

ARTIFICIAL CRANIAL MODIFICATION IN PREHISTORIC IRAN: EVIDENCE FROM CRANIA AND FIGURINES

BY

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Abstract: Figurines have traditionally been investigated in terms of their typology and related function. However, the figurine record¹ may additionally contribute to studies of the body and identity, providing evidence into how the body may have been physically treated or manipulated, such as through examples of artificial cranial modification. We discuss this phenomenon with relation to skeletal evidence from Late Neolithic to Middle Chalcolithic Iran², providing an overview of existing evidence for cranial modification, as well as assessing the role an examination of the figurine record can play, providing further insights into bodily practices and the social implications of cranial modification.

Keywords: Artificial cranial modification, skulls, Neolithic to Middle Chalcolithic, Iran, human figurines, the body, identity

The practice of cranial modification³ occurs across many varying geographical and temporal regions⁴, not least in the archaeological material of the

¹ T-shaped and stalk-like figurines are not included here.

² Although the practice of artificial cranial modification has been attested at contemporary Mesopotamian sites, the present article is restricted to the modern political boundaries of Iran. Comparison and analysis of figurines and skeletal material from other sites in the Near East are the topic of another forthcoming paper and are hence not discussed in detail here.

³ Although the terms modification and deformation both refer to ‘*an alteration of a body part that is developing normally until a mechanical force is applied*’ (Bronfin 2001: 193), it is often felt when referring to practices which alter the body that the term ‘deformation’ implies an unnatural and undesired appearance, with negative connotations. We have therefore chosen to use the terms ‘modification’ or ‘alteration’ as these bear a more neutral connotation in our opinion.

⁴ Practiced since at least the Palaeolithic period (Trinkhaus 1982: 198), examples of cranial modification have been discovered spreading as far as China (Molleson & Campbell

Ancient Near East. We will briefly outline the phenomena of cranial modification before reviewing the late prehistoric Iranian skeletal material and the complementary role figurines can play, providing insights into the way people treated their bodies, and the interpretation of personal and social identities. This will build on existing research undertaken by Molleson & Campbell (1995) in their analysis of material from Tell Arpachiyah in Mesopotamia.

It is widely accepted that treatment of the skull in the mortuary domain, through decapitation and further post mortem treatment, as well as through ante mortem modification, are common traits in the archaeological record of the Ancient Near East, albeit evidenced in widely varying actual physical practices. It is important to note that the skulls discussed here all result from ante mortem treatment, rather than the post mortem treatment of the skull prevalent during the PPNB of Mesopotamia, the Levant and Anatolia⁵. It should be noted that many skulls selected for post-mortem treatment, such as plastering or painting, were also initially cranially modified (Bonogofsky 2001: 63 discussing Strouhal 1973: 244). Recent attention has begun to focus on the practice of skull modification in the Neolithic Near East⁶. Previous to this work, main reports on the topic have included Arensburg and Hershkovitz (1988), who have provided a general overview of the phenomenon. Molleson and Campbell (1995) focused on the Halaf-Ubaid site of Tell Arpachiyah in Northern Mesopotamia, whilst Meiklejohn *et al* (1992) documented examples of cranial deformation from four Proto-Neolithic and Neolithic sites: Ganj Dareh, Tepe Ghenil, Ali Kosh and Choga Sefid. These papers provide a foundation from which we can progress when researching the Iranian evidence. Before reviewing the evidence in closer detail we will first describe the practice of cranial modification.

Artificial Cranial Modification

As discussed in detail by Dingwall (1931), cranial modification occurs through both intentional and unintentional means. In both cases it is a

1995: 50), Australia (Brown 1981: 156) and Africa, as well as from Northern, Central and Latin America (Özbek 1974: 459).

⁵ See for example Bienert (1991).

⁶ For instance, the BANE 2004 Conference on ‘*The Creation of Symbolic Worlds*’ held at Reading University, March 25th – 27th, featured many papers discussing the phenomenon. The study of artificial cranial modification has a longer tradition in the archaeology of other continents, e.g. Latin America and Australia.

process which flattens and / or elongates the human skull, resulting from pressure applied to the malleable baby's head. The degree and the nature of the pressure exercised have an effect on the permanence of the process.

A newborn skull shows inherent plasticity and can therefore easily be modified. This can occur as a natural or unintentional process at birth, as a result of intrauterine constraint and the journey through the birth canal, leaving the skull slightly deformed (Bronfin 2001: 191). In normal circumstances, the skull will return to its initial form in a relatively short period of time following birth⁷. A second form of unintentional modification can occur when a head covering is applied too tightly to the weak baby's head shortly after birth, causing distortion of the skull (Lange 2004: 5). Furthermore, cradle boarding has an obvious effect on the shape of the skull, although whether this is an intentional motivation is open to debate. The deliberate or artificial modelling of the skull of a baby however, is always accomplished with the aid of external objects, such as wooden boards, stones, bandages, or through repetitive manual moulding (Bronfin 2001: 191; Molleson pers. comm.)⁸. It is this type of intentional cranial modification which concerns us here.



Fig. 1. *Example of Cranial Modification from Mangbetu, Central Africa, from Fisher 1984: 79*

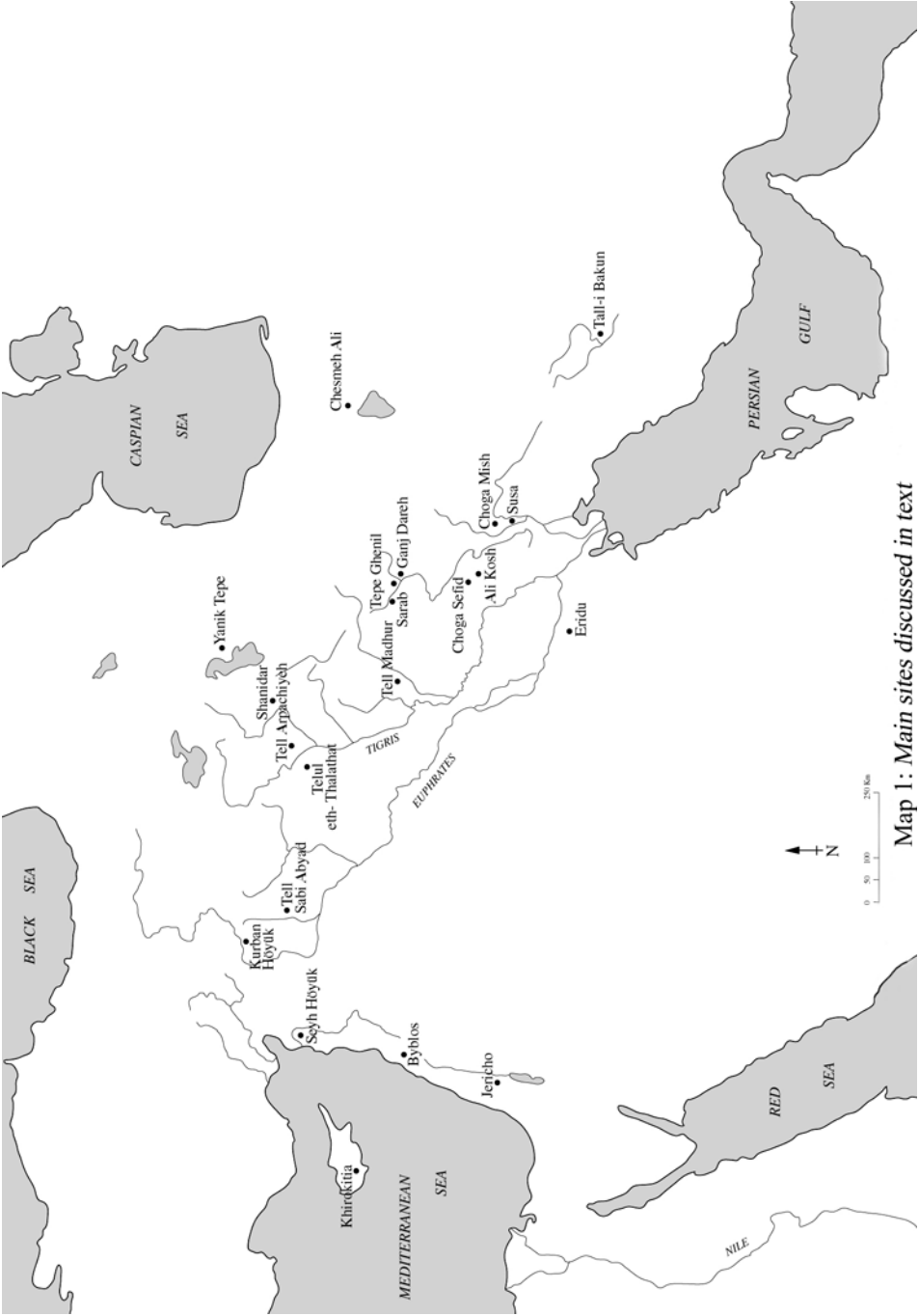
A modern example of cranial modification can be seen in figure 1 (Fisher 1984: 79), where the skull has been elongated using bark or wood. Criteria on how to recognize artificial cranial modification during excavation have been detailed elsewhere (Molleson & Campbell 1995: 48; Dingwall 1931: 20) and therefore will not be repeated here.

Early Evidence from the Near East

As can be seen from the map (map 1), there is widespread evidence for artificial cranial modification in the Near East. Dating as far back as Neanderthal times, evidence of the practice has been found on the skulls from Shanidar 1 and 5

⁷ Furthermore a *torticollis*, which is not always visible at birth but which seems to occur frequently with infants, can result in a modification of the skull because of the child always sleeping on one side of the head (Bronfin 2001: 195). This is only an aesthetic 'defect', termed *plagiocephaly*, and does not in general generate brain damage. It can easily be masked by hair.

⁸ For a more complete survey on materials and methods used see Dingwall (1931: 12-13).



Map 1: Main sites discussed in text

in Northern Iraq (Trinkhaus 1982: 198-199; Meiklejohn *et al* 1992: 84), with later examples recovered from between the 7th and 4th millennia BC at the sites of Jericho, Khirrokita, Byblos, Seyh Höyük, Eridu (Meiklejohn *et al* 1992: 83, 86; Kiszely 1978: 7; Özbek 1974), Tell Arpachiyah, Tell Madhur, Telul eth-Thalathat and Kurban Höyük (Molleson & Campbell 1995: 50). This evidence comes from primary sources of the skulls themselves.

Cranial evidence for Late Neolithic to Middle Chalcolithic Iran

Skeletal remains have so far been recovered from 18 of the 285 reported sites from Late Neolithic to Middle Chalcolithic Iran (Hours *et al* 1994). Of these, five attest to the presence of artificial cranial modification⁹, almost one third of the sample, indicating the potential prevalence of the practice. There are in total 27 skulls which are artificially modified¹⁰. These have so far been recovered from Ganj Dareh, Tepe Ghenil, Ali Kosh, Choga Sefid and Choga Mish (Meiklejohn *et al* 1992: 84; Hours *et al* 1994: 103; Hole 1977: 91-92), as detailed below.

• Ganj Dareh:

At 9th – 8th mill. BC Ganj Dareh, all 14 skulls recorded¹¹ have been altered artificially using bandages (Meiklejohn *et al* 1992: 89). Of the crania studied, one is female and two are male; three others are probably female and five more probably male; three are of undetermined sex (Meiklejohn *et al* 1992: 91, table 4).

⁹ There is also evidence of trephination from the Chalcolithic site of Dum-Gar-Parchineh in Luristan, where five skulls have been found that show evidence of this practice (Haerinck & Overlaet 1996: 10). So far, this is the only other type of known treatment evidenced from skulls from late prehistoric Iran.

¹⁰ It has also been argued that the intentionally modified skulls found in the Ukraine, the Crimea and the Caucasus areas -where until recently the Ossets and the Katvelies still practiced intentional head modification (Kiszely 1978: 18)- originally derived from Iran (Kiszely 1978: 18), an issue which will not be debated here.

¹¹ In total 69 individuals were recovered from Ganj Dareh, however these were not all complete burials.

- *Tepe Ghenil:*

Nearby Tepe Ghenil is dated slightly later than Ganj Dareh to the beginning of the 8th mill. BC (Meiklejohn *et al* 1992: 86; Hours *et al* 1994: 138). Here one individual — whose sex is undetermined — has an artificially modified skull, again using bandages (Meiklejohn *et al* 1992: 89).

- *Ali Kosh:*

In the early Ali Kosh phase of the site (8th mill. BC), 14 inhumations of adults and children were found beneath the rooms of the houses. Three female adults -one of whom was buried together with a foetus- displayed evidence of artificially modified skulls (Hole *et al* 1969: 42)¹².

- *Choga Sefid:*

During the Sefid phase of the site (7th – 6th mill. BC), evidence for artificial cranial modification is present on at least six skulls¹³ (Hours *et al* 1994: 103; Hole 1977: 91). All show traces of what Hole has termed ‘*extreme cranial deformation*’ (1977: 344-345, Pl. 28, 30-31), as can be seen here (figs. 2 and 3).



Fig. 2. *Choga Sefid Burial 7*,
Courtesy Frank Hole



Fig. 3. *Choga Sefid Burial 5*,
Courtesy Frank Hole

¹² It is possible that even more skulls underwent intentional modification, however, most of the Ali Kosh skulls were either too badly preserved or crushed to permit further analysis (Hole *et al* 1969: 248).

¹³ All skulls were unsexed — Frank Hole, pers. comm.

- *Choga Mish:*

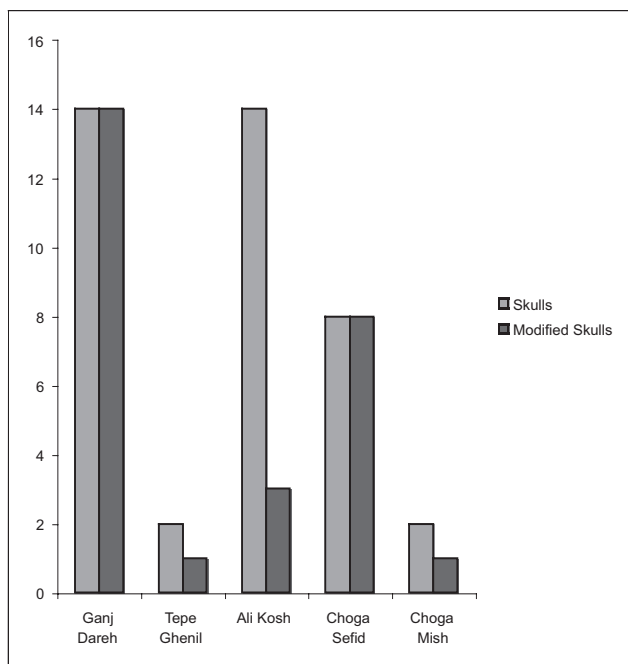
Of the two burials dated to the Middle Susiana period at Choga Mish¹⁴, one probable female skull dated to the Late Middle Susiana period (5th mill. BC) shows evidence of artificial cranial modification (Ortner 1996: 319-320). The cranium has a small and elongated profile, the result of cloth binding applied around the posterior part of the skull (Ortner 1996: 320, fig. 49).

The methods used to modify the skulls at these sites are not always stated, but in most cases it can be reasonably argued that cloth bandages were used to alter their shape, as has been explicitly reported for the sites of Ganj Dareh, Tepe Ghenil (Meiklejohn *et al* 1992: 94, table 5) and Choga Mish (Ortner 1996: 320). The table presented here demonstrates the proportion of modified skulls recovered per site. At Ganj Dareh and Choga Sefid, all skulls recovered display clear traces of artificial cranial modification, suggesting that either all individuals from the site underwent this treatment, regardless of rank and gender, or that only those persons with cranial modification underwent a specific post mortem treatment, i.e. interment within the site, instead of interment outside of the site or other mortuary disposal. This latter point, which seems more probable in light of the small sample, points to interpretations that these particular persons were regarded as different in some sense. This position may have been due to their family, their gender, ethnic identity, or perceived role, and could have been hereditary; whatever the motivation, this was a position chosen for them during infancy, a decision removed from their own hands.

Human figurines displaying possible evidence for Artificial Cranial Modification

Although the list of functions attributed to human figurines is lengthy and debatable, it can be reasonably argued that many are representative of what people looked like, or an achievable human appearance. Indeed, the body bears a biography of the wearer through life, serving to construct as well as reflect changing identity through appearance and bodily treatment (Croucher 2004). Cranial modification is one of the most obvious exam-

¹⁴ Several more burials were found within the early levels of the site. Some seem to be intrusive of younger levels, while eight more are dated to the Archaic Susiana period (Delougaz *et al* 1996a: 159, 162, 165-167).

Table 1. *Proportion of modified crania*

ples we have in the archaeological record of the use of the body in identity construction, and figurine evidence can further support skeletal information, providing insights into bodily treatment.

Of the five Late Neolithic to Middle Chalcolithic Iranian sites from which intentionally modified skulls were recovered, four have human figurines in their archaeological repertoire¹⁵. These are as mentioned Ganj Dareh, Ali Kosh, Choga Sefid and Choga Mish. However, several of the figurines recovered from these sites have either been poorly published¹⁶, or lack secure contexts¹⁷. Where we do have further evidence of human figurines, many are sadly too fragmentary to aid our study here¹⁸. Evidence

¹⁵ All figurine fragments presented here are between two and four cm in height.

¹⁶ For example, of the 113 human figurine fragments recovered from Ganj Dareh (Eygun 1992: 109), only six have so far been published, none of which show any trace of artificial cranial modification.

¹⁷ Tepe Ghenil has only been surveyed rather than excavated.

¹⁸ In total five fragments of human figurines were found at Ali Kosh; four of which date from the Mohammed Jaffar phase (7th mill. BC) and one of the late Ali Kosh phase



Fig. 4. *Human Figurine from Choga Mish*, Daems after Delougaz *et al* 1996b: Pl. 66a



Fig. 5. *Human Figurine from Choga Mish*, Daems after Delougaz & Kantor 1975: fig. 7

from the site of Choga Mish is more promising. Of the 38 human figurine fragments known, three are remains of heads, of which two are relevant here (figs. 4 and 5). Both show a round frontal view but appear to be clearly flattened and elongated at the back of the head.

These heads are realistically modelled fragments of a larger figurine. In both cases, the contour of the head is painted black as if to accentuate a type of headgear, hairstyle, or the skull of the figurine. It is feasible that the black band encircling their heads indicates bandage bindings. The head shape of fig. 5 could also be an indication of an elongated skull, of the type that is common on many Ubaid 4 figurines from Southern Mesopotamia (Molleson & Campbell 1995: 51, fig. 9.3). These figurines offer a further insight into possibilities of bodily treatment at this time, confirming the importance of head shape seen in some of the later skeletal material.

The artificially modified skull from Choga Mish was recovered from the late Middle Susiana levels; a period from which no human figurines have so far been recovered (Delougaz *et al.* 1996a: 258). However, both head fragments discussed above were found within the preceding Early

(8th – 7th mill. BC) (Hole *et al.* 1969: 224). Only one figurine (Hole *et al.* 1969: 225, fig. 97: a) has a realistic appearance but unfortunately its head is broken and missing so it cannot give us an indication as to whether artificial cranial modification was portrayed in figurines during the periods following the early Ali Kosh phase at Ali Kosh. At Choga Sefid nine human figurines were found, of which one fragment of a naturalistic face was dated to the Sefid phase (7th mill. BC) (Hole 1977: 229, fig. 90g). The figurine fragment however does not display artificial cranial modification.

Susiana levels. That they are earlier than the skeletal material suggests that the practice seen in the later Middle Susiana period could in fact be part of a longer tradition, dating back to occurrences in the previous Early Susiana period.

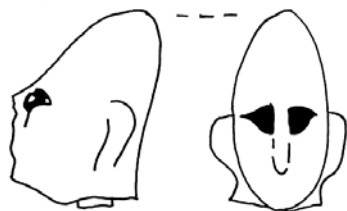


Fig. 6. *Human Figurine from Yanik Tepe*, Daems after Burney 1964: Pl. 15, fig. 11

A further figurine of interest is that recovered from the site of Yanik Tepe, as can be seen in fig. 6, thought to date to around 6000 BC (Burney 1964: 55). The white stone figurine, covered with red ochre and with its eyes painted black, clearly displays an elongated head, although the unusually coloured black eyes may raise questions about whether this was intending to represent a person or deity / idol. Either way, the shape of the head is clearly accentuated.

Further evidence may lie in the Iranian figurine record from the sites of Sarab (7th mill. BC), Susa (5th mill. BC) and Tall-i Bakun (5th mill. BC)¹⁹. Although not conclusive, we feel the discussion of these less obvious examples is still profitable here.

Two of the figurine heads from the Sarab record each display a clearly elongated cranium (figs. 7 and 8). Although schematised, both heads are reminiscent of ethnographic examples of head binding, as can be seen in fig. 9 (Fisher 1984: 68), where the elongated head tapers upwards, and possible head covering may be depicted, dictating cranial shape.

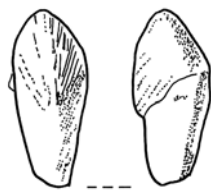


Fig. 7. *Human Figurine from Sarab*, Daems after Broman Morales 1990: Pl. 11c



Fig. 8. *Human Figurine from Sarab*, Daems after Broman Morales 1990: Pl. 11e

¹⁹ 650 fragments were recovered from Sarab (Broman Morales 1990), 36 from Susa (Spycket 1992) and 21 from Tall-i Bakun (Langsdorff & McCown 1942).



Fig. 9. *Bound Head from Mangbetu, Central Africa*, from Fisher 1984: 68

Some of the figurine head fragments from Susa also have intriguing shapes. Although some of these unfortunately lack facial features, they are nonetheless defined by Spycket (1992) as human due to their resemblance to other contemporary standing human figurines from Susa. These seemingly display indications of stylised elongated skulls (figs. 10 and 11). A further example from one of the three head fragments recovered from Tall-i Bakun also appears to portray a slightly elongated skull that tapers upwards (fig. 12). This is also significant due to the pottery sherd from this site discussed below (fig. 14), which can be argued to also portray an elongated skull, again demonstrating the importance of head shape for the inhabitants of this particular site.



Fig. 10. *Human Figurine from Susa*, Daems after Spycket 1990: Pl. 3, fig. 13



Fig. 11. *Human Figurine from Susa*, Daems after Spycket 1990: Pl. 4, fig. 39



Fig. 12. *Human Figurine from Tall-i Bakun*, Daems after Langsdorff & McCown 1942: Pl. 6, fig. 25

We are aware we are being speculative here, and base our discussions partly on the assumptions made by the excavators' interpretations of human figurines. However, we feel that discussion of such items is still beneficial, and whilst several interpretations of these last fragments are possible, we hope we have provided here a further alternative suggestion for this group of artefacts.

In addition to figurine remains, further evidence can be gained from other depictions, also portraying treatment or enhancement of the skull, such as depictions of humans on pottery sherds from Neolithic Tell Sabi Abyad in Syria and Chalcolithic Tell Madhur in Mesopotamia (Molleson & Campbell 1995: 52, fig. 9.4). Further Iranian examples also exist displaying humans with an elongated or exaggerated head shape, for example, sherds recovered from the Late Chalcolithic Iranian sites of Cheshmeh-Ali (fig. 13) and Tall-i Bakun A (fig.14).

Previously only discussed in terms of women seemingly dancing (Daems 2001: 8, fig. 28), the representations of persons depicted on a sherd from Cheshmesh Ali clearly display an emphasis on the head. Whether the elongated head shape is an indication of possible artificial cranial modification or exaggerated hairstyle can unfortunately not be determined.

Likewise, this sherd from Tall-i Bakun (fig. 14) also displays an exaggerated head shape. Herzfeld (1932: 13) interpreted the figures on this particular sherd as representations of demons or monsters, due to their perceived unnatural appearance; it is interesting to note how such features, differing from Western ideals and expectations, are often treated with negativity.



Fig. 13. *Pottery Sherd from Cheshmeh Ali*, Daems after de Mecquenem 1928: 118, fig. 24/1

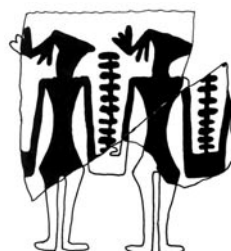


Fig. 14. *Pottery Sherd from Tall-i Bakun A*, Daems after Herzfeld 1932: 13, fig. 1

Albeit schematically, these sherds indicate possible head shape or hairstyle. Reviewing the remainder of the pottery assemblage of Neolithic to Mid Chalcolithic sites of Iran clearly indicates that not all human images depicted display forms of an exaggerated hairstyle or head shape, suggesting that the practice was in some way restricted to certain members of the community²⁰.

Although figurine and pottery evidence suggests the significance of the shape of the skull, a word of caution is necessary when using secondary sources such as depictions or figurines. The individuals portrayed may also represent the wearing of headdresses or even masks, perhaps during ceremonial dance (Garfinkel 2000: 69 on fig. 14: 3). Whether these images relate to actual skull modification, or are representative of less-permanent means of enhancing head shape, such as headdresses, hairstyle or a mask, the shape of the head in the depictions is nonetheless prominent, with attention naturally drawn to this part of the body. The significance of this in a social context is discussed by Molleson and Campbell (1995: 52), where the implications of an elongated skull shape affect labour, and may relate to an elite, probably hereditary, ideal, as will be discussed below.

Artificial cranial modification and identity

It is possible that an idealised type is being portrayed through these images (Molleson & Campbell 1995: 52). As Bailey (1996: 293) comments; *'to make an anthropomorphic figurine is to fit humanity into a preferred form and appearance'*. Even if the depictions are intended to represent deities or idols²¹, an achievable human appearance is still being displayed, highlighting the appeal of such features. Such concepts have been discussed by Irene Winter (1996: 11-13) in her analysis of the divine image of Naram-Sin of Agade, where she notes depictions represent notions of physical

²⁰ Two sherds from Middle Susiana levels at Choga Mish for instance depict ranges of a schematised human head (Delougaz, Kantor & Alizadeh 1996: Pl. 58: A), while another one found in insecure levels at the Susa Acropolis shows a person with elaborate hairdo presumably holding a bow (de Mecquenem 1928: 37, fig. 129). In both cases, it is not only the back or the top of the head that is elongated but the complete face.

²¹ The idea of an idealised type, possibly linked to concepts of deities and/or ancestors, can also perhaps be seen through some of the plastered skulls typical of the PPNB. For more information see Bienert (1991), Butler (1989), Arensburg & Hershkovitz (1989) and Bonogofsky (2003).

ideals, demonstrating desired attributes and symbolising appealing concepts through aspects of the body. Although these physical ideals themselves obviously cannot be reliably carried back into the past, it can be suggested that the modelling of some of the figurines were intended to portray idealistic, desirable features.

Although it is treacherous to speculate on such notions as ‘aesthetic ideals’ so remote in the past, this is an area which shouldn’t be excluded totally from our questioning of the material. Indeed, ethnographic sources repeatedly state that in addition to reflections and constructions of identity, bodily decoration and modification are inextricably entwined with concepts of beauty, and appearance, even if these notions differ vastly from our own²². Whilst difficult to prove, it is hard to dismiss that there was not some such motivation present in the decoration and manipulation of the body, and through the portrayal of the body in some anthropomorphic representations. We should therefore remain open to such possibilities in our interpretations of the archaeological material.

Cranial modification has traditionally been interpreted as indicative of rank and status in society. Indeed, Molleson and Campbell (1995: 52) suggest artificial cranial modification might have been a means of defining elitism within a group. This motivation behind the practice has seemingly occurred throughout the millennia. During the reign of the eighteenth dynasty of Egypt for instance, the practice was apparent during the rule of king Echnaton²³ (Kumar 2002: 2). Intentional skull modification was also *en vogue* during the Early (Beňuš *et al.* 1999: 267) and Late European Middle Ages (Bronfin 2001: 192) in Slovakia and Italy respectively, as evidenced on drawings and paintings, amongst other examples. Even as late as the nineteenth century, intentional skull modification has been reported as defining social status and rank, such as among the North American Chinook, where the babies of tribal leaders underwent cranial modification (Bronfin 2001: 191).

²² See Berns (1988: 62-63), Riefenstahl (1976: 219ff) and Faris (1988: 31) for examples.

²³ It has been argued that the king suffered from *hydrocephaly*, a pathology resulting in cranial modification. However, it is possible that during his reign intentional cranial modification was imposed on other members of the royal family; as seems to have been the case for his children (Lange 2004: 8). However, caution should prevail; evidence is currently based on the secondary sources of wall paintings and sculpture as no artificially altered skulls have so far been recovered from excavations focussing on this period (Özbek 1974: 472).

The practice has also been seen in more modern times. In 1978 Kiszely reported that people of the villages of Bahsany and Bashiqa near the Jebel Sinjar in Iraq displayed traces of intentional cranial modification (1978: 41), and Ralph Solecki has observed the practice of head binding within the Kurdish population of the Shanidar region (Meiklejohn *et al.* 1992: 95). During the first half of the last century some inhabitants of Sidon and Tyre used to tighten their babies head using a cradling device (Lange 2004: 2). Molleson and Campbell (1995: 50) report artificial cranial modification still to be present in some parts of Eastern Turkey, while Dingwall (1931: 81, 86) reported it to be present, although slowly dying out, during the first half of the twentieth century in Armenia and among Hindu communities in Baluchistan.

Gender distinction may also have featured as a motivation in some cases (Owen 1998: 1). We see at certain sites that artificial cranial modification seems to be restricted to females, as was the case at the sites of Ali Kosh (Meiklejohn *et al.* 1992: 89), Byblos (Özbek 1974: 470), and at Seyh Höyük (Senyurek & Tunakan 1951: 441). Nevertheless, caution should prevail when attributing artificial cranial modification to one sex; often the sample is too small to be conclusive, and problems have been identified in the reliable sexing of skeletal remains (Weiss 1972). Also problematic is the identification of sex and gender attributes in the figurine record. There are often problems with the apparent sexual ambiguity of many figurines, possibly suggesting in some cases a third gender category, or the absence of sex as an important categorising concept in many figurines (Hamilton 2000: 22, 28), or that our binary oppositions are not always relevant when assessing this material (Croucher *in prep.*). Such ambiguities would be problematic if attributing specific traits according to our modern western gender categorisations.

The use of cranial modification as an ethnic marker has been discussed through many South American examples, such as by Hoshower *et al.* (1995: 145), who examine the hypothesis of cranial modification as an ethnic indicator among Andean peoples during the fifteenth and sixteenth centuries AD. This builds on earlier research of cemetery sites, suggesting modification type may be linked to cultural affiliation, period and settlement plans, and ethno-historic sources documenting '*induced cranial forms that characterized different Andean regions and served as conscious, overt symbols of group affiliation*' (Hoshower *et al.* 1995: 147). The role of cranial modification as an ethnic identifier, serving as a mnemonic device



Fig. 15. *Skull shape exaggerated by hairstyle and coiffure, from Mangbetu, Central Africa, from Fisher 1984: 68*

of inherited identity, has also recently been discussed by Jones (2004) for Late Prehistoric Cyprus. The possibility of cranial modification as a cultural marker of group identity has already been suggested for Tell Arpachiyah (Molleson & Campbell 1995: 52), and it is not unfeasible that comparable motivations existed in some of the Iranian material²⁴.

It is clear that whatever the actual motivation behind cranial modification, identification of the wearer can be argued to be taking place. Having such body modification as skull shaping would surely affect the

²⁴ The use of the body in re-inforcing both hierarchical and ethnic identities is a theme discussed with relation to the later Iron Age in Ancient Iran by Marcus (1993), where the wearing of lion pins is regarded as a possible means to both reinforce hierarchies within the Hasanlu IVB society (Iron Age II, 1100-800 BC), whilst also serving as '*highly visible emblems of within-groups cohesion with respect to outsiders*' (Marcus 1993: 157). Although for a recent critique, see Muscarella (2004).

individual's view of the world around them, and serve to construct as well as reflect their identity. It is clear from both the mortuary evidence and evidence from figurines that a specific head-shape was in some sites a desired attribute. This has implications for issues of aesthetics, where an idealized appearance, in this case focused around the head, seems to be represented. The shape of a skull can be a highly visual indicator of position and identity, one that can be easily exaggerated by hairstyle, as can be seen here (fig. 15, Fisher 1984: 68).

Although it is difficult for us to speculate on the meaning behind the actual practice in Late Neolithic to Middle Chalcolithic Iran — indeed, the practice is likely to have had different meanings in different locations and contexts — one thing that is demonstrated through skull modification is power over the body, not by the self, but by another, usually in this case the parent. This is a type of modification where the wearer has no choice, nor the ability to avert the processes. Added to this is the fact that the process is totally irreversible, and in many cases un-disguisable²⁵. This must have a significant effect on the construction of identity²⁶ and the experience of the modified. This highly visual indicator would impress on the wearer, as well as others, a sense of otherness and difference, or of inclusion, which would surely serve to construct as well as reflect identity.

In this paper we have examined comparisons between figurines and mortuary data in terms of appearance. However, further conceptual comparisons between the body and material culture may become more evident through an examination of practices of decoration, manipulation, fragmentation, circulation and discard, and a closer examination of contexts. This can give us a better insight into concepts of individuality; which undoubtedly differed sensibly from our own Western concepts²⁷.

Through further examination of the contexts of finds, the presence of the individual in the mortuary arena and figurine record may be actively denied or renegotiated. Concepts of fragmentation and circulation should

²⁵ Although it was noted by Stuart Campbell that in some less-pronounced cases skull-shape may be easily covered by hair.

²⁶ As is discussed by Judith Butler (1993) in relation to gender. Aspects of identity are argued to be constructed through performance and socialisation, rather than being inherent universal givens.

²⁷ As highlighted in recent European and British prehistoric studies (see Brück 2001; Chapman 2000; Fowler 2001; Thomas 2000).

be examined, especially where we see in many cases probable intentional fragmentation of both figurines and bodies. Furthermore, the context of deposition of the deceased, whether primary inhumation or secondary mortuary treatment, may offer further insights into the roles of the deceased in the lives of the living, or the removal of the dead from the living arena. However, such discussion merits its own paper, a clear avenue for future research, offering additional insights into treatment of the body.

Although evidence is at the moment limited, it is hoped that the above study suggests an alternative use of the figurine record, complementing skeletal material, and can aid future interpretation of both bodily practices and some figurines. Nevertheless, we recognize that the work put forward here remains open to debate, and hope that further dialogue will progress research in this area.

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