalising view saw the relation between basketry and incipient pottery primarily in terms of self-evident causality: the latter (pottery) represented the logical and superior, ‘artificial’ successor to containers made of perishable, ‘natural’ materials. Already quite early on, scholars therefore expected to find crossovers in the *chaîne opératoire* of early ceramic vessels and baskets as evidence for technological borrowing and mimesis (Peschel 1876: 169; Grosse 1897: 143; Schurtz 1900: 320–321).

To be fair, until quite recently the frustratingly limited data set available from the West Asian Late Neolithic (for syntheses, see Le Mière and Picon 1987, 1998, 2003) hardly allowed scholars to test this deep-seated assumption empirically. Instead, scholars have pointed out selective morphological features in the early ceramic assemblages that supposedly represented skeuomorphic echoes of the older, organic container traditions (Tomkins, this volume). Early ceramic vessels were thought to maintain characteristics of the antecedent basketry artefacts because “a connection to the prototype expressed through

similarity is considered necessary to the successful creation of the object” (Blitz 2015: 675). By emulating pre-existing organic containers, specifically: basketry, innovating Near Eastern potters were able to “render novel objects more desirable and less threatening” (Blitz 2015: 675).

The *a priori* notion of a causal relationship between basketry and pottery is firmly rooted in nineteenth-century evolutionary paradigms about the universal linear development of human culture (Lowenthal 1985: xvi). Scholars relied on the ethnographic present to conceptualise the past: contemporary ‘savages’ encountered during ethnographic expeditions were regarded as direct analogies for imagined prehistoric communities inventing pottery. Early archaeological thinking about the inception and evolution of container technology found itself much inspired by ethnographic observations accumulating from still ‘uncivilised’ parts of the world, particularly in North America (Holmes 1886: 443). Thus,

‘The earliest vessels used by mankind undoubtedly were shells, broken gourds or other natural receptacles that presented themselves opportunely to the needs of the aborigine. As his intelligence grew and he moved from place to place, the gourd as a receptacle for water when he crossed the hot and desert regions became a necessary companion. But accidents doubtless would happen to the fragile vessel and then the suggestion of strengthening it by means of fiber nets arose and the first step towards basket-making was taken.’ (James 1909: 11).

A supposed result of an increased intelligence, the discovery of basketry was regarded as a characteristic element of the final phase of the evolutionary stage of “Savagery” (Morgan 1877: 14). As basketry techniques became subsequently more refined, this offered an enormous range of possibilities, and resulted in innovative applications. One of these was identified in ethnographic contexts as a technological hybrid between basketry and pottery. Nineteenth-century Native American societies were observed to use clay-lined baskets for water storage and culinary purposes. Accidental or deliberate contact with fire occasionally caused the clay to harden:

‘The manner in which a clay lining to a vessel of another material may result in the production of an earthenware dish, is exemplified by a practice of the Coconinos Indians of Arizona, who roasted seeds, crickets, bits of meat, etc., in wicker trays coated inside with clay, which was pressed in whilst soft and allowed to dry. The food to be roasted was placed on the tray, together with glowing wood-embers, and the tray shaken to and fro [sic], with constant blowing to keep the embers burning. The food was thus cooked, and incidentally the clay became baked.’ (Harrison 1924: 22).

Applying the present to the explanation of the past, several scholars therefore imagined that clay-lined baskets had been the Neolithic stepping-stone to fully independently produced ceramic containers (Starr 1895:

55; Childe 1936: 89; Schurtz 1900: 320–321). The invention of pottery was seen as an accidental discovery, yet one that was simply bound to happen somewhere along the arduous road of becoming human. Morgan classified the introduction of pottery technology as the seminal distinction between his evolutionary stages of ‘Savagery’ and the ‘Lower Status of Barbarism’. As he saw it, ceramics “produced a new epoch in human progress in the direction of an improved living and increased domestic conveniences” (Morgan 1877: 14).

The potential of these accidentally fired, clay-lined baskets was quickly recognised for the many benefits it offered, in particular in the realm of status competition. Hence, people moved on to using baskets as moulds for producing the first non-accidental ceramics. Literally building on basketry technology, novice potters now shaped raw clay in or around baskets, then removed it from its mould, and fired the new container separately. These experimental vessels ought to be identifiable in the field by tell-tale traces of the basketry impressions on the interior or exterior surface of the vessel. This technological and cultural evolution was thought to be universal, as inferred not only from thousands of basket-impressed sherds found during pioneering archaeological surveys throughout North America, but also from ethnographic observations at the beginning of the twentieth century among “these ignorant and savage people” (James 1909: 19).

Shaping clay around baskets intrinsically meant that the ceramic product was an identical and permanent copy of the organic mould, which was deemed a crucial element to explain the widespread adoption of ceramic technology. Remarkably, having just invented it, Neolithic groups were thought to have conceptualised the “clay vessel [as] an intruder, [which] (...) usurps the place and appropriates the dress of its predecessor in wicker.” (Holmes 1886: 449). Skeuomorphism was understood to have enabled diminished emotional responsiveness to the introduction of the new, frightening substance that is fired clay.

Indeed, cross-overs between basketry technology and incipient pottery were imagined to be manifold. One technological cross-over deemed particularly illustrative for the causal relation between basketry and pottery was coiling: “Bowls were made on the outside of baskets by winding a coil of clay around and around (Starr 1895: 57). This view was repeatedly illustrated by examples from the American Southwest, where “an application of coiled methods of weaving to the manufacture of pottery” (James 1909: 19) was documented:

‘It will be remembered that the Indian women of southern California make their basket-work out of a coiled rope composed of grass; it was impossible for the pot-maker to break away all at once from basketry and its methods; hence the coil of grass was replaced by a coil of clay.’ (Starr 1895: 57).

Even when some time later early potters no longer modelled the clay around baskets but shaped the containers by hand without baskets as support, they continued with emulating basketry technology with which they were supposedly familiar:

'The workman tries to make the new pot as like as possible to the familiar basket, in all respects, unessential as well as essential. He is not satisfied with giving the new vessel the convenient curvature of the old, but he also gives it the pattern of a woven basket, not because he considers it suitable or pretty, but because he is so accustomed to it that he can not [sic] easily think of a vessel without it.' (Grosse 1897: 144).

Basketry was thus seen as "a preparatory training for pottery" (James 1909: 13), a teleological claim based on ethnographic observations which were subsequently projected onto an imagined prehistoric past:

'Pottery is a comparatively young art; it is at least very much younger than basketry, which even the rudest tribes have rather highly developed. The basket is everywhere the forerunner of the pot, and has consequently been everywhere its prototype.' (Grosse 1897: 143).

Simultaneously, in a curious example of circular reasoning, basketry-impressed pottery sherds were thought to represent incipient pottery technology, whether encountered in archaeological surveys or among nineteenth-century Native Americans:

'That basketry was intimately connected with two distinct methods of pottery-making is proven by the clearest evidence. In the Mississippi Valley, in Arizona, New Mexico and elsewhere in the United States thousands of pieces of pottery have been found which unmistakably show that the soft clay was modelled around the outside or within some basket form which gave the shape of the vessel. In all the museums these specimens of pottery may be found. It will be observed in studying them that they bear far more impressions of basketry and other textile arts than of natural objects, such as gourds, shells, etc. It is also observable that every basketry stitch or pattern known to the aborigines is found in these pottery impressions. Hence the natural inferences that basketry antedates pottery, and that the art of basket-making was in an advanced stage whilst pottery was still in its infancy.' (James 1909: 18).

It comes as no surprise, then, that the 'infancy' stage of pottery technology in the archaeological record was generally assumed to exhibit three closely related characteristics:

1. impressions of the original basketry object in or around which the pottery-basket hybrid was shaped;
2. basket-inspired shapes for the early ceramic containers, or skeuomorphs;
3. the use of pottery shaping techniques similar to those employed in the production of basketry (Blitz 2015).

Together with an assumed coarse, plain, and overall simple appearance, these elements were implicitly or explicitly seen as the defining characteristics of 'early' ceramic assemblages (Nieuwenhuyse et al. 2010: 74).

Even so, the assumptions underlying these reconstructions were already questioned at the beginning of the twentieth century. Earl H. Morris was among the first to actually examine the archaeological evidence from a stratified cultural sequence in New Mexico: what did early pottery really look like? Morris analysed a specific type of coiled pottery from a diachronic perspective, introducing solid archaeological evidence into the hitherto speculative and theoretical debate on the origins of pottery. After a careful examination, Morris reached the conclusion that "the variety of coiled ware which has generally been accepted as the most ancient of Southwestern pottery, is shown to be the product of the culmination and not the beginning, of an intricate and highly elaborate technique" (Morris 1917: 28).

Morris' research effectively showed that not ethnographically inspired conjecture but actual analysis of sherds from well-documented, stratified cultural sequences could provide insights into the first adoption of pottery and its subsequent development:

'Until there was no stratigraphic evidence to the contrary, it was permissible, though not justifiable when relative difficulty of construction was considered, to postulate a genetic relationship between coiled baskets and the coiled pottery (...) Hence it appears that proofs based upon coiled ware mean nothing at all, and other arguments must be brought forward if the theory that the pottery of the Southwest is a direct outgrowth of basketry is to be substantiated.' (Morris 1917: 28).

Unfortunately, Morris' far-sighted views did not receive widespread recognition at the time. Instead, the theorisation on the relation between basketry and incipient pottery technology has remained within the realm of speculation. Many of the extraordinary quotes above predate the recent claims by Blitz (2015) by more than a century, yet the *a priori* notions at the heart of these speculative statements have remained unchanged, as have their universalist connotations.

These ideas have had a significant impact on the interpretation of early pottery in Western Asia. While ceramic specialists more intimately familiar with the messy complexities of the data have always argued for professional caution (Le Mièrre and Picon 1998), the region has had its fair share of broad-brush cultural-evolutionary generalisation. Already early on in the development of prehistoric archaeology in the region, and in full absence of empirical evidence, basketry production was widely seen as a major stepping-stone towards early Near Eastern pottery (Frankfort 1924: 12; Childe 1936: 76). Ethnographic comparisons from outside the region have been brought in to show how prehistoric reed baskets can be impregnated

with clay (Gheorgiu 2009). In the Western Asian Neolithic this then accidentally yielded ‘pottery’ when these clay-lined baskets dried out or became accidentally fired (e.g., Schmidt 1968, 1974, 1976, 1990).

In sum, the perception of a direct evolution from organic, natural basketry to inorganic, artificial early pottery has been a remarkably consistent theme in

prehistoric archaeology. So, what does the archaeological record from Western Asia have to say?

Late Neolithic Tell Sabi Abyad and Shir

Here we present several recent strands of evidence from Tell Sabi Abyad in Upper Mesopotamia and Shir in the Northern Levant, which, when examined jointly, counter

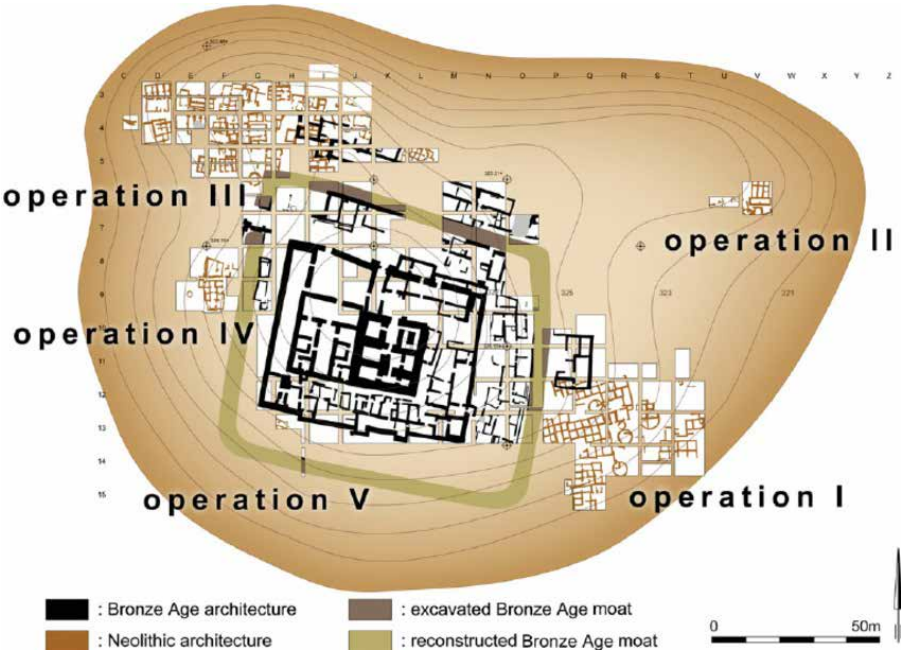
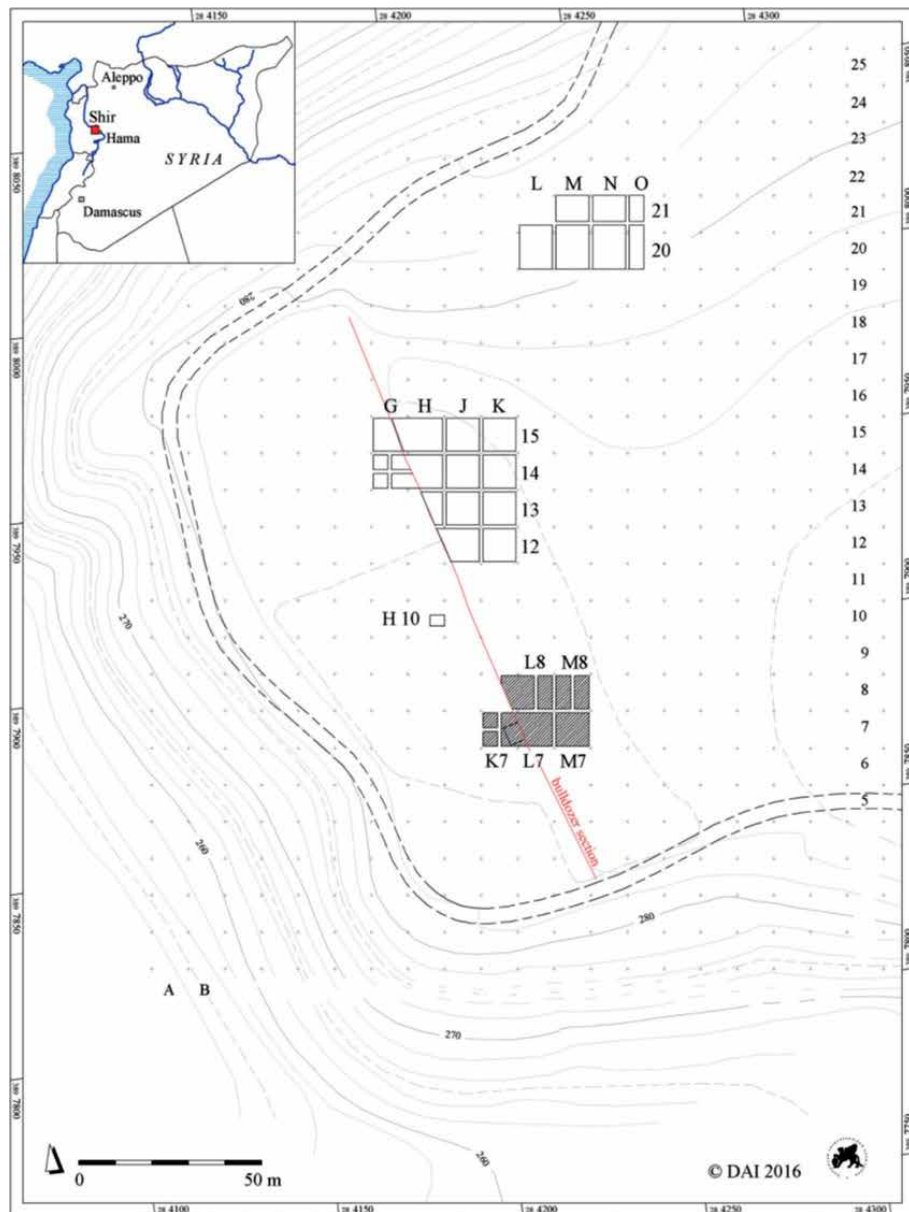


Figure 8.1: The mound of Tell Sabi Abyad showing the locations of the various operations (Tell Sabi Abyad Project, Leiden University).

Date cal. BC	Period	Tell Sabi Abyad I - operations					Tell Sabi Abyad II	Tell Sabi Abyad III
		I	II	III	IV	V		
5700	Middle Halaf			D-Seq.				
5800	Early Halaf	level 1						
5900		level 2		C-Seq.				
		level 3	level 1	level 2				
		level 4	level 2					
6000	Transitional	level 5	level 3	level B1		phase III		
		Burnt Village	level 4	level B2				
		level 7		level B3				
6100	Pre-Halaf	level 8		level B4				
		P15 - 8		level B5				
6200		P15 - 9		level B6				
		P15 - 10		level B7				
				level B8				
6300	Early Pottery Neolithic			level A1		phase II		
6400				level A2		phase I		
6500		P15 - 11		level A3	level 1			
6600				level A4	level 2			
				level A5				
				level A6				
				level A7				
6700	Initial PN			level A8			level 1	trench H7
				level A9				
6800				level A10				
6900				level A11				
				level A12			level 2	trench H8
				level A13				
				level A14				
				level A15				
				level A16				
7000	Late PPNB						level 3	trench H9
7100							level 4	

Figure 8.2: The complex occupational sequence of Tell Sabi Abyad, indicating the relationships between the various Operations at Tell Sabi Abyad I, the excavations at Tell Sabi Abyad II and III, culture-historical attributions and absolute dates cal BCE (image A. Kaneda; Tell Sabi Abyad Project, Leiden University).



UTM data WGS 84, Zone 37S

Shir excavations

Trenches 2005-2008

German Archaeological Institute, Damascus

Direction Générale des Antiquités et des Musées de la Syrie

Figure 8.3: Plan of Late Neolithic Shir, showing the modern bulldozer cut across the site. The Southern Area comprises trenches K7 to M8 (map: DAI Orient Department, Th. Urban).

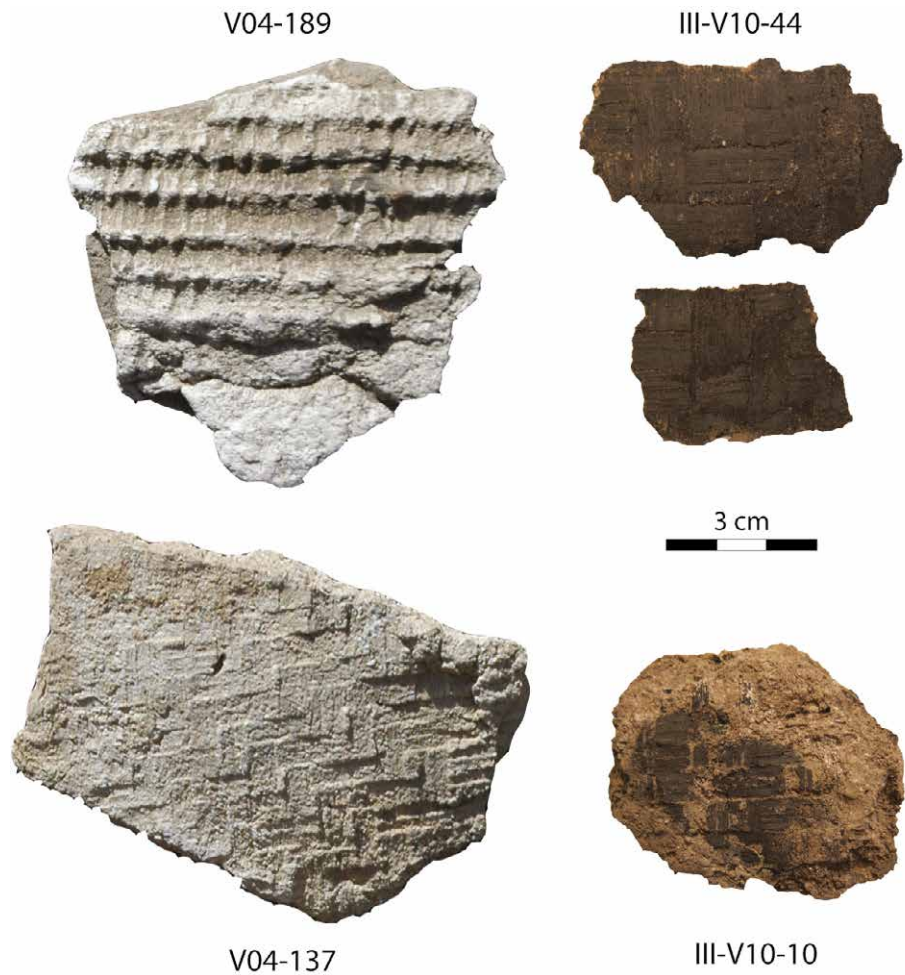


Figure 8.4: Tell Sabi Abyad I and III. Examples of (Late) Neolithic basketry-impressed fragments of bitumen (Tell Sabi Abyad III: V10-10; V10-44) and White Ware (Tell Sabi Abyad I, Operation III: V04-137; V04-189) (Tell Sabi Abyad Project, Leiden University).

the traditional, 'primitivist' view on the development of early ceramic technology discussed above. Both Late Neolithic sites offer stratified, well-dated archaeological sequences that allow archaeologists to chart the adoption and subsequent development of ceramics in close detail. Intriguingly, while the ceramic sequences at the two sites differ in terms of the composition of the ceramic assemblages and the range of types available, at a broader, structural level a number of key developments were closely comparable. These relate to the role of the earliest pottery at the sites, the subsequent advance of the potters' craft, and, significantly, the relationships between pottery and basketry discussed below (Le Mière and Nieuwenhuys 1996; Nieuwenhuys 2007, 2009, Nieuwenhuys et al. 2010, Nieuwenhuys 2014, 2017a, 2017b, Nieuwenhuys and Campbell 2017, Nieuwenhuys 2018a). Juxtaposing these two sites offers the unique opportunity to tease out localised solutions from practices shared over larger distances. After two short site descriptions, and after two brief digressions into Neolithic basketry and pottery technology, we will return to the main matter at hand: the occurrence of

pottery-basketry hybrids and their role in the development of early ceramic technology in West Asia.

Tell Sabi Abyad is situated in the gently undulating plain of the river Balikh, a perennial tributary of the Euphrates, about 30km south of the Syro-Turkish border. The site comprises four prehistoric mounds between 1 and 5ha in size, named Tell Sabi Abyad I to IV, located in a roughly linear north-south orientation within a short distance of each other (Fig. 8.1). People inhabited these places from the late eighth until the early sixth millennium BCE, although not all of them always contemporaneously. Initially habitation included all four sites, but it contracted to the main mound of Tell Sabi Abyad I after c. 6800 BCE (Akkermans 1989; Akkermans and Le Mière 1992; Akkermans 1993; Akkermans and Verhoeven 1995; Akkermans 1996; Akkermans et al. 2006; Van der Plicht et al. 2011; Akkermans and Van der Plicht 2014; Plug et al. 2014). A rigorous program of AMS radiocarbon dating has resulted in a fine-grained sequence with some building levels dated at a decadal scale (Fig. 8.2), which resulted in a fine-tuned ceramic sequence for the seventh to early sixth millennium BCE.

The Late Neolithic settlement of Shir is located in western Syria, in what is known as the Northern Levant. The Neolithic site measures approximately 4 ha and is situated on a high spur overlooking the Sarut, a perennial tributary of the Orontes River (Bartl and Haidar 2008). The inconspicuous prehistoric site was discovered after local farmers destroyed part of the site with a bulldozer to level the surface. Excavations between 2005 and 2010 targeted different parts of the site (Fig. 8.3) (Bartl et al. 2006a; Bartl et al. 2006b; Bartl and Haidar 2008; Bartl and Ramadan 2008; Bartl et al. 2009; Bartl et al. 2011; Bartl et al. 2012; Bartl 2013; Bartl and al-Hafian 2014; Bartl 2018). Large-scale excavations in the Central Area gained information on the layout of the settlement during its later stages. Excavations in the North-eastern Area investigated several large buildings belonging to the final phases of the site. In the so-called Southern Area, a full stratigraphic sequence was excavated, from the initial settlement of this location to the final stages of inhabitation. This sequence yielded the pottery-basketry evidence discussed in this paper. In spite of a dedicated collection of radiocarbon dates from well-stratified contexts, the stratigraphic complexities of the site caution against suggesting overly exact dates for specific levels (Bartl 2013). However, we can be relatively sure of a starting point soon after c. 7000 cal BCE (layer I, 'Pottery Phase I'), with the abandonment of this part of the site placed sometime after c. 6500 cal BCE (layer VIb, or 'Pottery Phase IV').

Basketry before pots

Throughout West Asia, direct evidence for the production and usage of (Late) Neolithic basketry is rarely preserved and therefore extremely scarce. The best-known Neolithic basketry artefacts were found at the site of Nahal Hemar, and their degree of preservation remains unrivalled in the region (Schick 1988). Fortunately, indirect evidence for basketry production and use is more commonly available. Phytolith traces and basketry impressions on a variety of materials have been reported from, inter alia, Çatalhöyük (Wendrich and Ryan 2012 and Hodder, this volume), Beidha (Kirkbride 1967: 10; plates IVb, VIa), Jarmo (Adovasio 1975), Jericho (Crowfoot 1982: 548–550) and Gilgal (Bar-Yosef 2010).

The only evidence for basketry usage at Late Neolithic Shir derives from impressions on ceramics, which are discussed in more detail below. Tell Sabi Abyad, however, boasts a variety of basketry impressions on Neolithic ceramics, fragments of bitumen, white ware, and burned clay, and on much later pre-Halaf sealings (Duistermaat 1996) (Fig. 8.4). Excavations at the site of Tell Sabi Abyad II produced several such bitumen fragments with imprints of plaited basketry from Late PPNB layers (Verhoeven 2000: 102–103). The earliest attestation of coiled basketry at the site derives from the early-7th millennium layers A9-A7 and A8 in Operation III, and comprises a small assemblage of White Ware fragments



Figure 8.5: Tell Sabi Abyad I, Operation III. Examples of Early Mineral Ware (EMW) (Tell Sabi Abyad Project, Leiden University).

with impressions of coiled basketry artefacts (Berghuijs 2013; Nilhamn and Koek 2013).

The range of materials on which these impressions are found offer some insights into the different uses for Neolithic basketry containers. The impressions on White Ware fragments demonstrate that the gypsum vessels were moulded in or around three-dimensional basketry artefacts (Nilhamn et al. 2009). Additionally, basketry objects were rendered impermeable by applying bitumen to their interior or exterior surfaces, and may have been used to transport or store liquids. Most important, however, is that the known corpus of Neolithic basketry impressions unequivocally demonstrates that the technological know-how of basketry-making was already widespread in the region before the advent of pottery technology.

Initial pottery

In Upper Mesopotamia, archaeological investigations over the past two decades or so have also radically altered scholarly understanding of the initial adoption of pottery. The earliest ceramics known from Upper Mesopotamia derive from a fairly well-dated cultural horizon between ca. 7000 and 6700 cal BCE (Campbell 2017). Contrary to long-held modern assumptions, the earliest pottery in the region was mineral-tempered, burnished, and occasionally decorated (Nieuwenhuys et al. 2010).



Figure 8.6: Tell Sabi Abyad I, Operation III. Standard Ware base fragments carrying the impressions of coiled basketry on the exterior surface (Tell Sabi Abyad Project, Leiden University) (after Nieuwenhuyse 2018a, plate 26).

The earliest ceramics from Tell Sabi Abyad (Fig. 8.5) belong to this so-called Early Mineral Ware (EMW) and occur in Operation III levels A16-A10, which have been securely dated to between 7000–6900 cal BCE (Nieuwenhuyse et al. 2010). Provenance studies strongly suggest that this EMW was not produced locally, but was instead imported from Tell Seker al-Aheimar, a site in the headwaters of the Khabur River (Le Mière et al. 2018). After several centuries the relatively rare EMW disappears from Tell Sabi Abyad altogether, giving way to an unmistakable “tsunami” (Nieuwenhuyse 2018b, 7) of plant-tempered, coarsely-made, undecorated Standard Ware (SW). In contrast to EMW, SW was locally produced, and made and used in increasing numbers between 6700–6400 cal BCE, a dynamic timeframe characterised by a growing diversification (both quantitative and qualitative) of pottery production, as

well as an expanding array of pottery-related practices (Nieuwenhuyse 2018d: 367–368, 370).

At Shir, a similar pattern is observable. The initial phases of the Pottery Neolithic here were characterised exclusively by low densities of mineral-tempered, burnished wares known as Dark-Faced Burnished Ware (DFBW). The following phases saw increasing densities of ceramic assemblage, dominated more and more by coarsely-made, plant-tempered, and unburnished ceramics (CUW) (Nieuwenhuyse 2009).

Pots and basketry: the evidence

Apart from their general importance in the study of early ceramics, Tell Sabi Abyad and Shir offer a unique dataset of basketry-impressed pottery sherds. Excavations in Operation III at Sabi Abyad I produced eighteen basketry-impressed ceramic sherds (for a more technological and

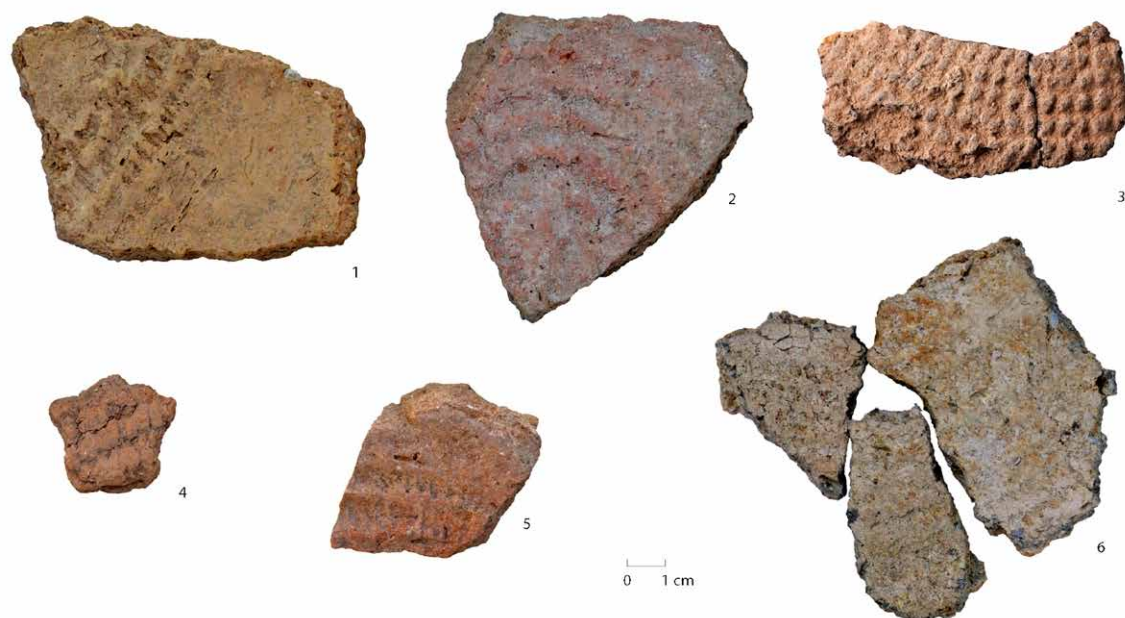


Figure 8.7: Shir, Southern Area. Examples of Coarse Unburnished Ware (CUW) with basketry impressions (DAI Orient Department, Th. Urban).

contextual description of these sherds, see: Berghuijs 2018); those photographed in the field are reproduced in Fig. 8.6. The impressions were all present on fragmented sherds of coarse, plant-tempered Standard Ware. One of the impressions was found on the interior body surface of a relatively large vessel fragment, whereas the other ten imprints were all present on the exterior surfaces of base fragments. The impressions were all negatives of coiled basketry artefacts: terminologically, coiling refers to one of the three main basketry techniques and consists of sewing passive, horizontal elements with active, vertical elements, thereby forming a coil around which the next horizontal element is wrapped (Wendrich 1991; Adovasio 2010). The positioning of the impressions on these sherds suggests that two different basketry categories were employed in the production sequence of the vessels. First, the clay may have been shaped on flat mats or shallow bowl-like baskets, which may even have functioned as perishable turntables (Özdemir 2007). Second, as the impression on the interior surface indicates, clay was also shaped around baskets, suggesting that the vessel resembled – at least, partly – its basket-mould in appearance. At Tell Sabi Abyad, the stratigraphic sequence in which basketry-impressed sherds occur has been securely dated to the second half of the 7th millennium cal BCE (Van der Plicht et al. 2011). The diachronic distribution of the impressions thus falls between layers A8 and A3 (between 6625 and 6375 cal BCE), with the majority of specimens originating from levels A4 and A3 (between 6455 and 6375 cal BCE).

At Shir, excavations in the Southern Area of the site have produced a total of nine basketry-impressed sherds (Fig. 8.7). The impressions were present on fragmented sherds of Dark Faced Burnished Ware (DFBW) and Coarse Unburnished Ware (CUW) (Nieuwenhuyse 2017b; see also Nieuwenhuyse et al. 2012). Similar to those from Tell Sabi Abyad, all basketry-impressed sherds from Shir yielded imprints of coiled basketry artefacts. Remarkably, two impressions were in fact impressions of impressions, i.e., positives rather than negatives. This suggests that during the production sequence, the wet clay came into contact with another surface already carrying impressions.¹ These basketry-impressed sherds derive from layers IVa-b to VIa-b, stratigraphic sequences dated to between 6600 and 6300 cal BCE.

Shifting materialities

This handful of ceramic sherds from Tell Sabi Abyad and Shir provokes new questions with regard to technological cross-overs between basketry and early pottery. Especially relevant for the present discussion is the temporal context of this relationship, and the chronological appearance of pottery-basketry hybrids. Following the traditional cultural-evolutionary perspective on incipient pottery outlined above, these

1 This may have occurred as a result of shaping the vessel's convex base on a make-shift tool, such as a piece of broken pottery (e.g., a low base fragment of a large body sherd, see: Nieuwenhuyse 2018c: 51). If such a sherd carried a basketry impression, it would automatically transfer onto the wet clay.

initial ceramics were long expected to be 1) coarse and plain, and 2) to display clear influences from preceding basketry shapes or techniques. With the identification of Early Mineral Ware as the earliest pottery in Upper Mesopotamia a decade or so ago, the former assumption was already rejected, as EMW is characterised by a fine texture, mineral temper, and occasional slip decorations (Nieuwenhuyse et al. 2010). The second assumption now also requires stringent revision: pottery vessels with clear links to basketry technology do occur at Tell Sabi Abyad, but only several centuries *after* the first occurrence of EMW at the site and, more importantly, *after* the initial appearance of locally produced Standard Ware.

A similar scenario emerges from the site of Shir, where the earliest occupation layers are dominated by the presence of DFBW. Although known under a different name, it is comparable to EMW from Tell Sabi Abyad in terms of both chronology and overall appearance. The incipient pottery from Shir is also characterised by a fine texture, mineral temper, and a burnished surface. Pottery vessels with clear links to basketry technology (in the form of impressions) also occur at Shir, but only several centuries *after* the first occurrence of DFBW at the site.

Thus, the chronology of basketry-impressed pottery at both sites consigns to the waste-paper basket any preconceived notions about the causality between basketry and ceramic technology – at least, in Upper Mesopotamia and the Northern Levant. There are, however, two other aspects of the traditional cultural-evolutionary perspective that merit particular emphasis here. The imagined skeuomorphic qualities of early pottery are commonly thought to have “render[ed] novel objects more desirable and less threatening” (Blitz 2015: 675). The mimicking of basketry shapes in ceramic vessels would thus have contributed considerably to the acceptance and spread of incipient pottery, since these new containers were considered reminiscent of basketry containers and thus seen as familiar. Blitz (2015: 666) has suggested that this skeuomorphism acted on two different visual levels, namely shape and texture. With regard to the former, the data from Tell Sabi Abyad and Shir are not conclusive: the earliest pottery sherds from both sites are too small to make inferences about the overall shape of the original vessels. They do indicate, however, that potentially skeuomorphic textures did not appear until several centuries after the first introduction of ceramic technology. But rather than being the result of an attempt at mimicking basketry-textures, the impressions from Tell Sabi Abyad and Shir are an inherent result of technological choices made during the production sequence, i.e., when clay was very sporadically shaped in or around basketry artefacts. At Tell Sabi Abyad, basketry technology has an even greater chronological depth in combination with other impressed materials, such

as bitumen and White Ware. A few centuries later the technique was also employed in the production sequence of ceramic containers.

Another aspect of the traditional cultural-evolutionary perspective is the supposed technological cross-overs that occur between basketry and early pottery. As we have seen in the first part of this paper, coiling was and is seen as the common denominator between the two, and emphasis has generally been placed on the similarities between coiled basketry and coiled pottery. However, beyond pointing out the terminological correspondence, further supposed similarities are left to the imagination – and for good reason: ‘coiling’ in basketry technology is rather different from ‘coiling’ in ceramic technology. The production of basketry and potting are technological systems with their own objects, gestures, and specific knowledge (Lemonnier 1992: 5–6): just because both share a modern terminological construct does not mean these techniques are comparable in other aspects.

Concluding remarks

It becomes clear, then, that at Tell Sabi Abyad and Shir, coiled basketry artefacts were sporadically used as supports or moulds for shaping clay into vessels from the mid-7th millennium onwards – not, as so often imagined, for crafting incipient ceramic vessels. It is only at this belated stage that convincing relationships can be identified between the operational chains of pottery and basketry. Moreover, the low quantities of basketry-impressed sherds suggest that this technique of shaping vessels never really became common practice. Instead, Late Neolithic potters preferred to draw from a suite of technological alternatives, depending on how they had formed the vessel’s base (see Nieuwenhuyse 2018c: 50–63). Far from indicating the ‘primitive’ beginnings of pottery, these cross-overs between the crafts of basketry and pottery occurred in a dynamic context of increasing quantitative and qualitative diversification of pottery production, as well as an expanding array of pottery-related practices, several centuries *after* the first adoption of pottery.

Though it is unquestionably the case that basketry technology chronologically preceded the invention of pottery by several millennia, pottery did not ‘evolve’ from basketry, nor are its technological characteristics mere copies of basketry designs – at least in the cases of Tell Sabi Abyad and Shir, for we must avoid exchanging one universalist model (or one ‘imagined inception’) for another. The introduction and subsequent adoption of pottery in West Asia is indeed still poorly understood, but speculative and generalising statements about the nature of the relation between basketry and pottery should be abandoned in favour of analysis of actual archaeological data, whenever available.

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