

'The changing face of clay': continuity and change in the transition from village to urban life in the Near East

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In the Near East, the inherent dualism of clay as both symbol and instrument was a feature of its use from the inception of farming villages to the formation of cities, and the extensive record of its 'changing face' allows us to trace the continuous history of development between them.

Key-words: Near East, Neolithic, Chalcolithic, clay, pottery, figurines, houses, exchange, village, origins of writing

Writing in 1923, J.L. Myres attributed the 'gulf which separates the study of the Old Stone Age from that of the New' to the appearance of a 'more varied and far more expressive source' of archaeological knowledge than stone, bone or antler. This new source of information was clay and, according to Myres, there are special reasons for its 'eloquence' which we may recount since they form the basis of this study (*Cambridge Ancient History* 1923: 70 [original emphasis]):

First, clay is eminently *plastic*; unlike stone, wood or fibre, it has no 'grain' or texture of its own; it is therefore *fictile*, and can be modelled into any form characteristic of the natural 'grain' or texture of any other material; all objects of pottery are therefore literally *figments* of the potter's will, *fictions* (to vary the phrase) of his memory and imagination. 'Hath not the potter power over the clay?'. But the potter, and still more those people who will use his pots, are creatures of habit.

The growth of the archaeological record since Myres' day has greatly enlarged the scope of his initial insight. Shaped into figurines and tokens by the first horticultural communities of the Fertile Crescent, clay was soon appropriated in the manufacture of fired and decorated vessels. By the 4th millennium BC, it had become the material upon which seals and written signs, the tools of urban administration, were impressed, and its plastic and thermal qualities provided the moulds

which later made possible the casting of sophisticated metal artefacts through the lost-wax technique. A primary construction material from the inception of farming onwards, clay also played an integral part in the development of architectural forms which, through symbolic elaboration, acted as frameworks for the formation of corporate groups and the negotiation of social roles.

More than any other surviving medium of human expression, clay now serves to bridge the gap between late Stone Age prehistory and the first written documents in the archaeological record. It allows us to relate the transition from prehistory to history as a continuous story, rather than focusing upon the postulated revolutions — Neolithic and urban (Childe 1936) — which mark the beginning and end of the process. In following the changing applications of clay, we therefore gain access to the interplay between symbol and practice, meaning and means, in the transition from village to urban life in the Near East.

PPNA-B: The ancestral house and Lévi-Strauss

'Exchange, as a total phenomenon, is from the first a total exchange, comprising food, manufactured objects, and that most precious category of goods, women.'

LÉVI-STRAUSS *The Elementary Structures of Kinship* (1969: 60–61)

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The initiatives of those people who joined the flow of settlement into PPNA Jericho during the 10th millennium BC¹ yielded an unexpected bonus. In addition to providing a habitat in which wild pulses and cereals could produce unprecedented grain surpluses (Sherratt 1980; 1997a), the moist groundwater soils in the vicinity of Ain es-Sultan offered excessive quantities of something else: mud, and, more specifically, clay. At Jericho and contemporary Mureybit (Phases IA-II) this prodigious resource was initially used to supplement wood and stone in the construction of better-insulated and less ephemeral houses, and to provide interior furnishings such as benches, storage bins and hearths. The latter features acted as foci for the generation of social roles relating to food processing and preparation (Cauvin 1977).

During the 9th millennium BC, the firing of clay to produce small ceramic vessels at Mureybit III occurred simultaneously with the modelling of human figurines. The majority depicted women, many with full breasts and hips and protruding stomachs, emphasizing those aspects of the female body associated with reproduction (*cf.* Cauvin 1977: 34–5; 1985; McAdam 1997). A concern with perpetuating occupational rights is suggested by the burial of some individuals beneath or adjacent to houses at this time. This desire to reproduce social relations across generations, already evident at earlier Natufian sites such as Mallaha (Boyd 1995: 22), would have placed a premium upon the acquisition of spouses, possibly mediated through cultural exchanges between exogamous households and village groups (bride/groom-wealth).

Intensification of this pattern of change with the onset of PPNB (8500–7000 BC) is evident at the northern Levantine sites of Tell Ramad I-II, Ghoraiife I-II, Ras Shamra VC and Tell Aswad I-II (de Contenson 1971; 1979; 1983), further inland on the Euphrates floodplain at Tell Mureybit IVA-B (Cauvin 1977) and Tell Abu Hureyra (Mellaart 1975: 54–5), at Çayönü I-IV on a northern tributary of the Tigris (Çambel & Braidwood 1970), and at southern Levantine sites such as 'Ain Ghazal (Rollefson *et al.* 1992), Jericho (Kenyon 1960) and Beidha VI-II (Kirkbride 1966; 1968). The repeated superimposition of rectangular buildings over a single

piece of land gave rise to 'tells' (Byrd 1994: 660), while enhanced emphasis upon locality and ancestors resulted in more elaborate treatment of the dead. Detachment of the skull from the corpse, and its occasional display within houses following 'revivification' with plaster and paint, is practised at a number of sites (Garfinkel 1994). This mirrors the elaboration of the house-interiors with red paint or ochre, traces of which are preserved on the plaster surfaces of floors and walls.

It is within this context that we first witness the widespread creation of clay figurines, anthropomorphic and zoomorphic, and a range of minute geometric tokens, mostly discs, cones, spheres and cylinders. These not only appear all over the Levant but also far to the east on the forested flanks of the Zagros Mountains and the adjoining Khuzistan plain. Comparable developments in sedentary life had been under way there, at sites such as Karim Shahr, Tell M'lefaat, Jarmo, Ali Kosh, Tepe Guran, Ganj Dareh and Tepe Asiab (Braidwood 1961; Braidwood *et al.* 1960; Hole *et al.* 1969; Mortensen 1964; Smith 1972). Despite the fact that they share a common medium and make their first appearance simultaneously during the 9th and 8th millennia BC, clay figurines and tokens have only recently been considered as parallel or related phenomena, or as part of wider developments affecting the structure of village life in the Neolithic of the Near East.

Previous discussions have related figurines to social and psychological processes thought to be at work within particular villages (e.g. Haaland & Haaland 1995; Hamilton *et al.* 1996), focusing overwhelmingly upon female figurines to the exclusion of the many animal representations and the rarer sexless or male examples (see Ucko 1968; McAdam 1997). These different classes of figurine emerge together, however, along with geometric tokens. It seems far-fetched to suggest that village communities from the Mediterranean coast to the Persian Gulf simultaneously underwent independent transformations at this time, leading to their manufacture. Interaction between these sites must, therefore, be an aspect of their creation and use.

With this in mind, it is interesting to note the proliferation of the PPNB cultural pattern over a far greater geographical area than that of the PPNA. This is concomitant with a heightened circulation of exotic substances, archaeo-

1 All dates given in calibrated years BC.

logically attested in the distribution of attractive stones, shells and occasionally metals used in the manufacture of decorative items such as beads, pins and pendants (Mellaart 1975; de Contenson 1983). These materials changed hands within an arena of exchange, the outer bounds of which extended in an arc from the Sinai peninsula to the Persian Gulf across the Fertile Crescent (Dixon & Renfrew 1976). Preserved inorganic materials map out the potential area within which organic desirables, such as wild fruits of limited natural range and cultivated cereal grains, moved (Runnels & van Andel 1988; Sherratt 1997b: 6–7). Since no means of bulk overland transport would become available until the domestication of the donkey some three millennia later, those animals already under human control would have formed a particularly important source of mobile wealth.

Within this growing field of interaction, clay would have presented itself as an excellent medium of communication between sedentary groups dispersed throughout the Near East. Available in abundance to villagers from the Levant to Khuzistan, clay was intrinsically associated with the productive capability of the land, and culturally linked to the construction and maintenance of houses, evoking a background of common interests relating to sedentary life and ancestral heritage. The processes of shaping, firing and even breaking forms in clay provided a performative language of negotiation in which transactions could take place, lending dramatic weight to the proceedings. The presence of a ritualistic aspect to the conclusion of exchanges is likely, given the apparent absence of other forms of contract and the lack of centralized authority to enforce property rights at this time.

Under these circumstances, it might be envisaged that the representation of objects in clay played a role in the conduct of exchanges, particularly those involving high levels of risk and commitment, where the prior negotiation of agreeable terms may have been important. The transport of livestock (sheep and goats) over long distances would constitute one such scenario. Depictions of wild animals such as boars in figurine assemblages may, in turn, indicate the promise of carcasses to be taken in the hunt and presented at ceremonial feasts, where new cycles of exchange would have been initiated

and existing ones fuelled. Boars would have been a primary source of prestige both as the main edible attraction and for their tusks, which were made into pendants (mementos?) at Ali Kosh (Mellaart 1975: 75, 82). Hunting of wild pigs as well as gazelle, onager, auroch, ibex and smaller mammals is amply attested at PPNB sites in the Near East (Mellaart 1975: 65–7, 83). Like boar, many of these species could serve the dual functions of consumption and display through the provision of meat, fur and horns.

Marriages, as well as being essential to the perpetuation of ancestral houses, are also primary occasions for feasting and, given the limits to regular contact during the PPNB, for the cementing of economic and political relationships between communities far-removed from one another. A significant number of the female anthropomorphic figurines present in Near Eastern villages during the 9th and 8th millennia BC may therefore have represented the principal objects of pre-nuptial negotiations, against which animals and easily-portable manufactured goods, similarly represented and enumerated by clay figurines and geometric tokens, were bartered and exchanged.

Hassuna–Samarra–Halaf: the sexual division of labour

‘The sexual division of labour in farming is bound to be closely linked to the type of agriculture, the relations of production to the means of production.’

GOODY *Production and reproduction* (1976: 35)

During the second half of the 8th millennium BC a string of settlements was established along the foothills of the Zagros and Taurus mountains. Flanking the routes to highland obsidian sources, this distinctive group of villages, reaching from Çayönü to Shemshara via Tell Maghzaliyah, occupied a zone of mutual interest to participants in exchange cycles operating to the east and west. Still largely aceramic, these sites maintained a flowing trade in obsidian blades, marble bracelets and leaf-shaped projectile points. Some communities exploited their nodal location at the apex of the Fertile Crescent, developing advanced manufacturing techniques which added value to regionally-accessible raw materials (see Bader 1993: 13–16, 21).

Continued economic specialization characterizes the first half of the 7th millennium BC,

during which the steppes of northern Mesopotamia were extensively colonized by groups using crude chaff-tempered ceramic containers for the storage, preparation and consumption of food (Kirkbride 1974; Merpert & Munchaev 1993). Images of male livestock and women with hands below their breasts were applied in clay to the outer surfaces of these vessels, thereby associating them with the cultural context of eating and drinking. Offering unprecedented access to the networks along which goods travelled, the occupation of the steppes also demanded the inception of a labour-intensive agricultural régime, reflected in the use of chipped stone hoes at Hassuna sites (Bernbeck 1995). The necessary restructuring of productive roles was augmented by the management of increasing numbers of domesticated cattle. Further south, in the more arid heartland of the Samarra complex, the digging and maintenance of irrigation canals demanded a comparable investment of labour, the co-ordination of which is also attested in the small-scale fortifications at Choga Mami and Tell es-Sawwan (Oates & Oates 1976).

Alongside the adoption of time-consuming agricultural and pastoral activities, settlements of the Hassuna–Samarra–Halaf complex, dating to the late 7th and 6th millennia BC, produced elaborate pottery and textiles (implied by large numbers of spindle whorls) on an unprecedented scale, often in circumscribed or secluded areas of the village. At Yarim Tepe I, boundary walls marked off a space in which domed pottery kilns were concentrated (Merpert & Munchaev 1993: 76), while Hajji Firuz Tepe and Arpachiyah provide detailed evidence for the communal nature of food preparation and pottery firing, centred around hearths and kilns (Voigt 1983; Hijara *et al.* 1980). At Hajji Firuz Tepe the working of flint and obsidian was carried out away from these features which, as Voigt suggests, may have provided women with a discrete social setting for productive life (1983: 310–11).

Hassuna, Samarra and Halaf ceramics often display an intense fusion of images within a visual vernacular, clearly generated in relation to the production and decoration of textiles and basketry. The bodies of women were closely associated with these products, as strikingly illustrated by a vessel from Yarim Tepe II (Merpert *et al.* 1981: 40–41, figure X-XI). Con-

currently, naked female figurines, which had been typical of PPNB, were now increasingly replaced by partially covered forms. The latter bear markings suggestive of clothing, ornament and cosmetic treatment of the skin (e.g. Mallowan & Cruikshank Rose 1935: figures 45–46; Mellaart 1975: 149, 166), indicating greater participation by women in the discourse of cultural display.

At Tell Sabi Abyad (Level 6, *c.* 6200 BC) in the Balikh Valley of northern Syria (Akkermans & Verhoeven 1995; Akkermans 1996) the division of the site into rectangular and round buildings ('*tholoi*') seems related to an increasingly pronounced division of labour between the sexes. The presence of pestles, spindle whorls, loom-weights and bone awls testify to food processing and weaving within round buildings, while rectangular buildings, by contrast, were used exclusively for the storage of grain and the conduct and recording of economic transactions.

Two rooms within a rectangular complex at Tell Sabi Abyad contained large numbers of clay geometric tokens and figurines as well as hundreds of sealings, many bearing stamped impressions, which would have been applied to ceramic containers and basketry (Akkermans & Duistermaat 1996: 20–21). The anthropomorphic figurines, which are exclusively female, had been systematically broken at the neck or waist after firing, a practice also observed at the contemporary sites of Yarim Tepe I (northern Mesopotamia; Merpert & Munchaev 1993: 92, figure 6.10), Tell es-Sawwan (central Mesopotamia; Oates 1966: 151) and Hajji Firuz Tepe (Iranian Azerbaijan; Voigt 1983: 175–81). The excavators proposed the use of geometric tokens to enumerate quantities of a specified commodity (Akkermans and Verhoeven 1995: 24), while the introduction of seals provided a special form of economic identity, and may signal the emancipation of property and trading relations from those of kinship (*cf.* Akkermans & Duistermaat 1996, but also comments by Bernbeck and others; see also Alizadeh 1994).

A symbolic rhetoric based around representations of wild and domesticated animals pervaded the regulation of resources within rectangular compounds, implying an association with the male-dominated realms of animal husbandry, herding and hunting. The roof of one of the buildings at Tell Sabi Abyad, in

which administrative procedures were conducted, supported a series of emblematic clay ‘torsos’ adorned with wild sheep horns and the limbs of bovids. These images also appear upon the sealings found within, which feature straight-limbed human figures with heavy eyebrows, as well as goat or gazelle with pronounced curving horns, and ‘*bucrania*’. In the later Halaf-period levels at this site, the façade of a two-storey rectangular complex was buttressed with monumental niches (Akkermans & Le Mière 1992: 12–15), and contained the by-now familiar assemblage of clay female and animal figurines, and geometric tokens.

It seems reasonable to assert that buildings such as these were used by men to create a political and economic realm apart from women. The increasing significance of domesticated cattle as a primary generator of mobile wealth (Akkermans & Le Mière 1992: 30–31; *cf.* Sherratt 1997b: 252–69) is suggested at this time by the prominence of bull-heads and rams in the decoration of widely-circulated Halaf ceramics (e.g. Mallowan & Cruikshank Rose 1935: 154–71; Davidson & McKerrell 1976: 53; 1980: 164) and by the introduction of bull figurines into the clay animal assemblage at Tell Sabi Abyad (Akkermans & Verhoeven 1995: 25, figure 15). Less hampered by the cost of ceremonial feasting, the decline of which is signalled by a marked decrease in wild animal bones at most sites (Merpert 1993: 122), transactions predicated upon the exchange of livestock could occur with greater frequency than earlier forms of trade based upon marriage alliance.

Concurrently, a new etiquette of exchange developed, more in tune with the motives of short-term acquisition. This involved controlled hospitality within the walls of male-oriented buildings, employing a range of richly decorated serving vessels (FIGURE 1) and, almost certainly, textiles (*cf.* Voigt 1983: 308–316). The cultural rapport inherent in such encounters remained linked to the productive activities of women, and may have led on occasion to lasting alliances based on marriage. Since women were the first resource over which socially defined rights of control were exercised, it is not surprising that female symbolism played a part in the extension of property rights to other categories of goods. Hence clay female figurines, evoking sentiments of trust and reciprocity associated with nuptial agreements, may have

been broken in such contexts as a symbolic act of contract between men (*cf.* Oates 1996: 167).

The growing autonomy of round structures from rectangular superstructures is visible as a gradual process spanning the 7th millennium BC (for transitional stages see Voigt 1983: 306–7, figures 127–8; Akkermans & Verhoeven 1995: 9, figure 3; Merpert & Munchaev 1993: 94–7, figure 6.11). By the end of the Halaf period, sites such as Arpachiyah and Yarim Tepe II featured a number of independent round or keyhole-shaped buildings, which resemble monumental bread-ovens or domed kilns (*cf.* Buccellati *et al.* cited in Moorey 1994: 154). At Arpachiyah (Phase A Two, Levels VIII–VI) such ‘*tholoi*’ first appear within a walled precinct where the secondary burial of skulls in ceramic jars took place (Hijara 1978; Hijara *et al.* 1980: 134). Beneath the floor plaster of one such building at Yarim Tepe, a foundation deposit containing spindle whorls, ceramic fragments, a clay figurine, pendants and animal bones was found, and the *in situ* contents of other ‘*tholoi*’ suggest that activities associated with females, notably weaving and food-processing, also predominated within them (Merpert & Munchaev 1993: 139).

Such assemblages may be contrasted with the *in situ* contents of contemporary rectangular structures, notably the well-preserved (if misleadingly named) ‘potter’s workshop’ at Arpachiyah 6. Thousands of cores and chips indicate the working of stone here, while the variety of paraphernalia, including stone phalli/finger-bones, limestone female statuettes and amulets (Mallowan & Cruikshank Rose 1935: 99–104), signify a ritualistic context for the production of exotic items, including an exquisite necklace of obsidian beads and cowries found beneath the collapsed roof (Mallowan & Cruikshank Rose 1935: plate XI). Perforated clay tags or ‘*bullae*’, once suspended upon the string binding with which packages were sealed, were also recovered, and bore impressed signs (von Wickede 1990; figures 54–66). The prominent location of this building at the apex of the mound suggests a central location in the village, comparable to that occupied by a rectangular building adorned with a bull’s skull at Tell Aswad (Mallowan 1946: 123–6).

These developments coincide with the first use of lead and copper at Arpachiyah, and occur shortly after the earliest signs of smelting

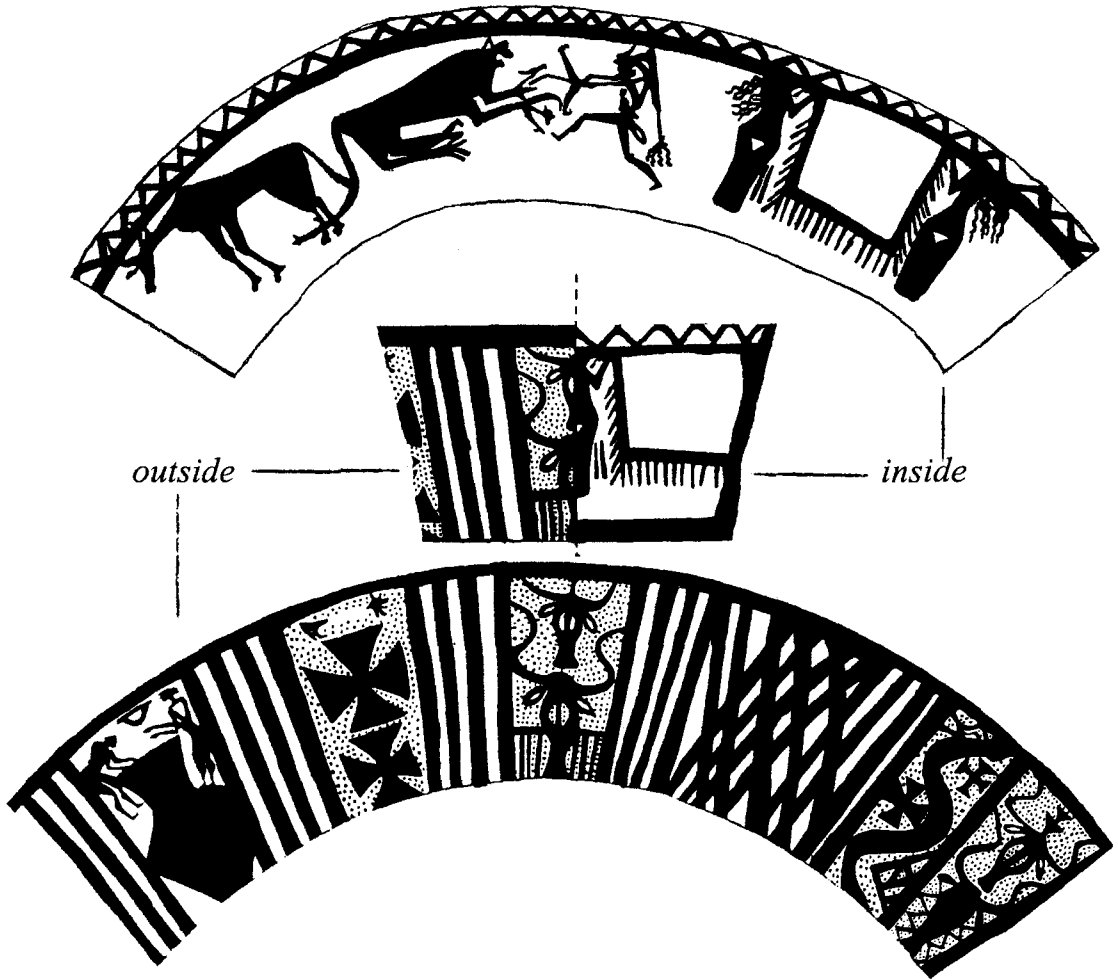


FIGURE 1. A decorated Halaf vessel from Arpachiyah: emblematic females are shown on the inside in arrested pose with a woven rug, while the male individual's confrontation is caught in mid-action (after Hijara et al. 1980; further discussion in Hijara 1978).

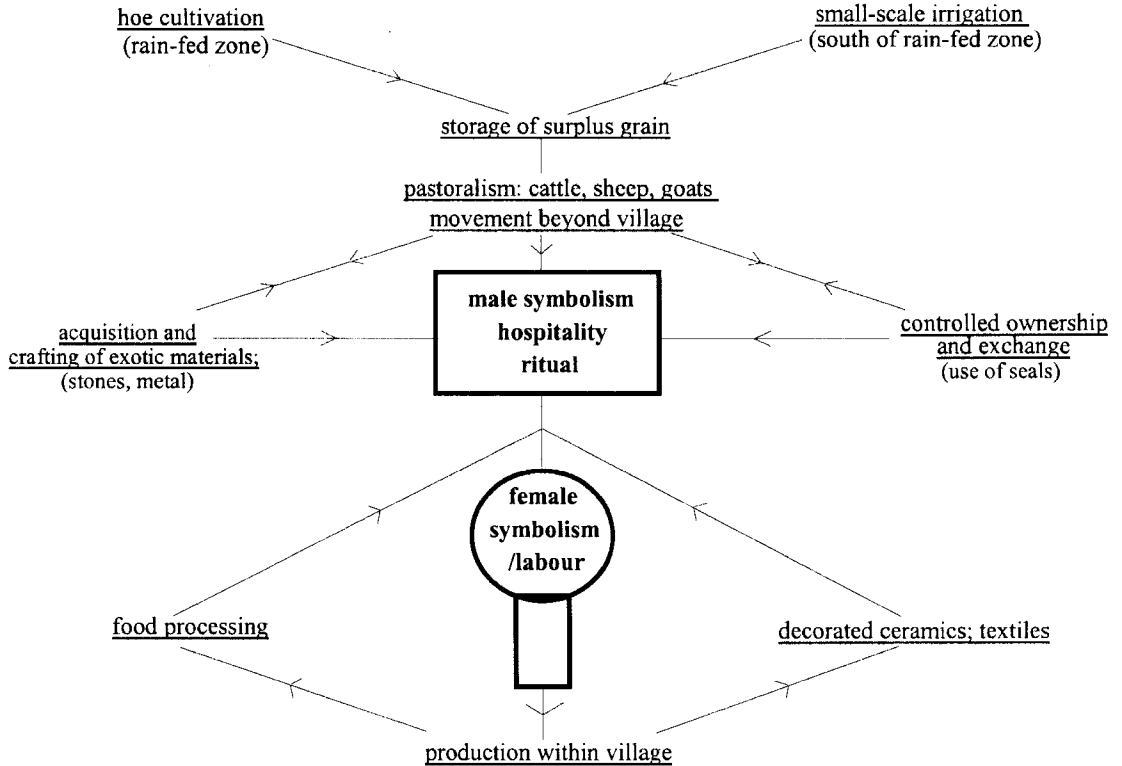
at Yarim Tepe II (Mallowan & Cruikshank Rose 1935: 103–4, plate X-i; Merpert & Munchaev 1993: 247–8). It seems likely that metallurgical skills were initially concentrated in the mountainous and semi-desert areas on the northern and southern fringes of Mesopotamia (Chernykh 1992; Moorey 1995). The forging of contacts required for the absorption of this technology and its products into lowland communities is evident in the penetration of Halaf ceramics and architecture into the highlands around Ergani Maden (copper and malachite) and the Malatya-Keban region (copper and gold). Sites such as Tilki Tepe in the region of Lake Van also indicate a more direct interest in the sources of obsidian. These materials would have entered lowland communities through the

movements of transhumant pastoralists, enhancing the role of men as procurers of exotica.

Contact and exchange over long distances, however, remained linked to the internal structural prerogatives of village life (FIGURE 2). In defining the latter, architecture became an agent of social exclusivity. The domestic hearth no longer provided a shared focus for production, consumption, exchange and ritual. Instead we see a process of fission in which circumscribed spaces, symbolically elaborated to reflect the disparate economic functions of men and women, provided discrete realms for the performance of activities perceived as socially incommensurate. The village institutions to which this gave rise, while still small in scale, may already have exhibited important aspects of their

*colonisation of northern and central Mesopotamia and spread of settlement to metal and obsidian sources.
fission of male/female productive life; growth of male status groups engaged in trade*

HASSUNA-SAMARRA-HALAF (6500-5000 cal.BC)



Transition: late 6th–early 5th millennium BC

Proliferation of new commodities: tree crops (almonds, figs, olives in Levant; dates in Sumer); wool-bearing sheep and resinated wine in Iranian highlands transplanted onto lowlands of Mesopotamia. Experimentation with cereals and milk products(?): beer, leavened bread, yoghurt, cheese (Sherratt 1997). Restructuring and intensification of village production involving specialisation and standardisation to produce tradeable goods.

FIGURE 2. Model expressing the economic and political context of life in Hassuna-Samarra-Halaf villages, and anticipating transition to the Late 'Ubaid period in northern Mesopotamia.

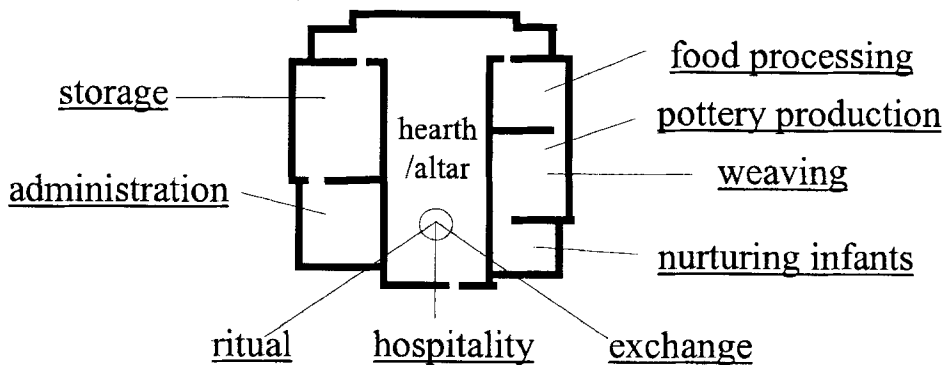
later urban counterparts, notably: the mystification of manufacturing processes involving certain materials, the establishment of a distinct realm for female labour, and the creation of an exclusive environment in which male status groups managed resources and engaged in trade and mutual hospitality.²

² For evidence of exchange and ritual in the context of male-dominated banquets during the late Early Dynastic period see Green (1993). McAdam (1993) suggests that the shaping of clay figurines depicting men, chariots and animals (themes also evoked by the earliest copper statuettes cast in the 'lost-wax' technique; Frankfort 1939; Moorey 1994: 259) was associated with such occasions. For related assemblages see Kish (EDI; Langdon 1934: 9), Ur (Woolley 1955) and Al-Hiba (Green 1993).

tripartite building becomes standard framework for domestic life and the metaphor of the household is extended to administrative, productive and ritual action creating a new work ethic and greater overall output

LATE 'UBAID (5000-4300 cal.BC)

Tripartite 'house' as extended metaphor



household : workshop : office : shrine

FIGURE 3. Hypothetical model expressing a variety of possible differentiations of space (both practical and symbolic) within the tripartite house. Allocation of activities to specific rooms is arbitrary, and particular buildings will only represent a limited range of the functions indicated.

The 'Ubaid period: the domestication of female labour

'As painted pottery shifted gradually to the deterioration of design in later periods . . . a fundamental social transformation was under way that we have set aside altogether in our thinking and have not dealt with.'

R.MCC. ADAMS (closing remark at the 'Ubaid Symposium, Elsinore, 1988)³

During the 6th and early 5th millennia BC the ceramic horizon known as Late 'Ubaid is attested over an unprecedented area of the Near East, reaching from the modern Gulf States and southwestern Iran, *via* Mesopotamia, to the northern Levant and eastern Anatolia. In northern and central Mesopotamia, it coincides with

the widespread construction of rectangular multi-room buildings, based on a tripartite plan (Tobler 1950; Forest-Foucault 1980; Jasim 1985; Roaf 1984; Akkermans 1989). With their appearance, the overt use of architecture to reinforce social distinctions within villages is abandoned, in favour of greater outward homogeneity. In the 'Ubaid levels at Tell Abada, for instance, administrative and possibly ceremonial functions, now involving a clay 'prototablet', are concentrated in a single building (Building A). This structure is slightly more elaborate than others in the village but essentially shares the same tripartite plan as the surrounding domestic units. In Level III, this layout is also used for two structures identified as specialized pottery workshops (Jasim & Oates 1986).

³ Henrickson & Theusen (1989).

Structurally uniform, tripartite buildings nevertheless enclosed their occupants within a corporate 'shell' encompassing an unprecedented range of activities, while maintaining their mutual exclusivity through the internal control of space and movement (FIGURE 3; *cf.* Roaf 1989). One effect of this was to redefine the relationship between women, work and the household. Weaving and food preparation were now performed in relative isolation, increasing the amount of time spent within the house and diffusing the identity of women as a self-conscious group within the village. Opportunities to congregate around open-air ovens and kilns still existed at Tell Abada (Jasim & Oates 1986: 353, figure 1), but were now limited in time to the performance of particular tasks. Even outside the household the segregation of one female activity from another was enhanced by the erection of designated work areas for pot-firing (now occasionally using double-chambered kilns for a faster turnover of vessels; Moorey 1994: 154) and decoration, spatially removed from the location of cooking ovens (Jasim 1989: 85–8).

Mortuary practices suggest that another aspect of this greater confinement may have been a prolonged obligation to nurture infants. Young children are conventionally buried within storage or cooking vessels beneath the floors of 'Ubaid buildings, while adults are generally interred in cemeteries outside the settlement (Hole 1989). This would indicate that infants were considered part of the domestic realm (and symbolically, perhaps, the natal realm), implying a protracted period of nurturing within the household preceding initiation into the community at large. The variety of tasks performed by women is unlikely to have decreased, therefore; what had been reduced was their potential to become the focus of collective ideas relating to female productivity.

The impact of these organizational changes is evident in the contrast between Late 'Ubaid ceramics and their Halaf predecessors. Whereas Halaf vessels were created entirely by hand, allowing the producer flexibility in her use of time and choice of design, the adoption of a pivoted work surface during the Late 'Ubaid period (Nissen 1988: 46) served to regulate and accelerate production while encouraging the creation of simple linear designs by applying paint to the rotating vessel. This was exacerbated

by the segregation of potting from the production of textiles, inhibiting discourse between potters and weavers during manufacture and discouraging the 'organic' transposition of designs between media. The channelling of female labour into more intensive, antisocial work environments and the introduction of machinery which constrained movement and expression occurred as part of a general drive towards specialization, standardization and increased output in the economy of the Near East. These changes responded to rapid proliferation in the range of available consumer-products during the later 6th and 5th millennia BC: what Sherratt (1997b: 8–9) has called 'the diversification of desire' (*cf.* McGovern *et al.* 1997).

The transformation of villages into hotbeds of manufacture was linked to the wider consolidation of northern Mesopotamian contacts, providing a flow of manufactured goods which could support permanent trading centres beyond the plains. To the north at Değirmentepe 7, where an administrative complex of clear Mesopotamian character was established *en route* to the copper and silver sources of Anatolia (Esin 1989; 1994), the tripartite building was transformed into a ceremonial centre with vivid wall-paintings and a raised altar where the main hearth would normally stand. A comparable process was triggered on the southern plains of Mesopotamia (Sumer) and Khuzistan which marked the way, respectively, to the maritime resources of the Persian Gulf and the native copper and exotic stone of Iran (see Sherratt 1995). At Eridu a tripartite building (level XI) was raised directly over a series of small existing shrines, incorporating an altar and offering table. Far to the east, a large building adorned with clay models of goat horns was erected at Susa, adjacent to which stood a series of chambers in which grain was stored and a partially exposed building with monumental walls from which a number of spindle-whorls were recovered. These structures were elevated upon a massive mud brick platform which yielded a large group of administrative seals. Arranged beneath them, adjacent to the platform, were pottery kilns, grain silos and other craft areas (Pollock 1989).

Institutions which took millennia to develop in northern Mesopotamia appear to have been grafted onto the existing communities of Sumer, taking on a hierarchical aspect not detectable

in their area of origin. Here the incorporation of dispersed villages into overarching social and economic networks involved a strong element of ceremony including burial rites which provided occasions for the affirmation of supralocal ties, transforming both Susa and Eridu into centres of pilgrimage (Hole 1989; Vértesalji 1989; cf. Sherratt 1995). Crudely made clay figurines of livestock, particularly painted bulls and rams, are common in the 'Ubaid levels at Tell 'Uqair, Eridu, Ur and Uruk (e.g. Lloyd & Safar 1943: plate XVIII; Woolley 1955: 12; Ziegler 1962: Abb.44–57; Forest 1996: 87), while large copper axes, disk-shaped pendants/clothing fasteners and richly decorated beakers were interred with the dead at Susa.

During this phase of rapid centralization, clay appears to have acted as a performative medium through which processes of transition and integration into new social roles could be tangibly expressed, and hence reinforced. The terracotta figurines found within graves at Susa, Eridu and Ur introduce the motif of a woman suckling a child, while her male equivalent holds a phallic sceptre (e.g. Woolley 1955: plate 20; Safar *et al.* 1981: 234–7; Forest 1996: 88). Differences between the male and female physique are de-emphasized in these figurines by the application of dominant, androgynous forms of body ornamentation, and by the similar overall proportions (broad shoulders and narrow hips) of male and female statuettes (Strommenger 1962: plates 10–12). The peculiar heads and faces of both male and female forms serve further to obfuscate dissimilarities between the sexes, and link them to an established tradition of cranial deformation and ornamentation which is first evident at sites of the Halaf–Samarra complex to the north (Molleson & Campbell 1995), where direct precursors for these distinctive representations are found (Roaf 1990: 56). They suggest a growing mystification of male creative forces, while the reproductive role of women, like their productive role in the changing economy, was increasingly rationalized.

Conclusion: the construction of male authority and the context of early writing

The transformation of Late 'Ubaid centres into foci of urban settlement during the late 5th and 4th millennia BC augmented existing economic developments which were already linked, such

as the secondary exploitation of animals for dairy products and wool and the concentration of a workforce to process and package the yield (cf. Potts 1997). The prominence of the tripartite building-plan among the earliest urban institutions lends credence to the view (often adduced from later texts) that some of the latter were conceived of as 'Houses of the Deity'. To some extent, they took social and economic relations initially generated within the domestic household as their model, and ritualized them on a monumental scale.

The centralized organization of a large female workforce engaged in potting and weaving is attested in some of the earliest texts recovered from ceremonial precincts of the first known cities (Nissen 1993; Pollock 1995; Zagarell 1986). Its recruitment and maintenance had a symbolic dimension indicated by the relief decoration on the famous stone vase from Warka (Heinrich 1936: Tafel 38) which shows a procession of males bringing the yield of their herds, flocks and fields to the gates of an institution where a large female figure (?the goddess Inanna) stands. She wears a long robe which almost completely disguises the contours of her body while the nude figures of the male providers are fully incorporated into this ordered representation of institutional life. Her receipt of their offerings at once expresses both authority and dependence, control and impotence.

At this time, male authority received formal expression in stone monuments such as the 'Uruk Lion Hunt Stele', minor statuary, and a range of cylinder seals (cf. Schmandt-Besserat 1993). These depict a standardized bearded figure with a round head-dress and woven garments. The activities he is shown to perform, such as the hunting of animals and the tending of herds, play upon themes associated with masculine power since the early stages of the Neolithic. Others, such as waging battle, travelling in a boat, and anointing the head of a female, extend the related ideas of violence and protection, venture and provision, into new areas. His appearance in both relief carving and three-dimensional statuary is rigid and muscular, evoking qualities of strength associated with the medium of stone in which he was rendered.

Within this context the first system of visual communication which we recognize as writing was developed, employing abstract signs impressed onto tablets of damp clay. Clay, how-

ever, was in no sense a 'clean sheet' upon which the new symbolic code could be transcribed; its use as a canvas for the earliest pictographic and numerical signs was the culmination of a process which had been unfolding since the beginnings of sedentary life. The early stages of this process established the authority of clay in representing and quantifying resources through the use of figurines and tokens, which were integrated into the practices of ritual and hospitality through which bonds of biological and fictive kinship were created. The inception of the stamp seal answered a demand for new forms of economic interaction and extended the role of clay in the passage of commodities. Able to absorb the imprint of engraved signs, clay 'bullae' carrying identity-marks were attached to the binding of packages, ensuring the recipient that their contents arrived as dispatched. This allowed forms of exchange and ownership to develop that were not contingent upon face-to-face contact between the parties involved. As Henri Frankfort (1939b: 3) noted, cylinder seals, a later innovation, achieved this in a more elegant way:

The form of the cylinder seal is adequately explained by the function which it was meant to fulfil, namely to impress a distinctive mark on a soft material of varying extent, the clay with which packages and

store-jars were secured, and which, subsequently, became the vehicle of writing.

Urban institutions, responsible for the organization of unprecedented numbers of people and things, provided a context within which the role of clay as a recipient of signs was abstracted from the physical processes of storage and exchange. Here the stylus could supplement the seal, allowing information to be classified, quantified, ordered, stored and otherwise manipulated in a bureaucratic manner (*cf.* Goody 1977). The part played by clay in the evolution of cuneiform script was not, then, that of a passive vehicle for an autonomous sequence of intellectual developments (*contra* Schmandt-Besserat 1992). Rather, the emergence of writing in the Near East needs to be seen in terms of both practice and thought; as both a material and a mental process, the relationship of which to clay was mediated through changing structures of social and economic interaction in the transition from village to urban life.

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