# Deciphering Later Neolithic stamp seal imagery of Northern Mesopotamia

## Çiğdem Atakuman

Middle East Technical University, Ankara, TR cigdem.atakuman@gmail.com

ABSTRACT – Stamps, pendants and related image bearing objects of the Near Eastern Neolithic are commonly treated as markers of property control and as precursors of writing. Through a basic stylistic analysis of image and shape relations, this study focuses on material from later 7<sup>th</sup> and the 6<sup>th</sup> millennium BC Northern Mesopotamian sites in an attempt to understand the symbolic role of stamps within the wider context of social practice. I suggest that the stamps and pendants may have been objects that elaborated on their user's identity in various spheres of social membership. More significantly, these objects may have introduced a new discursive field through which personal identities and community structures began to be redefined with reference to male sexuality. This interpretation is demonstrated by the dominance of phallic imagery within the stamp assemblages of the time period and the links built between these phallic images and the remaining stamp corpus which is composed of powerful imagery surviving from the earlier Neolithic of the region.

IZVLEČEK – Pečatniki, obeski in drugi podobni predmeti iz obdobja neolitika na Bližnjem vzhodu predstavljajo znake nadzora nad lastnino in veljajo za predhodnike pisave. Ta študija je usmerjena na material iz poznega 7. in iz 6. tisočletja BC v severni Mezopotamiji. Z osnovno stilistično analizo podob in odnosov med oblikami poskušam razumeti simbolično vlogo pečatnikov v širšem kontekstu družbenih praks. Sklepam, da so bili pečatniki in obeski predmeti, ki so dodelali identiteto tistega, ki jih je uporabljal, v različnih sferah družbene pripadnosti. Še bolj pomembno pa je, da bi lahko takšni predmeti predstavljali novo diskurzivno področje, preko katerega so bile osebne identitete in strukture skupnosti ponovno definirane v zvezi z moško seksualnostjo. Ta interpretacija se kaže tako v prevladi faličnih podob znotraj zbirov pečatnikov v tem obdobju kot v povezavah med temi podobami in preostalim korpusom pečatnikov, ki je sestavljen iz močnih prispodob, ki so navzoče v tej regiji od zgodnjega neolitika naprej.

KEY WORDS - Neolithic; stamp seals; symbolism

## Introduction

Small, image-bearing items usually produced from available local stone, sometimes together with items made from clay, bone or exotic materials, are traditionally called stamp seals. These items are regularly encountered at later 7<sup>th</sup> and 6<sup>th</sup> millennium BC sites of Northern Mesopotamia (Fig. 1). A remarkable unity can be observed in the selection of seal images across this region, which strengthens the impression that these objects were part of a common symbolic world. Various styles of cross-hatching, concentric circles, zigzags or a combination of parallel and perpendicular lines were often incised on carefully shaped geometric surfaces (Fig. 2). More naturalistic images of animals, such as caprines, snakes and scorpions along with humanoid and house imagery are also consistently observed. The great majority of these objects have pendant- or bead-style perforations or raised suspension loops that indicate attachment to another medium, such as a rope or textile (*von Wickede 1990; Charvat 1991*). Evidence from the mid-7<sup>th</sup> millennium BC cemetery at Tell Ain el-Kerkh indicates that they were worn on the hip or hand area as body adornments by individuals of both sexes and of various ages, including juveniles and children (*Tsuneki 2011*).

The role of stamps and pendants in Mesopotamia is often considered within an evolutionary framework that led to the emergence of writing (*Dittman 1986; Nissen* et al. 1993; Pittman 1994; Frangipane 1994; 2000; Schmandt-Besserat 1996; Postgate 2005; Algaze 2008). In this framework, the construction of a universal Mesopotamian ideology is narrated as a pro-

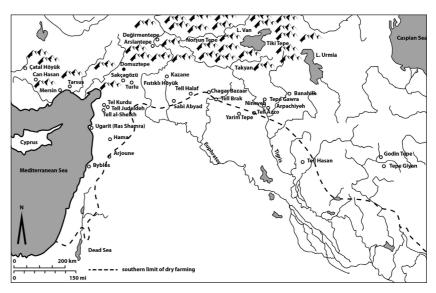


Fig. 1. Map of the later 7<sup>th</sup> and 6<sup>th</sup> millennium BC sites mentioned in the text (adapted from Carter 2010).

gressive development of increasingly rational solutions to administrative problems over the course of development of a sedentary agricultural lifestyle. The most overt crystallisation of this idea is found in the work of Denise Schmandt-Besserat (1992; 1994; 1996; 2007; 2009), who, by focusing on the geometry of image-bearing objects from various prehistoric and proto-historic contexts, postulated that stamps with particular geometric shapes symbolised counting of particular types of goods that, when used as sealing, secured a record of those goods in exchange transactions.

Many scholars agree that the objects studied by Schmandt-Besserat may have served as antecedents to the proto-cuneiform writing system. The evidence for the earliest writing comes from clay tablets found at Uruk dated to *c*. 3200 BC, the majority of which are understood to be records of material transactions taking place within the economy of a densely populated temple-state in which trade and labour was centrally controlled through powerful political institutions and religious rituals enacted within the context of monumental architecture (*Algaze 2008*). According to Robert Englund (*1998; 2004*), in the period just prior to the development of writing, geometrically shaped objects began to be used as tokens that were impressed on clay envelopes, which then became the basis of numerical tablets and ultimately proto-cuneiform, or pictographic and ideographic writing.

The discovery, in Sabi Abyad, of approx. 300 sealings (impressed clay used to seal goods and commodities) was a prominent factor in the identification of stamps and pendants as types of administrative

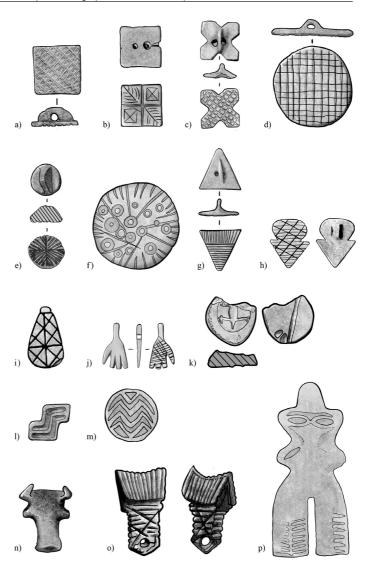
Time period	Associated cultural development
The Early Neolithic (Aceramic or Pre-pottery Neolithic)	Emergence of early forms of sedentary life and ritual, with
с. 10000–7000 ВС	the first domesticated grasses appearing during the initial
	stages, followed by the development of an increasing
	reliance on domesticated legumes and herd animals
	which was accompanied by increasing architectural
	elaboration and ritual intensification.
he Late Neolithic (Ceramic Neolithic) Appearance of wide scale colonization of t	
с. 7000–5500 ВС	Mesopotamian landscape by small communities of
	extended households who subsisted on mixed farming
	and herding strategies. Introduction of portable items,
	such as pottery and stamp seals, laden with symbolism
	which gradually created an impression of a culturally
	unified horizon, commonly referred to as the Halaf,
	over Northern Mesopotamia.

Tab. 1. Generalized chronology for the Early and the Late Neolithic periods of the Near East.

Fig. 2. Various stamp seals, pendants and related images bearing objects from the 6<sup>th</sup> millennium BC contexts in Northern Mesopotamia: a) Domuztepe Dt 2804, serpentinite (from Carter 2010.168, Fig. 5.2); b) Ras Shamra, carnelian (from von Wickede 1990.Pl. no. 186); c) Domuztepe Dt 3, serpentinite (from Carter 2010.168, Fig. 5.17); d) Arpachiyah A 18, steatite (from Mallowan, Rose 1935.93, Fig. 50.15; drawing adapted from von Wickede 1990); e) Domuztepe Dt 492, dark red clayey slate (from Carter 2010.170; Fig. 5.24); f) Tell Halaf, Limestone (from von Wickede 1990. Pl. no. 207); g) Domuztepe Dt 140, serpentinite (from Carter 2010.170, Fig. 5.33); h) Arpachiyah A 583, steatite (from Mallowan, Rose 1935.583, Pl. VIIa; drawing adapted from von Wickede 1990); i) Arpachiyah A 13, limestone (from Mallowan, Rose 1935. 94, Fig 51.10; drawing adapted from von Wickede 1990.Pl. no. 133); j) Domuztepe Dt 171, serpentinite (from Carter 2010.172, Fig. 6.1); k) Sabi Abyad sealing impression (from Akkermans, Duistermaat 2004.7, Fig. 4.19); l) Sabi Abyad sealing impression (from Duistermaat 1996. 359, Fig. 5.3, C 1.1); m) Sabi Abyad sealing impression (from Duistermaat 1996. 359, Fig. 5.3, B 2.1); n) Arpachiyah A 895 (B), limestone (from Mallowan, Rose 1935.Pl. 6. A: drawing adapted from von Wickede 1990); o) Arpachiyah, steatite (from Mallowan, Rose 1935.93, Fig 51.4, Pl. VI a.11); p) Sabi Abyad, sealing impression (from Duistermaat 1996.362, Fig. 5.6, T1.1).

tools. Together with a concentration of miniature vessels, tokens, discs and figurines, the sealings came from the Level 6 settlement known as the 'Burnt Village', a well-established community with large, closely spaced rectangular buildings and many small *tholoi* that were largely destroyed by fire around 6000 BC (*Akkermans, Verhoeven 1995; Akkermans, Duistermaat 1997*). The sealings were concentrated within particular rooms of extensive architectural complexes, where they appear to have been placed after having been removed from the sealed objects (*Duistermaat 1996*). Actual stamps have also been recovered from other contexts at Sabi Abyad, and 15 of these stamps have been published (*Duistermaat 1996; Akkermans, Duistermaat 2004*).

The sealings were apparently used to mark food or other commodities that may have been kept in straw baskets or stone or clay containers (*Akkermans, Duistermaat 1997*). Often, the same surface was covered with multiple impressions of the same seal.



Considerable variation was observed among motifs, which comprised a total of 67 separate types of imagery, most frequent among caprines (17%), 'S'-shaped motifs possibly representing snakes (10%) and zig-zag motifs possibly representing scorpions (5%). Through a complex set of arguments, the excavators concluded that the Burnt Village served the storage needs of pastoralists travelling in the Balikh Valley, and that the practice of sealing was used to keep a record of the commodities secured by sedentary groups at the site (*Akkermans, Duistermaat 1997; Verhoeven 1999*).

Alwo von Wickede (1990) recorded 43 sealings and 130 stamps from various 6<sup>th</sup> millennium BC contexts, mostly from Arpachiyah, with smaller numbers from Chagar Bazar, Tell Hassan, Gird Banahilk, Tepe Gawra and Yarım Tepe. Some of the best-crafted artefacts from Arpachiyah were found at the Burnt House, the rich archaeological context of Tt 6, which is believed to have been a communal storage area for valuable objects such as figurines, finely made pottery and stamps before it was intentionally burnt during the abandonment of the site (*Mallowan, Rose 1935; Campbell 2000*). At the Burnt House, 41 sealing impressions, apparently created from 26 stamps, were recovered along with other valuable objects.

Evidence of sealing and stamping practices varies substantially among sites. At the 20ha site of Domuztepe in Kahramanmaraş, Turkey, for example, approx. 150 stamps, pendants and related objects were collected, whereas very few sealings were encountered (Denham on-line). At Domuztepe, stamps and pendants were not found within a discrete building; rather, nearly one-third of the stamps and pendants found at Domuztepe were encountered during the surface survey of the site, and the rest were found within archaeological deposits from the late 7<sup>th</sup> through the early 6<sup>th</sup> millennium BC. In particular, the 'Death Pit', a communal burial context, was a rich find context for stamps and pendants (Campbell et al. 1999; Carter et al. 2003). Most of the stamps were carved from serpentinite, a local stone, although jasper, alabaster, steatite, limestone, quartzite and sandstone were also used.

Various attempts have been made to reveal the social function of the late 7th and 6th millennium BC period stamp seals. For example, Frangipane's argument draws attention to their use as identity markers, albeit the term 'identity' begs the fundamental question of how personhood was constructed in social contexts in the 7th and 6th millennium BC (Fowler 2002; 2004; 2010). Frangipane (2007.159) argues that, "the similarity between the different groups of seal design comprising very specific iconographic sets, each of which was characterized by the repetition of a particular motif, indicates that the seal-holders withdrawing the goods must have been members and representatives of different households or clans, each one symbolized by a dominant motif, perhaps a kind of identity symbol." In a critical light, however, the similarity between images carved on the stamp surfaces would probably make for a very inefficient form of individualised or group marker to be used in property control on any scale. Nevertheless, it is certainly possible that such signs of 'membership' were shared beyond individual households to clans or tribal groups, and linked together numerous communities within a cultural system of integration.

In an attempt at a more holistic interpretation, Sarah K. Costello (2000; 2011) argued that tokens, seals

and even writing should not be viewed as functional solutions to the administrative needs of the first states. Rather, she postulated that stamp images carry meaning, in many cases religious, and that the earliest context of writing was intertwined with a long visual and symbolic tradition rooted in religious belief and practice. Yet, by referencing one particular shaft straightener from the PPNA site of Jerf el-Ahmar, Costello traced the history of a quadrupedsnake-raptor image trilogy to the detriment of other rich and often much more significant imagery of the 7<sup>th</sup> and 6<sup>th</sup> millennium BC, such as the crosshatching design commonly found on the geometrically shaped seals of the period.

It is possible that the previous approaches to the Late Neolithic stamps and related image-bearing objects have assumed that if a certain set of imagery appeared in 'writing', then these imagery and or similar looking objects could be selectively sought out in prehistory and assembled as a backdrop to a progressively evolving administrative and religious system within which writing became practically perceivable. However, the success of any approach linking early imagery to the emergence of writing or to the development of central authority requires an understanding of the processes and practices through which selected elements of prehistoric imagery survived and were reproduced within the administrative record system of temple-states. With this framework, this study aims not to solve the riddle of the emergence of writing, but to understand the role played by stamps and pendants in the symbolic construction of communities in later Neolithic Northern Mesopotamia.

## **Theoretical concepts**

From a material culture perspective, humans have no pre-discursive existence; rather they become themselves through experience, interaction and discourse. Identity and self are constructs that must be perpetually constituted through social action. Within this context, objects operate as important active agents of symbolic construction of community and of an ever-unfolding process of social change within which a continuous categorisation, communication and negotiation of the conceptual world take place. Human beings manipulate objects to express ideas. However, meaning in symbolic communication is always contextual and fluid; thus, symbolic objects are best approached as attention-capturing devices that attract and divert attention to concepts in need of evaluation (Donald 1991). Situated within a complex set

of social affiliations ranging from family to progressively more encompassing levels of community, individuals are able to negotiate and elaborate on their position at the intersection of social boundaries through the continuous manipulation of material culture. Objectification, abstraction, portability and alienation should be viewed as manipulative technologies that emerge through the dialogue between the person and the collective (*Dobres, Hoffman 1994; Dobres 1995; 2000; Tilley 2006*).

For example, the contexts through which objects are attained and distributed can be appropriated or controlled through ritualised acts in such a way that the objects are ultimately alienated from their original contexts of production. Symbolically-laden objects may be distributed after painful body manipulations or competitive displays of skill during initiation ceremonies in which the body would have been appropriated for different stages of personhood. At large events, social power and hierarchy may be demonstrated through taboos regarding the body, place and food preparation. In order to attain, produce, carry and display objects of social membership, individuals may be increasingly required to demonstrate that they possess the skills, knowledge and responsibility expected of them in order to engage in increasingly hierarchical spheres of the social world.

Often, the body becomes a negotiable space through the symbolic agency of objects, which aids in the enchainment of the self within a world of other beings (*Chapman 2000*). A person is who s/he is because s/he uses certain objects, lives in certain places, eats in certain ways and practices certain acts. Those who wish to join or remain part of a social group must display his or her capacity to be part of any social sphere by responsibly engaging in social relations with all the encountered entities of daily existence - observing taboos, behaving and speaking appropriately and remaining conscious of the fact that every thought and action has wider implications. Failure to honour the obligations of personhood can be dangerous, as one who does not follow certain rules and practices may be made into an 'other'. Within this context, persons may be either forbidden or permitted to prepare their body with special haircuts, tattoos, *etc.* and to produce and consume certain foods in relation to their identities. Food preparation taboos are a particularly important subject for those who come from different cultural backgrounds. Through such symbolic displays, an environment of trust and cooperation can be created to allow social exchanges to take place.

In this context, style can be perceived as a product of the intersection of the person and the structuring principles of community that s/he manipulates to re-produce social boundaries (Wobst 1977; Kopytoff 1986; Carr, Neitzel 1995; Gosden, Marshall *1999*). Therefore, in seeking to recover the relations between objects and their social context, any stylistic analysis requires an exploration of how a given form is determined by its position in a sequence of changing forms, what an image depicts as its subject matter and how an image expresses or even constitutes social relations (Lesure 2011.51, Fig. 17). Also within this context, an important part of the 'message' may be embedded within an object's specific material qualities such as durability, redundancy, transferability and expression of investment (Donald 1991; Prijatelj 2007; Gamble 2008) that expand the symbolic performance characteristics of

Material attributes of affiliation	Material attributes of status and social differentiation	
Similarity in shape, size, decoration, craftsmanship	Differentiation and variation in shape, size, decoration	
	and craftsmanship	
High numbers	Low numbers	
High visibility (through monumentality or portability)	Management of social boundaries through manipulation	
	of image abstraction	
Distribution over wide spatial ranges, with emphasis	Different materials (e.g., stone, clay) carrying different	
on social integration	messages	
Spatial variations	Chronological changes	
Variation in the frequency of occurrence of different	Change in the frequency of occurrence of different styles	
styles within a specific class of items should be	within a specific class of items should be evaluated over	
evaluated within the context of other material media	time and within the context of other material media	
at a specific site in order to assess variant social	at a specific site in order to assess the introduction	
strategies within a cultural horizon.	of new strategies of manipulation.	

Fig. 3. Suggested material attributes of social affiliation.

the raw material by opening up new possibilities of communication between different scales of audience.

Within a given class of objects, variations in material, craftsmanship and levels of abstraction may signal membership of different social spheres within and between groups (Fig. 3). Different degrees of craftsmanship may be an indication of different degrees of skill, and in social terms, one may expect that a person carrying a highly crafted object aims to be distinguished from others. This status may be achieved over a lifetime, as an individual moves through consecutive stages of personhood and demonstrates the capacity to carry out increasingly more complex social performances. Like craftsmanship, abstraction is another strategy for manipulating social boundaries. Abstract items are often ambiguous and require exegesis by those who can understand and interpret their symbolism. Therefore, one may expect that the bearers of abstract items understand the significance and meaning of the objects with which they are associated. The frequency with which one encounters abstract and/or highly crafted objects may be another indicator of access to knowledge and power domains. For example, high numbers of a particular class of items may indicate an emphasis on social inclusion, whereas low numbers of a specific set of imagery may indicate segregated power domains controlled by a limited number of individuals.

I suggest that the prolific use of highly abstract, elaborately crafted portable objects such as stamp seals may reflect a need to expand, as well as limit the boundaries of social identity. The objects under consideration may be viewed as a field of symbolic technology that empowered individuals to strategically negotiate their position within an existing social grid. That is to say, seals and sealing practices may not necessarily reflect capitalistic exchange and ownership relations during the 6<sup>th</sup> millennium BC; instead, this period may be perceived as one in which social positions were negotiated by material practices, which allowed for the symbolic constitution of personhood and community in new ways.

## The evidence

Within the framework of this analysis, stamps and related image bearing objects were reviewed from the sites of Arpachiyah, Domuztepe, Tell Ain el-Kerkh, Sabi Abyad, Tell Halaf, Yarım Tepe, Chagar Bazaar and Ras Shamra. While not all of the items are presented here, examples of most of the representative types are shown in the text figures, and regional differences in style preferences are duly noted. Whereas the frequency of occurrence and the degree of abstraction and craftsmanship of the different types may have changed over time, such an analysis would require more accurate chronological and spatial data than what is available; therefore, this analysis is by necessity limited to the reconstruction of discursive relations between the items of the analysed sets as a whole. Such an analysis is more capable of revealing image-shape relations and a very general level of chronological and spatial variation than it is of performing a comprehensive chronological and spatial evaluation at the site level.

The stamps and seals assessed here may be classified into three categories and sub-categories as follows:

A. Irregular geometric forms:

A.1. Deltoid; A.2. Bulbous ovoid; A.3. Ovoid with tip-marking or tip-denticulation; A.4. 'Sickle' and 'foot'; A.5. Trapezoid and pyramid.

B. Regular geometric forms:

B.1. Rectangular; B.2. Circular; B.3. Polypartite rosette; B.4. Quatrefoil rosette; B.5. Triangle and axe.

C. Naturalistic forms:

C.1. Bird; C.2. Caprine; C.3. Snake; C.4. Scorpion; C.5. Unidentified animal (Varanus lizard?); C.6. Humanoid; C.7. Bucranium; C.8. House; C.9. Angels; C.10. Double-axes.

### A. Irregular geometric forms

These types are found both in pendant and backloop handle forms and occur in relatively high numbers. Within the irregular forms, five different types can be recognised:

*A.1. Deltoids (Fig. 4):* The deltoid objects are essentially comprised of two parts: a smooth, bulbous part and a long pointed part. Although there may be

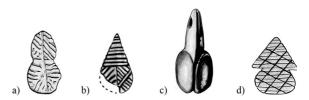


Fig. 4. Type A.1. Deltoids: a) Tell Ain el-Kerkh (from Tsuneki 2011.95, Fig. 21); b) Domuztepe Dt 137, serpentinite (from Carter 2010.170, Fig. 5.32); c) Arpachiyah A 17, brown limestone (from Mallowan, Rose 1935.94, Fig. 51.6); d) Arpachiyah A 583, steatite (from Mallowan, Rose 1935.Pl. VIIa).

highly abstract items within this range, many of them appear to be phallic.

*A.2. Bulbous ovoids (Fig. 5):* These are usually in pendant form and are encountered at most sites in moderate numbers. The imagery and shape may connect some of these forms to the bulbous part of the deltoids (compare Figs. 4.a and 5.e, f.). At Arpachiyah, bulbous ovoids comprise the majority of all the pendant-shaped stamps encountered.

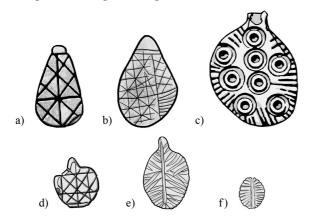


Fig. 5. Type A.2. Bulbous ovoids: a) Arpachiyah A 13, grey stone (from Mallowan, Rose 1935.94, Fig. 51.10); b) Arpachiyah, A 1, steatite (from Mallowan, Rose 1935.93, Fig. 50.7); c) Tepe Gawra, marble (from Tobler 1950.31, Pl. 172); d) Arpachiyah A 10, steatite (from Mallowan, Rose 1935.93, Fig. 50.4); e) Yarimtepe II (from von Wickede 1990.Pl. no. 126); f) Tell Ain el-Kerkh (from Tsuneki 2011. 95, Fig. 21).

*A.3. Ovoids with tip-marking or tip-denticulation (Fig. 6).* This group includes items with various forms of tip denticulation. The so-called 'hands' (Fig 6.b, c), which are encountered rarely, but con-

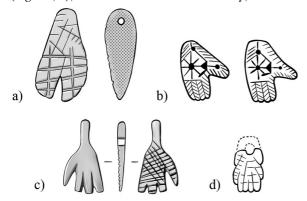


Fig. 6. Type A.3. Ovoids with tip-marking or tipdenticulation: a) Yarım Tepe II, steatite (from von Wickede 1990.Pls. no 162); b) sealing impression from Arpachiyah A 619 (from Mallowan, Rose 1935. Pl. 9b); c) Domuztepe Dt 171, serpentinite (from Carter 2010.172, Fig. 6.1); d) Arpachiyah A 9, steatite, from Mallowan, Rose 1935.94, Fig. 51.1).

sistently, at many sites, may be considered within this set.

*A.4. 'Sickles' and 'feet' (Fig. 7):* The so-called sickles and feet may be stylistic variations on deltoids and ovoids (Figs. 4, 5, 6). The high frequency with which they are encountered at Arpachiyah suggests some specific social significance for this site.

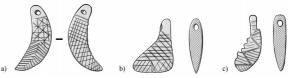


Fig. 7. Type A.4. 'Sickles' and 'feet': a) Arpachiyah A 16, steatite (from Mallowan, Rose 1935.93, Fig. 50.25); b) Arpachiyah A 557, quartzite (from Mallowan, Rose 1935.Pl. 8a); c) Arpachiyah, A 882, steatite (from Mallowan, Rose 1935.93, Fig. 50.27).

**A.5.** Trapezoids and pyramids (Fig. 8): These types are regularly encountered at many sites. The form may be a variation of the deltoids (Fig. 4) and/ or humanoid forms (Fig. 19).

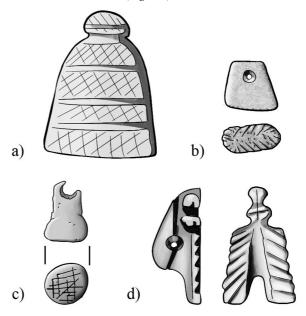


Fig. 8. Type A.5. Trapezoids and pyramids: a) Arpachiyah A 58l, limestone (from Mallowan, Rose 1935.93, Fig. 50.10); b) Domuztepe Dt 303, turquoise-coloured stone, possibly serpentinite (from Carter 2010.172, Fig. 6.2); c) Domuztepe Dt 4748, quartz (courtesy of Stuart Campbell, Domuztepe excavations); d) Sabi Abyad (from Akkermans, Duistermaat 2004.4, Fig. 2.3).

#### B. Regular geometric forms

These include rectangular, circular, triangular and rosette forms that occur in relatively high numbers. Well-made pieces and loop-handle stamp forms are encountered most frequently, although smaller and less well-made items may also be encountered. Regular geometric forms frequently bear abstract imagery of crosshatching, eyeholes, or a composition of parallel and perpendicular lines. Also, the surfaces were sometimes divided into four sections in a manner very similar to that of the quatrefoil rosette forms (Fig. 12). Otherwise, the surface may sometimes be divided into two sections in a manner similar to the bulbous ovoids (Fig. 5.e, f) and double-axe forms (Fig. 23). Rarely encountered relatively larger and heavier block styles and highly crafted polyfoil rosettes are also included within this category of items.

**B.1. Rectangulars (Fig. 9):** Rectangular stamps are by far the most commonly encountered objects at many sites of the period. The surfaces are usually decorated with crosshatching, eyeholes, or a distinct composition of parallel and perpendicular lines. Four partite versions, such as Figures 9.d and 9.e, may be variations of the proper quatrefoil rosette forms (Fig. 12). Figure 9.g may be a variation of Figure 10.b, both of which appear to be related to the bulbous ovoids (Fig. 5.e,f) as well as the lower portion of the deltoids (Fig. 4.a–c). The objects with 'eyeholes' (Fig. 9.f, h) may be a variation that referred to

the eyeholes on such objects as demonstrated in Figures 11.a and 19.

**B.2.** Circulars (Fig. 10): Circulars are also among the most commonly encountered types, along with the rectangular forms. Like rectangulars, they can

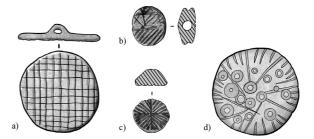


Fig. 10. Type B.2. Circulars: a) Arpachiyah A 18, steatite (from Mallowan, Rose 1935.93, Fig. 50.15); b) Domuztepe Dt 133, serpentinite (from Carter 2010.167, Fig. 4.2); c) Domuztepe Dt 492, dark red clayey slate (from Carter 2010.170, Fig. 5.24); Tell Halaf, limestone (from von Wickede 1990.Pl. no. 207).

have crosshatched surfaces, sometimes with eyeholes. Alternatively, some object surfaces may be two partitioned, or the surface may be four partite in a similar way to the rosettes. Four partite versions, such as Figure 10.c, may be a variation of the proper quatre-

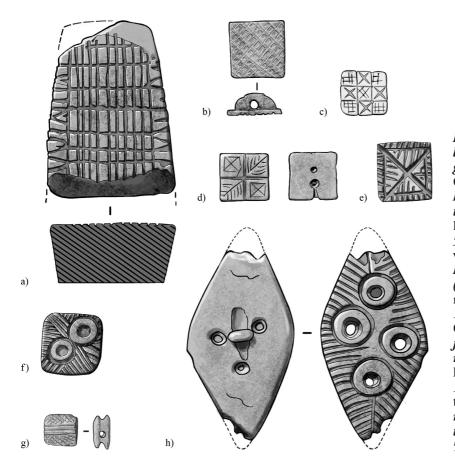


Fig. 9. Type B.1. Rectangulars: a) Domuztepe Dt. 717, gypsum block style (from Carter 2010.172, Fig. 8.1); b) Domuztepe Dt 2804, serpentinite (from Carter 2010.168, Fig. 5.2); c) Arpachiyah A 574, limestone (from Mallowan, Rose 1935.Pl. 7a); d) Shamra, carnelian Ras (from von Wickede 1990.Pl. no. 186); e) Domuztepe, Dt 1683, serpentinite (from Carter 2010.168, Fig. 5.12); f) Domuztepe Dt, serpentinite (from Carter 2010.168, Fig. 5.10); g) Domuztepe Dt 1787, quartz (?) (from Carter 2010.167, Fig. 4.1); h) Domuztepe Dt 180, serpentinite (from Carter 2010.170, Fig. 5.23).

foil rosette forms (Fig. 12). Figure 10.b may be a variation of Figure 9.g, both of which appear to be related to the bulbous ovoids (Fig. 5.e, f), as well as the lower portion of the deltoids (Fig. 4.a-c). The objects with 'eyeholes' (Fig. 10.d) may be a variation that referred to the eyeholes on such objects as demonstrated in Figures 11.a and 19.

**B.3.** Polypartite rosettes (Fig. 11): Examples of polypartite rosette forms have been recovered at many Northern Levantine sites, as well as at Domuztepe. Along with small and less skilfully made examples (Fig. 11.b, c), some highly crafted objects (Fig. 11.a) can be found within this range of objects. The polypartite rosette imagery frequently appear on some of the most remarkable painted pottery known from Arpachiyah, and are usually symmetrically placed at the inner centre of the pottery in association with surrounding quatrefoil rosette imagery. In the stamp corpus, this centre may take the shape of an eyehole. Apparently, the depiction of this central hole added potency and meaning to the whole image.

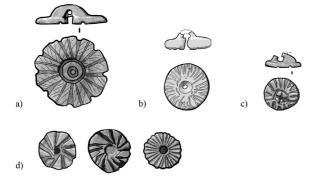


Fig. 11. Type B.3. Polypartite rosettes: a) Domuztepe Dt 168, serpentinite (from Carter 2010.170, Fig. 5.31); b) Domuztepe Dt 1113, serpentinite (from Carter 2010.170, Fig. 5.26); c) Domuztepe Dt 1684, coral-coloured quartz (from Carter 2010. 170, Fig. 5.25); d) Tell Ain el-Kerkh (from Tsuneki 2011.95, Fig. 21).

**B.4.** Quatrefoil rosettes (Fig. 12): Quatrefoil rosette forms are also among the most commonly encountered types. The foils may be shaped as pointed tips (Fig. 12.a-c) or may have wide edges (Fig. 12. d-f). Quatrefoil rosette forms with pointed foils appear to be associated with either full crosshatching designs (Fig. 12.a) or a simple cross at the tip (Fig. 12.c). Quatrefoil rosettes with wide-edged foils are commonly decorated with multiple parallel and perpendicular lines, sometimes accompanied by a deeply incised line running perpendicular to the outer edge of the foils. In terms of both their shape and decoration, the quatrefoil rosette forms may be con-

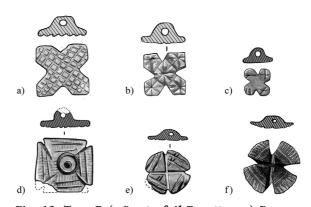


Fig. 12. Type B.4. Quatrefoil Rosettes: a) Domuztepe Dt 3, serpentinite (from Carter 2010.168, Fig. 5.17); b) Domuztepe Dt 48, flint (from Carter 2010. 168, Fig. 5.16); c) Domuztepe Dt 2, serpentinite (from Carter 2010.168, Fig. 5.15); d) Domuztepe Dt 244, sandstone (from Carter 2010.168, Fig. 5.19); e) Domuztepe Dt 353, serpentinite or flint(?) (from Carter 2010.170, Fig. 5.30); f) Domuztepe Dt 1687, serpentinite (from Carter 2010.170, Fig. 5.29).

sidered a close relative of the rectangular and circular forms (Figs. 9 and 10). Some of the triangular objects (which may be related to the deltoid forms) are crafted in a manner similar to the rosette foils (compare Figs. 12.f and 13.a).

**B.5.** Triangles and axes (Fig. 13): Triangular objects are also commonly encountered, although not as frequently as the rectangular, circular or rosette forms. They appear to be highly stylised versions of some of the deltoid (compare Figs. 13.a-upside down and 4.b) and ovoid types (compare Figs. 5.a and 13.b). The shape and imagery suggest that some of these objects are crafted in a manner similar to rosette foils (compare Fig. 12.f and 13.a). The cattle/ bull horns in Figure 20.b have striking similarities to Figure 13.c.



Fig. 13. Type B.5. Triangles and axes: a) Domuztepe Dt 140, serpentinite (from Carter 2010.170, Fig. 5.33); b) Domuztepe Dt 3601, serpentine (courtesy of Stuart Campbell, Domuztepe excavations); c) Domuztepe Dt 242, serpentinite(?) (courtesy of Stuart Campbell, Domuztepe excavations).

#### C. Naturalistic types

These are highly expressive types encountered rarely, but consistently. Various animal and humanoid and house forms were particularly popular in the Northern Mesopotamian context.

*C.1. Birds (Fig. 14):* Birds, together with houses, are often encountered as pottery decoration.



Fig. 14. Arpachiyah A 870 (B), steatite (from Mallowan, Rose 1935.94, Fig. 51.7).

*C.2. Caprines (Fig. 15):* Caprines are frequently encountered in the later 7<sup>th</sup> millennium BC contexts of Sabi Abyad.



Fig. 15. Sabi Abyad sealing impression (from Duistermaat 1996.359, Fig. 5.3, A1.1).

*C.3. Snakes (Fig. 16):* Snakes are understood to be one of the earliest symbolically depicted animals in Northern Mesopotamia. They were frequently encountered at the pillars of the late PPNA contexts of Göbekli Tepe. In the stamp corpus, the snake imagery was most commonly observed in late 7<sup>th</sup> millennium BC contexts of Sabi Abyad. Snakes also appear on decorated pottery of the 6<sup>th</sup> millennium, although rarely.

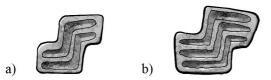


Fig. 16. a) Sabi Abyad sealing impression (from Duistermaat 1996.359, Fig. 5.3, C1.1); b) Sabi Abyad sealing impression (from Duistermaat 1996. 359, Fig. 5.3, C3.1).

*C.4. Scorpions (Fig. 17):* Scorpions were also among the most commonly depicted animals at the PPNA site of Göbekli Tepe. Like the snake imagery, scorpion images are highly stylised versions of the real thing.

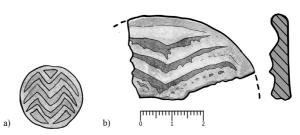


Fig. 17. Sealing impression: a) Sabi Abyad sealing impression (from Duistermaat 1996.359, Fig. 5.3, B 2.1); b) Domuztepe block stamp Dt. 444, serpentinite (from Carter 2010.17, Fig. 8.3).

**C.5.** Unidentified animals (Fig. 18): The image of a quadruped with spread legs is a common motif in many Early Neolithic contexts. A relief image of a Varanus lizard, a dangerous species that lives in the desert and camouflages itself in the sand, was depicted on one of the pillars at Göbekli Tepe. However, it is difficult to identify the animals depicted on the later 7<sup>th</sup> and 6<sup>th</sup> millennium stamps of Northern Mesopotamia.

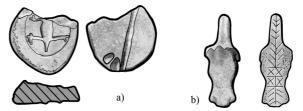


Fig. 18. Type C.5. Unidentified animals: a) Sabi Abyad sealing impression (from Akkermans, Duistermaat 2004.7, Fig. 4.19); b) Gogjali near Arpachiyah A 887, steatite (from Mallowan, Rose 1935. 94, Fig 51.9).

*C.6. Humanoids (Fig. 19):* In PPNA and PPNB contexts the pillars encountered at Göbekli Tepe, Yenimahalle and Nevalı Çori were considered anthropomorphic and were strongly associated with maleness. The eyes on Figure 19.a and 19.b may be linked with the eyeholes depicted on items in Figures 9.f-h and 10.d. Figure 19.c may be a variation of a so-called angel form at Figure 22.b.

*C.7. Bucrania (Fig. 20):* Bucrania are considered among the most significant imagery of the later Neolithic. The stamp or pendant forms are encountered at many sites, albeit in very small numbers. They bear stylistic resemblances to some deltoid forms (*e.g.*, Fig. 4.c upside down) as well as the house form in Figure 21. Also, note the similarity between the possibly phallic drill in Figure 13.c and the bucrania in Figure 20.b.

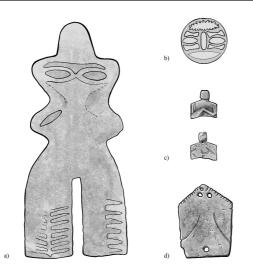


Fig. 19. Type C.6. Humanoids: a) Sabi Abyad sealing impression (from Duistermaat 1996.362, Fig. 5.6, T1.1); b) Sabi Abyad sealing impression (from Duistermaat 1996.360, Fig. 5.4, G1.1); c) Domuztepe pendant (courtesy of Domuztepe excavations); d) Domuztepe Dt 352, serpentinite (courtesy of Domuztepe excavations).

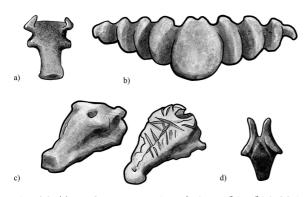


Fig. 20. Type C.7. Bucrania: a) Arpachiyah A 895 (B), limestone (from Mallowan, Rose 1935.Pl. 6.a); b) Domuztepe (courtesy of Stuart Campbell, Domuztepe excavations); c) Chagar Bazaar, marble (from Mallowan 1936.Pl. 7.33); d) Domuztepe (courtesy of Stuart Campbell, Domuztepe excavations).

**C.8.** House (Fig. 21): House depictions are sometimes encountered on the painted pottery of the period. One rare example in stamp form, which is shown in Figure 21, comes from Arpachiyah, and the stylistic links between this object and some of



Fig. 21. Arpachiyah, steatite (from Mallowan, Rose 1935.93, Pl. VI a.11, Fig. 51.4).

the bucrania forms (Fig. 20.a upside down) as well as deltoid forms (Fig. 4) is worth mentioning.

*C.9. 'Angels' (Fig. 22):* The so-called angels may be associated with more abstract forms such as the phallic deltoids (Fig. 4) or some rosette styles (Fig. 12.d). It is also possible to note the connection of the imagery between the triangular forms (*e.g.*, Figs. 13.a and 22.a). In some ways, Figure 22.b can also be associated with the humanoid form in Figure 19.c.

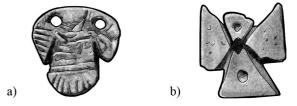


Fig. 22. Type C.9. Angels: a) Domuztepe Dt 6560 (courtesy of Stuart Campbell, Domuztepe excavations); b) Arpachiyah A 860, steatite (from Mallowan, Rose 1935.Pl. VI.b).

*C.10. Double axe (Fig. 23):* What has been termed a double axe at Arpachiyah by Max Mallowan, is a specific design which resembles a two-foiled rosette (Figs. 9.g and 10.b). Also, the bulbous portion of the arguably phallic deltoid forms may be linked with this image (Fig. 4.a-c).

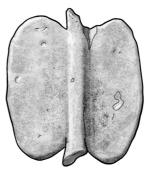


Fig. 23. Arpachiyah A 865 (B), steatite (from Mallowan, Rose 1935.Pl. VI.b).

#### The discourse of stamp seals

The comparative relationships mentioned in the presentation of evidence is summarised in Figure 24. Within this context, both the quatrefoil and polypartite rosette forms may be understood as highly stylised composite depictions of male genitalia. If at least some of the deltoids and ovoids are variant depictions of the male sexual organ, the sickles and socalled feet may represent a special body wrapping or manipulation technique which may have been emphasised at Arpachiyah. Some stylistic similarities between the broken figurines of Sabi Abyad (Fig. 25) and the stamp seals may strengthen the view that the objects under consideration refer to various parts of the male sexual organ. In the case of the circular objects with central eyeholes, it is possible that a particular emphasis may have been placed on the potency of either the upper tip or the lower root of the phallus. The phallic imagery is also noteworthy in the context of the house and bucrania pendants; the stylistic similarities between the house (Fig. 21), bucrania (Fig. 20) and the relatively more overt phallic objects (e.g., Figs. 22.a and 4.c) within the same material corpus may indicate that concepts of male fertility and house-based social continuity were manipulated and linked in very special circumstances, as the bucrania or house shaped objects are rare and were probably used by ritual specialists.

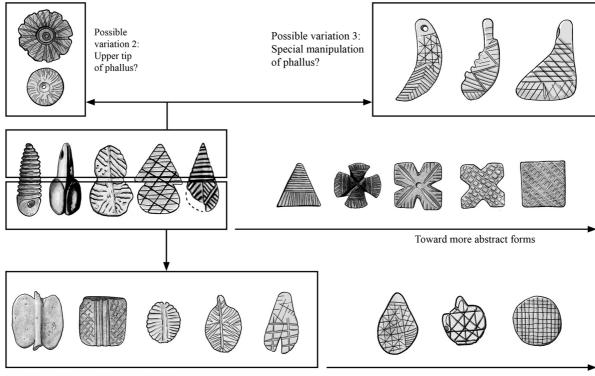
In terms of the overall image and shape relations, no one stamp or pendant is precisely the same as another, and some very distinctive styles were achieved. However, the majority of objects can be classified into a limited repertoire of geometric shapes that appear to have been produced by a technique whereby the raw material was reduced to a sequence of rectangles, circles, quatrefoil or polyfoil rosettes, triangles and ovoids. The suggested chain of reduction also appears to be related to a particular discursive relationship between the objects (Fig. 26). The regular geometric forms are often associated with the crosshatch decoration. The rosette forms provide a transitional link between regular and irregular forms, whereas the naturalistic forms fall into an entirely different category and include various wild animals, bucrania, houses and human shapes.

In terms of decoration, the following three general categories emerge, all of which can be combined through the division of the surface into two or more sections:

- crosshatching,
- 2 a set of parallel and perpendicular lines,
- **③** eyeholes.

Overall, the objects appear to form a discursive field that links irregular phallic shapes with more complex forms within relatively more abstract and frequently encountered regular types and relatively more expressive but rarely encountered naturalistic types (Figs. 27 and 28).

In further interpretive terms, objects exhibiting a higher degree of stylistic concern, such as the rosettes or crosshatched rectangles, are likely to have been associated with people who understood their performative and narrative power (Figs. 29 and 30). While the level of abstraction may have been associ-



Possible variation 1: Objects emphasizing the lower part of phallus? *Fig. 24. Links between various stamp forms.* 

Toward more abstract forms

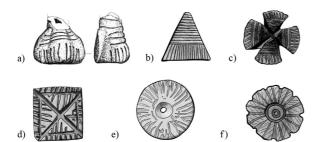


Fig. 25. Clay figurines and stamp seals: a) clay figurine from Sabi Abyad (from Collet 1996.410, Fig. 6.2); b) Domuztepe Dt 140, serpentinite (from Carter 2010.170, Fig. 5.33); c) Domuztepe Dt 1687, serpentinite (from Carter 2010.170, Fig. 5.29); d) Domuztepe, Dt 1683, serpentinite (from Carter 2010.168, Fig. 5.12); e) Domuztepe Dt 1113, serpentinite (from Carter 2010.170, Fig. 5.26); f) Domuztepe Dt 168, serpentinite (from Carter 2010. 170. Fig. 5.31).

ated with enhanced stages of personhood and community membership, the relatively high numbers of items with crosshatching may indicate that their distribution was not as limited as the naturalistic items, which were probably used by a few people only and on very special occasions at which powerful concepts were invoked in order to manipulate existing narratives of the social landscape. It is important to note that some of these images are associated with earlier Neolithic contexts, suggesting that they may have been connected to highly specialised knowledge and persons who were capable of consulting and manipulating the past and present.

At a different level, recognisable regional and/or chronological differences exist in terms of the frequency in which different types have been found. For example, in the late 7<sup>th</sup> millennium BC context of Sabi Abyad, a high frequency of animal images

such as snakes, scorpions and anthropomorphic shapes were encountered. These images are reminiscent of the PPNA and PPNB imagery known from Göbekli Tepe (*Schmidt 2000; 2010*). On the other hand, large numbers of irregular ovoid pendant forms were found at the 6<sup>th</sup> millennium BC sites at Arpachiyah, whereas at the roughly contemporary site of Domuztepe, rectangular and quatrefoil rosettes were encountered more frequently.

Site-based differences may actually reflect regional differences. In Von Wickede's work on stamps and pendants of the 7<sup>th</sup> and 6<sup>th</sup> millennium BC (*von Wic*- kede 1990), ovoid pendants appear with noticeably greater frequency in Northern Iraq at sites such as Yarım Tepe and Arpachiyah. In the Levant, both regular and irregular geometric shapes were in use, although the regular shapes are encountered more often. Nevertheless, within a local community of stamp-seal users, individuals appear to have had a degree of freedom to choose from an iconographic set, perhaps to add to it creatively, within a permissible range, and thus personalise these items. This practice indicates a relatively less conservative mind set, which may in turn indicate the absence of an institutionalised authority that controlled both economic and ritual activities. In this respect, the basic socio-economic unit of the societies of the period would appear to have been the household (possibly comprised of extended families), who frequently gathered with nearby households and communities for routine social events, such as feasts, initiation ceremonies and other social exchanges. These groups may have consulted ritual specialists on very specific occasions, such as death, birth, marriage, place abandonment, which must have had a direct impact on the social continuity of the community and the social position of individuals within it.

#### **Concluding remarks**

Douglas Bailey (2000) suggested that a new 'politics of the human body' emerged during the transition to settled life and the development of the 'built environment' of the tell settlements in the Balkan Neolithic (c. 6500 BC). At these densely populated settlements, the negotiation of personal identity and household composition as a way of resolving disputes between persons and groups was a major preoccupation. By representing the body in miniature, it

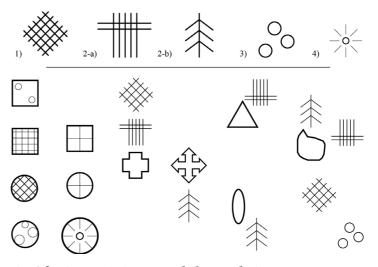


Fig. 26. Diagnostic image and shape relations.

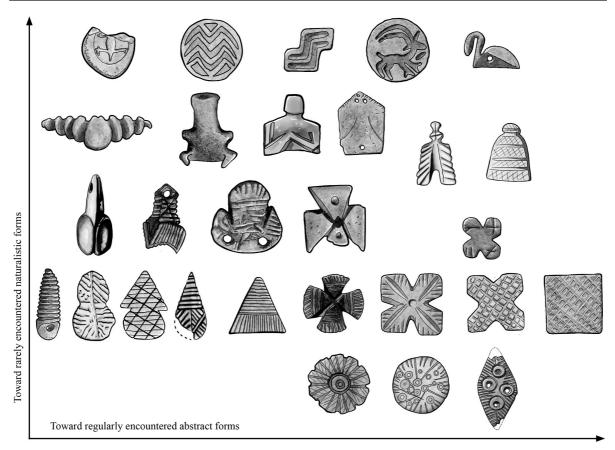


Fig. 27. Discursive relations between various types in terms of abstraction and frequency.

was possible to invoke different aspects of person and its relation to the collective, when necessary. Given all the other evidence pertaining to the use of space and burial during the 7th and 6th millennium BC in Northern Mesopotamia (see Pollock 2011), it would also be appropriate to place sealings within a social context still dominated by processes of enchainment. Stamps and related image-bearing objects may have been used as a transformative medium of discourse that constructed specific narrative links within a specific set of concepts pertaining to ideas about sex, place, past and the personhood. I suggest that the stamps and pendants may have been objects that elaborated on their users' identity in various spheres of social membership. More significantly, these objects may have introduced a new discursive field through which personal identities and community structures began to be redefined with reference to male sexuality. This interpretation has been demonstrated by the dominance of phallic imagery within stamp assemblages of the period and the links built between these phallic images and the remaining stamp corpus comprised of the powerful imagery surviving from the earlier Neolithic of the region. Nevertheless, this suggestion does not mean that stamps and pendants would have been used

only by males (in fact, evidence indicates that they were probably used by both men and women of all ages). Instead, it may mean all kinds of personhood were being redefined with reference to the perceived significance of male sexuality.

The introduction and increasing complexity of pottery production during the 7<sup>th</sup> and 6<sup>th</sup> millennium BC indicate that the formal context of food preparation and consumption had become a significant medium for constructing social divisions when diverse communities with different social and economic practices began to exchange commodities, people and food with greater frequency (Nieuwenhuyse 2007). Through food, people shared memories and exchanged materials, as well as partners, thus forging alliances (Hayden 1990). In fact, by recognising hierarchical distinctions based on perceptions of food production, consumption and settlement practices within and between communities, a certain set of rules and taboos may have been activated in an attempt to enhance social inclusion within specific grids of social power. Personhood and its relation to the communal were possibly constituted within this context, which resulted in a rich symbolism that elaborated on the fluid boundaries between individuals

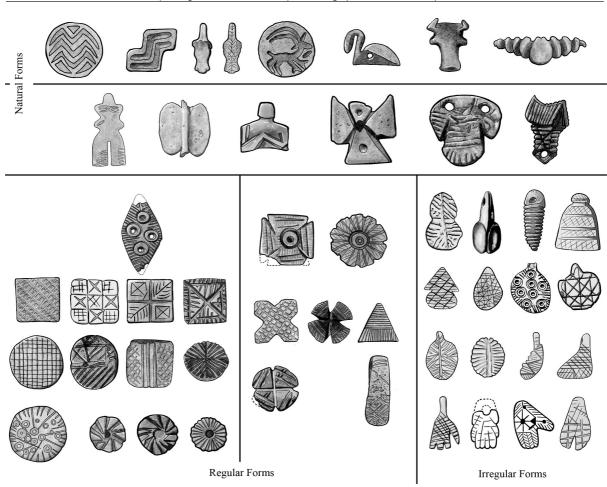


Fig. 28. Relations between regular, irregular and naturalistic forms.

and groups (*Budja 2003; 2004*). In such a context, stamps would have created an immediate environment of trust by demonstrating that participants understood what was socially acceptable.

Within this framework, the stamps of the later 7<sup>th</sup> and 6th millennium BC in Northern Mesopotamia may have connected their users to social spheres ranging from intimate to wider networks. In effect, those who claimed to be ready to take on certain social responsibilities may have been required to demonstrate their strict observation of rules regarding the preparation of the social body, and stamp use may have been part of this display. In return, the sealing and stamping practices would have demonstrated an appropriation of food, commodities and social relationships within cultural expectations pertaining to the preparation and consumption of food and other items. It is possible that in some places such as Sabi Abyad or Arpachiyah, sealed objects were stored or buried in particular rooms in order to maintain the memory of social exchange events through which certain persons and groups were enchained, and in the processes were indebted to each

other in more significant ways than they were to others.

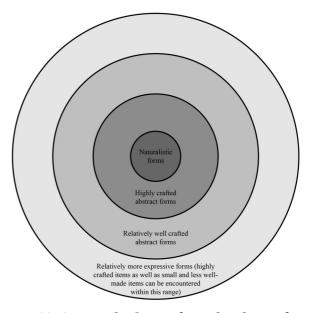


Fig. 29. Suggested spheres of social inclusion for stamp seals, in relation to abstraction, craftsmanship and find frequency.

Çiğdem Atakuman

Form	Characteristics	Possible social context
Irregular geometric types	• occur in relatively high numbers	Passage to adulthood and demonstration of
	<ul> <li>usually in pendant styles</li> </ul>	readiness to assume particular responsi-
	<ul> <li>some highly crafted items</li> </ul>	bilities within society.
	<ul> <li>some overtly phallic objects</li> </ul>	
Regular geometric types	• occur in relatively high numbers	Users may have gone through a particular
	<ul> <li>usually in back loop handle stamp styles</li> </ul>	stage in personhood, perhaps akin to
	<ul> <li>abstract imagery</li> </ul>	marriage and household leadership.
	• linked to powerful concepts of male fertility,	
	house success and social continuity	
Naturalistic types	<ul> <li>rarely but consistently found</li> </ul>	These were probably used by a few, who
	<ul> <li>images are reminiscent of the early</li> </ul>	were capable of consulting and manipulat-
	Neolithic anthropomorphic and	ing the past on very special occasions
	zoomorphic imagery	during which powerful narratives were
		invoked and manipulated.

Fig. 30. Different stamp seal types and possible social context.

As a final word, the objectification and abstraction of important concepts may facilitate the rapid migration of ideas into vastly remote and sometimes fundamentally different social contexts; however, abstract objects are ambiguous and can be interpreted in multiple ways. Therefore, in order to understand the specific function of stamps and pendants, one must inevitably focus on site-specific evidence and contextualise the use of stamps within the wider material culture of figurines, pottery and stone bowls, before producing generalising theses about the construction of personhood and community during the 7<sup>th</sup> and 6<sup>th</sup> millennium BC.

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## References

Algaze G. 2008. Ancient Mesopotamia at the Dawn of *Civilization: the Evolution of an Urban Landscape*. University of Chicago Press. Chicago.

Akkermans P. M. M. G., Duistermaat K. 1997. Of storage and nomads: the sealings from Late Neolithic Sabi Abyad, Syria. *Paleorient 22(2): 17–32*.

Akkermans P., Duistermaart K. 2004. More Seals and Sealings from Neolithic Tell Sabi Abyad, Syria. *Levant 36: 1–11*.

Akkermans P. M. M. G., Verhoeven M. 1995. An Image of Complexity: The Burnt Village at Late Neolithic Sabi Abyad, Syria. *American Journal of Archaeology 99: 5–32*.

Bailey D. W. 2000. *Balkan Prehistory: exclusion, incorporation and identity*. Routledge. London, New York.

Budja M. 2003. Seals, contracts and tokens in the Balkans Early Neolithic: where in the puzzle. *Documenta Praehistorica 30: 115–130.* 

2004. The transition to farming and the revolution of symbols in the Balkans. From ornament to entoptic and external symbolic storage. *Documenta Praehistorica* 31: 59–81.

Campbell S. 2000. The Burnt House at Arpachiyah: A Reexamination. *Bulletin of American Schools of Oriental Research 318: 1–40.* 

Campbell S., Carter E., Healey E., Anderson S., Kennedy A. and Whitcher S. 1999. Emerging complexity on the Kahramanmaraş plain, Turkey: the Domuztepe project, 1995– 97. *American Journal of Archaeology 103: 395–418*.

Carr C., Neitzel J. E. (eds.) 1995. *Style, Society and Person: Archaeological and Ethnological Perspectives*. Plenum Press. New York.

Carter E., Campbell S. and Gauld S. 2003. Elusive complexity: new data from Late Halaf Domuztepe in South Central Turkey. *Paleorient 29(2): 117–33*.

Carter E. 2010. The Glyptic of the Middle-Late Halaf Period at Domuztepe, Turkey. *Paléorient 36(1): 159–177*.

Chapman J. 2000. Fragmentation in Archaeology. People Places and broken objects in the prehistory of southeastern Europe. Routledge. London.

Charvat P. 1991. The Seals and their Functions in the Halaf- and Ubaid-Cultures (a Case Study of Materials from

Tell Arpachiyah and Nineveh 2–3). In R. B. Wartke (ed.), *Handwerk und Technologie im Alten Orient: ein Beitrag zur Geschichte der Technik im Altertum*. Ph. von Zabern. Mainz: 9–15.

Collet P. 1996. The Figurines. In P. M. M. G. Akkermans (ed.), *Tell Sabi Abyad: The Late Neolithic Settlement, Vol. 2.* Nederlands Historisch-Archeologisch Instituut. Istanbul: 403-414.

Costello S. K. 2000. Memory Tools in Early Mesopotamia. *Antiquity* 74(285): 475–476.

2011. Image, Memory and Ritual: Re-viewing the antecedents of writing. *Cambridge Archaeological Journal 21(2): 247–62.* 

Denham S. Online http://www.shdenham.co.uk/wiki/ Main \_Page, aktanak: a repository of information on early stamp seals of the Middle East, last accessed on May 14 2013.

Dittman R. 1986. Seals, sealings and tablets: thoughts on the changing pattern of administrative control from the Late-Uruk to the Proto-Elamite period at Susa. In U. Finkbeiner, W. Röllig (eds.), *Gamdat Nasr: Period or Regional Style?* Tubinger Atlas des Vorderen Orients (TAVO). Series B. Dr Ludwig Reichert Verlag. Wiesbaden: 332–366.

Dobres M. A. 1995. Gender and prehistoric technology: on the social agency of technical strategies. *World Archaeology 27(1): 25–49*.

2000. *Technology and social agency: outlining a practice framework for archaeology*. Blackwell Publishers. Oxford.

Dobres M. A., Hoffman C. R. 1994. Social agency and the dynamics of prehistoric technology. *Journal of Archaeological Method and Theory 1(3): 211–258.* 

Donald M. 1991. Origins of the modern mind: Three stages in the evolution of culture and cognition. Harvard University Press. Harvard.

Duistermaat K. 1996. The seals and sealings. In P. M. M. G. Akkermans (ed.), *Tell Sabi Abyad: The Late Neolithic Settlement, Vol. 2.* Nederlands Historisch-Archeologisch Instituut. Istanbul: 339–401.

Englund R. 1998. Texts from the Late Uruk Period. In J. Bauer, R. Englund and M. Krebernik (eds.), *Mesopotamien: Späturuk-Zeit und Frühdynastische Zeit*. Orbis Biblicus et Orientalis. Vandenhoeck & Rupert. Göttingen: 15–236.

2004. The state of decipherment of proto-Elamite. In S. D. Houston (ed.), *The First Writing: Script Invention* 

*as History and Process*. Cambridge University Press. Cambridge: 100–149.

Fowler C. 2002. Body Parts. In Y. Hamilakis, M. Pluciennik and S. Tarlow (eds.), *Thinking through the Body: archaeologes of corporeality*. Springer. New York: 47–69.

2004. *The archaeology of personhood: an anthropological approach*. Routledge. London.

2010. From identity and material culture to personhood and materiality. In D. Hicks, M. C. Beaudry (eds.), *Oxford handbook of material culture studies*. Oxford Handbooks. Oxford University Press. Oxford: 352–385.

Frangipane M. 1994. The record function of clay sealings in early administrative systems as seen from Arslantepe-Malatya. In P. Ferioli, E. Fiandra, G. G. Fissore and M. Frangipane (eds.), *Archives Before Writing*. Proceedings of the International Colloquium, Oriolo Romano, Oct. 23–25, 1991. Scriptorium. Rome: 125–136.

2000. The development of administration from collective to centralized economies in the Mesopotamian world: the transformation of an institution from 'systemserving' to 'self-serving'. In G. Feinman, L. Manzanilla (eds.), *Cultural Evolution: Contemporary Viewpoints Fundamental Issues in Archaeology*. Kluwer Academic/Plenum. New York: 215–232.

2007. Different types of egalitarian societies and the development of inequality in early Mesopotamia. *World* Archaeology 39(2): 151–176.

Gamble C. 2008. Kinship and Material Culture: Archaeological Implications of the Human Global Diaspora. In N. Allen, H. Callan, R. Dunbar and W. James (eds.), *Early Human Kinship: From Sex to Social Reproduction*. Royal Anthropological Institute. Blackwell Publishing Ltd. Malden: 27–40.

Gosden C., Marshall Y. 1999. The cultural Biography of objects. *World Archaeology* 31(2): 169-178.

Hayden B. 1990. Nimrods, Piscators, Pluckers, and Planters: The Emergence of Food Production. *Journal of Anthropological Archaeology 9: 31–69*.

Kopytoff I. 1986. The cultural biography of things: commodization as process. In A. Appadurai (ed.), *The Social Life of Things. Commodities in Cultural Perspective*. Cambridge University Press. Cambridge: 64–94.

Lesure R. 2011. *Interpreting Ancient Figurines: Context, Comparison and Prehistoric Art*. Cambridge University Press. New York.

Mallowan M. E. L., Rose J. C. 1935. Excavations at Tell Arpachiyah. *Iraq 2: 1–178*.

Nieuwenhuyse O. 2007. *Plain and Painted Pottery: The Rise of Late Neolithic Ceramic Styles on the Syrian and Northern Mesopotamian Plains.* Brepols. Leiden.

Nissen H-J., Damerow P. and Englund R. 1993. Archaic Bookkeeping: Early Writing and Techniques of Economic Administration in the Ancient Near East. The University of Chicago Press. Chicago IL.

Pittman H. 1994. Towards an understanding of the role of glyptic imagery in the administrative systems of protoliterate greater Mesopotamia. In P. Ferioli, E. Fiandra, G. G. Fissore and M. Frangipane (eds.), *Archives Before Writing.* Proceedings of the International Colloquium, Oriolo Romano, Oct. 23–25, 1991. Scriptorium. Rome: 177–203.

Pollock S. 2011. Making a Difference: Mortuary Practices in Halaf Times. In A. Baadsgaard, A. Boutin and J. Buikstra (eds.), *Breathing New Life into the Evidence of Death: Contemporary Approaches to Bioarchaeology*. School of Advanced Research Press. Santa Fe: 29–54.

Postgate N. 2005. New angles on early writing. *Cambridge Archaeological Journal 15(2): 275–280.* 

Prijatelj A. 2007. Digging the Neolithic Stamp-Seals of SE Europe from Archaeological Deposits, Texts and Mental Constructs. *Documenta Praehistorica* 34: 231–256.

Schmandt-Besserat D. 1992. *Before Writing, Vol. 1: From Counting to Cuneiform*. University of Texas Press. Austin TX.

1994. Tokens: a prehistoric archive system. In P. Ferioli, E. Fiandra, G. G. Fissore and M. Frangipane (eds.), *Archives Before Writing*. Proceedings of the International Colloquium, Oriolo Romano, Oct. 23–25, 1991. Scriptorium. Rome: 13–28. 1996. *How Writing Came About?* University of Texas Press. Austin TX.

2007. *When Writing Met Art*. University of Texas Press. Austin TX.

2009. Tokens and writing: the cognitive development. *Scripta 1: 145–154*.

Schmidt K. 2000. Göbekli Tepe, southeastern Turkey: A preliminary report on the 1995–1999 excavations. *Paleorient 26 (1): 45–54*.

2010. Göbekli Tepe: The Stone Age Sanctuaries. *Documenta Praehistorica 34: 239–256*.

Tilley C. 2006. Objectification. In C. Tilley, W. Keane, S. Küchler, M. Rowlands and P. Spyer (eds.), *Handbook of Material Culture*. Sage Publications. London: 60–73.

Tobler A. J. 1950. *Excavations at Tepe Gawra, vol. 2*. University of Pennsylvania Press. Philadelphia.

Tsuneki A. 2011. A glimpse of human life from the Neolithic cemetery at Tell el-Kerkh, Northwest Syria. *Documenta Praehistorica 38: 83–95*.

Verhoeven M. 1999. An Archaeological Ethnography of a Neolithic Community-Space, Place and Social Relations in the Burnt Village at Sabi Abyad, Syria. Nederlands Historisch-Archeologisch Instituut. Leiden-Istanbul.

von Wickede A. 1990. *Prahistorische Stempelglyptic in Vorderasien*. Profil Verlag. München.

Wobst H. M. 1977. Stylistic Behavior and Information Exchange. In E. H. Cleland (ed.), *For the Director: Research Essays in Honor of James B. Griffen*. Anthropology Papers No. 61. University of Michigan Museum of Anthropology. Ann Arbour. Michigan: 317–342.