MATERIAL IMAGES OF HUMANS
FROM THE NATUFIAN TO POTTERY NEOLITHIC
PERIODS IN THE LEVANT

ESTELLE ORRELLE
This book demonstrates that the surprising iconography of human images in the archaeological assemblages of the Levantine Neolithic indicates that they were gods.

An analysis of the iconography of the human-like artifacts of my data reveals genital shapes used metaphorically to portray androgynous images as well as elements of therianthropic imagery and red pigment. This iconography meets the predictions of the evolutionary anthropological hypothesis, the ‘Female Cosmetic Coalition model’ (FCC), which describes the first supernatural symbols as fused male: female, human: animal and red, and predicts that the iconography of early gods would bear this same symbolic syntax. My book shows that the material images of the Natufian and Neolithic in the Levant fit this model closely, confirming their identity as gods.

The hunter-gatherer socio-economic structure established by the strategies of the FCC was expressed as the first social contract, by which humans lived for thousands of years.

The FCC model provides an underlying unchanging syntax in the face of changing political-economy and sexual politics. I interpret my data as revealing a process of male ritual elites increasingly appropriating this syntax, incorporating it in a new social contract.

At the end of the last Ice Age, I predict that in the Near East male elites competed to circumvent the onerous burden of the first social contract, to appropriate female ritual power and to establish hierarchical religion legitimizing a new social contract between humans and supernatural beings. This new contract bound gods and humans in a partnership of exchange.

I suggest that this process can be identified in the increasingly elaborate ritual activity using costly signaling theory.

This work contributes to the decipherment of the iconography of this assemblage of human images, and proposes a model for the origins of religion and social differentiation in the Levant.
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The late Professor Marija Gimbutas encouraged me on my path and I dedicate this work to her memory.
**CHRONOLOGY**

<table>
<thead>
<tr>
<th>Period</th>
<th>Dates</th>
<th>Duration</th>
<th>Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wadi Raba**</td>
<td>6,900-6,300 years ago</td>
<td>~600 years</td>
<td>Cluster of regional variants; recognized by pottery assemblage, domesticated sheep and goats, cattle and pigs; domesticated cereals, legumes, secondary products, milk products? olives, spinning and weaving.</td>
</tr>
<tr>
<td>Yarmukian**</td>
<td>7,500-6,900 years ago</td>
<td>~600 years</td>
<td>Earliest pottery assemblage in S. Levant; culture recognized by distinctive pottery, imagery, flint tools; mostly domesticated sheep, goat, cattle, pigs. Domesticated cereals, legumes, flax.</td>
</tr>
<tr>
<td>Pre-Pottery Neolithic B</td>
<td>9,500-7,600 years ago</td>
<td>~1,900 years</td>
<td>Emergence of village societies; population increase; broad cultural interaction zone &quot;koine&quot; over entire Levant and beyond. Large settlements; rectangular architecture; farming domesticated cereals, pulses. Domesticated sheep, goats, cattle and pigs. Intensive ritual and mortuary practices.</td>
</tr>
<tr>
<td>Pre-Pottery Neolithic A</td>
<td>10,200-9,500 years ago</td>
<td>~700 years</td>
<td>Systemic cultivation, perhaps domestication supplemented by continued foraging and hunting; architecture; hierarchy of site sizes; earliest tel sites in the region. Intensive ritual and mortuary practices.</td>
</tr>
<tr>
<td>Natufian (Late Epi-Paleolithic)*</td>
<td>12,500–10,200 years ago</td>
<td>~2,300 years</td>
<td>Complex hunter-gatherer society; from large sedentary communities to mobile communities; circular stone architecture. Broad spectrum foraging; intensive plant exploitation; hunting; domesticated dogs. Elaborate mortuary practices.</td>
</tr>
</tbody>
</table>

Dates are calculated to:
* Natufian and Pre-Pottery Neolithic dates based on Goring-Morris and Belfer-Cohen 1998:75.
** Pottery Neolithic dates are based on Gopher 1995a:208.
CHAPTER ONE

Introduction

“Very slowly and very reluctantly, I have come to the conclusion that most of the principles that we have advanced to order our data bear little resemblance in kind to the systems of theory developed in the older physical and biological sciences. They have far more in common with the equally complex, but often unverified and unverifiable, systems outside the realm of science which we know as mythology or perhaps philosophy or even theology.”

G. P. Murdock: Huxley Memorial Lecture 1971

This book is about a collection of artifacts from the Neolithic period of the Southern Levant. For nearly a century, archaeologists have classified them as human images, although the relationship of some of them to natural human anatomy is sometimes tenuous. Similar images of anatomically distorted humans from other locations and historical periods have been interpreted by most researchers as supernatural beings, and studies which address their function mostly grant them supernatural powers. Here, I work on the premise that the collection of artifacts I am examining are intended to be supernatural beings. I will call them gods, and try to show how their iconography supports this premise. A connection between ‘un-natural’ – i.e. not anatomically correct – iconography, and supernatural potency, seems to have been made intuitively by researchers, but no theoretical explanation for this has been offered, nor has any account of why we see the reoccurrence of the same features over long periods of time and over great areas.

Restrictions in archaeological theory that limit the extraction of meaning from “observable” data (e.g. Hawkes 1954) have meant that the meaning of this strange collection of artifacts has been considered inaccessible. Explanations from successive schools of archaeological theory have been deduced from observational evidence only, divorcing archaeological explanation from its cultural, historical and anthropological context. Archaeology assigns these artifacts to what it calls the symbolic realm, but archaeological theory has very little to say about the intangible or unobservable and is therefore unable to draw on symbolic culture for analogical meaning.

These artifacts appear in the socio-economic context of the changing structure of food procurement from ‘hunter-gatherer’ food collection to ‘agriculturalist’ food production. In socio-political terms, cultures in these millennia are described as increasingly complex or transegalitarian. Social complexity implies hierarchical religion; one must ask whether this can be identified in the record and whether such religion played a role in persuading human groups to adapt to new economic structures? I suggest that to fully understand the process of economic transition in the Neolithic we need to integrate the symbolic, the economic and the social. If these images are gods – why do they look the way they do? How do hard, tangible objects, in stone and clay, express such intangible things?

The un-natural iconography used to portray gods runs counter to our expectations of how humans should look. History tells us that gods can appear as human, animal, or inanimate, male, female or both, in different periods and places. I argue that to make sense of this complex iconography in a period of transition we must look to both pre-literate and literate sources for analogies. Were there human gods or supernatural beings before the Neolithic and if so, how did the human population express their understanding of what they looked like? Written accounts and illustrations of portrayals of gods from historical sources add to our fund of analogies with which to decipher this iconography. In periods of change such as those which characterize the Neolithic, one can predict that symbols would tend to blend, mix and change meaning and that constant forms would be re-used in a confusing way.

1.1 Preliterate sources

For pre-literate sources, I draw on theory which addresses the origins and evolution of symbolic behaviour which suggest how the supernatural was envisaged. In a Darwinian sense, a theory of the origin(s) of symbolic culture should be able to explain why there was a need for the supernatural, what motivated this innovation and what problems it solved. Theories of religion offered by cognitive anthropologist Pascal Boyer (1994, 1996, 2000) propose that religious thought has evolutionary origins, which can inform us of how the notion of supernatural entities became accepted and propagated.

Symbolic culture origins – the FCC model

Central to the definition of the symbolic realm is:

“…the invention of a whole new kind of things, things that have no existence in the ‘real’ world but exist entirely in the symbolic realm.’ Chase (1994: 628).
Intangibles such as gods are inventions that owe their very existence to symbolism (Chase 1999). Conflicting male and female reproductive strategies have been presumed by sociobiologists to drive behavioural change; the need for such abstract reference and the invention of collective symbolic structures is seen by some (e.g. Knight 1991:23-4,32; Deacon 1997) to have emerged in this context. Knight’s symbolic model suggests that a revolution was driven by female reproductive interests. A Darwinian symbolic origins theory (Knight 1987, 1991, Knight et al 1995; Power 2001; Power and Watts 1996, Power 2004) argues that in the conflict, females suffering from increased reproductive and subsistence stress found solutions through strategic responses. Biological, cultural, and economic elements are all implicated in this model of the earliest symbolism. It provides a strong syntax (Knight et al 1995:91) against which all later cultural forms can be tested.

This theory of the earliest symbolic behaviour has come to be known by the name of the “Female Cosmetic Coalitions” model. I will refer to it as the FCC model. Symbolic behaviour started in the context of these female strategies and in the evolution of co-operation between females and between males and females. The agreement to cooperate has been described as a human revolution which underpinned socio-economic patterns amongst hunter-gatherers (Knight et al 1995). An intangible, a social contract, secured the regulation of reproductive relationships by symbolic means (Deacon 1997:400). Symbolic culture, writes Deacon “was a response to a reproductive problem that only symbols could solve: the imperative of representing a social contract” (1997: 401). The medium for the establishment and faithful communication of that contract was ritual (Rappaport 1999). Costly signalling theory suggests how religious rituals promote long-term trust and cooperation (Sosis and Bressler 2003).

The FCC model predicts that non-perceptible constructs such as gods, born in collective ritual, would bear the signature of that ritual and that the earliest symbolic behaviour would have a connotative relationship with its origins. Its unobservable origins would become observable. This female strategy, presented in performative ritual, leads to the creation of these ‘things’, which make up the human symbolic domain described by Sperber (1975:93-5). According to the model ritual potency belongs to females and from this we can predict that the first symbols which originated in the activities of female communal action would be gender symbols – a ritual power expressed in gender terms.

**Transformations of the model**

Knight (1987:167) describes his original model as a starting point which might be distorted and altered to produce a variety of symbolic structures. From one culture to another, political factors alter ideological meanings.

“We therefore have not a static model, but a template from which a variety of structures can be generated. It can be described as a “transformational template” (Knight 1987: 167).

Conditions for the FCC model in the Near East had been undermined well before the Neolithic. Meat was the economic basis of the social structure, the sharing of large animals would have been eroded by the disappearance of African large fauna. Wolf’s (1988) faunal analysis indicates that the African large fauna that had been a feature of the Near East through the Late Pleistocene had largely become extinct by ~20ka, leaving only the aurochs remaining among the large game species.

The main transformation that is predicted for the template of the model in the Neolithic period by the FCC model is that because the material conditions underpinning the hypothesized initial situation have been undermined, a patriarchal counter-revolution appropriated female ritual potency.

Ethnography and myths provide evidence for mythico-ritual complexes (Knight 1991:202) by which males set up alternative cultural legitimacy in ritual potency, such rituals being characteristic of numerous male-dominated traditional cultures (e.g. Knight 1991: chapters 6-15; Dundes 1988). Knight (1991:181-6) cites sets of similar myths which describe how strategies to which women once resorted against men, were in turn practiced against women, and how men stole ritual power from women. In simple societies where such sexual-political inversion has occurred and ritual power is appropriated, secret men’s rituals of pseudo-menstruation and childbirth are practiced, but using the same syntax for the mobilization of ritual power and the language of female biological powers (e.g. Knight 1987:17; 1991; Lewis 1980; Lattas 1989). In chapter 8 I speculate that in the Southern Levant male elites appropriated ritual power. I suggest that costly signal theory and its application to prestige behaviour can explain the evidence for ritual generated by this process.

### 1.2 The contribution of history

Researchers debating the appearance, origin and significance of monotheism and female deities in ancient Israel (e.g. Keel 1980, Lang 1981 and Haag 1985) draw increasingly on visual depictions recovered from archaeological excavations, identifying religious concepts and symbols of divine pantheons. Thus for historical periods, a rich repertoire of symbolic material has been collected with which to identify gods (Keel, 1997[1972]; Keel and Uehlinger 1998). These symbols are extremely conservative and Keel (1998) takes the view that
positive correlation between specific iconographic or textual evidence in one period allows, or makes it at least probable, that comparable religious concepts and symbolic representations are at work in another period where similar iconography is identified (1998:11).

In historical periods, the features of figurines cited as identifying deities are, in particular: posture, gesture, clothing, headdresses, bodily attributes, and composite therianthropic images which combine both human and animal features. Goodison and Morris (1998:16) note the difficulty of interpreting the nature of mute anthropomorphic figurines. In her data of Gallo-British goddesses Miranda Green (1998b:181) refers to the dilemma of differentiating between images of goddesses, priestesses or worshippers. Green suggests various characteristics which may be taken as a sign of divinity, which she calls ‘otherness’ such as nudity, disproportionate size, therianthropic imagery or reversal in weapon-bearing hands. In another example Hassan (1998) notes many identifying characteristics of the earliest goddesses of Egypt including therianthropic, dual-sexed divinities; goddesses identified with the moon, falcon and vulture; and human faces with cow ears. Thus historical periods provide a fund of evidence for divine characteristics.

### 1.3 Methodology

Some archaeologists (e.g. Schmandt-Besserat 1997, 1998b; Postgate 1994; Thomas and Tilley 1993) have found that drawing on combined avenues of approach for interpretation is more productive than treating each class of evidence independently. Multiple sources for interpretation are becoming increasingly common for the analysis of prehistoric imagery and its network of symbolic structures. To test my hypotheses I follow what von Gernet calls the “New Analogy”, the provision of richer analogical inferences by triangulation, whereby explanation can derive strength from the combined exploitation of diverse and independent lines of evidence (von Gernet 1993; Wylie 2002; Postgate 1994).

This approach in particular is recommended by the philosopher of science Alison Wylie (2002). In my view, archaeologists who engage with symbolic origins must find methods which allow for the application of extremely long-lived conservative ideas as interpretive analogies. Wylie recommends a fuller and more systematic use of analogies, drawn from a rich knowledge of cultural subjects which expose underlying structures in ritual (2002:126). These demonstrate the conservative nature of ritual forms making it likely that meanings or the germ of an original intent may be retained over time and in different places. Analogical inference is always insecure and so analogical conclusions must be treated as tentative, being assessed for closeness of fit with an archaeological subject and checked for “degrees of likelihood” with a range of interpretive options (Ascher 1961:323). Archaeologists must choose “between a significant pursuit based on a faulty method or one which is methodologically sound but trivial in purpose” (Wylie 2002:144; see also De Boer & Lathrap 1979:103; Klejn 1977: 6-11 as cited by Wylie). I suggest that in this case study, the degree of corroboration and good fit that exists between the anthropological model and the iconography of the archaeological subject and analogies between features of the record and ancient beliefs can help identify common determining structures underlying the formal analogy and allow a degree of reconstructive inference.

### Iconographic approach

For divine imagery in historical periods, a ‘methodology of the iconographic approach’ is outlined by Keel and Uehlinger (1998). They draw on Egyptologist Jan Assmann (1982; 1995[1983]:54-95) who defined what he called ‘constellations’ – shorthand sequences of pre-mythic complexes of ideas in pictorial form, or ‘mythic speech’. Such ‘mythic speech’ portrays conventional understandings of beliefs portrayed in pictorial form. For example, the fertility of the earth is understood by the image of a divine couple copulating; a depiction of Mary with child carries the idea of the ‘nursing mother of God’ (Assmann 1982:38; in Keel 1998:12). These constellations or ‘icons’ are crystallized reference points relating to certain beliefs.

Keel (1997[1972]:8,12) suggests that the imagery of the ancient Near East has a preference for the use of such constellations or ideograms and symbols with concrete connotative dimensions. In this usage, ideogram and symbol signify a concrete dimension to which is attached a significance larger than that which it inherently possesses. I find this terminology useful for any period when applying meaning to images and I assume that such devices operated in prehistoric divine iconography. I predict that “divine symbols” that represent a particular god, or an image of an animal associated with a god known from history, could have originated in prehistoric times and can help us to identify it.

Records from historical periods describe gods and goddesses as characterized in the imagery by traditional postures or gestures. The specific postures of supernatural beings can sometimes be linked with narratives or myths and posture and bodily positions link closely with ancient script.

Denise Schmandt-Besserat’s claim (1998a) that the specific characteristics of Near Eastern gods or kings have traditionally been portrayed in sculpture means that iconographic features of deities in figurines are supported by graphic references.
The multidisciplinary approach

As I approached the task of deciphering this complex iconography, it became clear that I could not rely on sources from one discipline alone. Each discipline involved has certain advantages or drawbacks. An anthropological model addressing the evolution of symbolism is built on the huge reserves of human cultural expression which do not survive in the archaeological record. In my view archaeology, which deals with mute images, cannot decipher this iconography without accessing these reserves of human symbolic and cultural knowledge. History, drawing on literary and graphic evidence of later periods, must inevitably take into account the fact that its data is subject to the kinds of political and social changes which affect symbolic subjects over time.

My solution has been to draw on anthropological origins theory and various ancient belief systems and historical divine imagery and texts as sources to decipher the iconography of these artifacts and give a voice to ‘mute’ archaeological data. I assume that the artifacts in my data represent gods and I test the prediction that such early ‘gods’ would bear a particular set of attributes.

It seems to me that an attempt to decipher the iconography of artifacts from archaeological periods poised between pre-literate and literate periods can benefit from this multidisciplinary approach that combines archaeology, anthropology and history.

1.4 Testing the model

This work has two main aims. The first is to test the predictions of the FCC model that ‘early gods’ would be characterized by a certain iconography. In Part I I test these predictions on artifacts regarded as gods, the figurines and human images in archaeological assemblages from the Natufian to the Pottery Neolithic periods (between about ~12,500 to ~6000 years ago) in the Southern Levant. I include occasional items from neighbouring regions in the database. An explanation of the chronology is presented in chapter four. For simplicity I refer to this area and period as ‘my data’. The database of illustrations is presented in Part II.

The second aim is to explore another prediction of the FCC model that, with the end of periodic collective big-game hunting as a mainstay of the economy, opportunities for men to appropriate women’s ritual power arise. I will attempt to show some of the ways in which males appropriate female ritual power and establish hierarchical religion in the period of my data.

An additional aim of this book is to overcome archaeologists’ hesitation in ‘transporting meaning’ between periods and demonstrate how evolutionary theories and historical knowledge of ancient belief systems can contribute to interpreting their data.

1.5 Outline

In chapter two I present a summary of theories that other researchers have offered for these artifacts. Most interpretation is devoted to function; the most common function offered by researchers is that these artifacts were Mother Goddesses, or have some form of supernatural role. Other suggested functions, the social, and anecdotal are drawn from ethnographical reports.

In chapter three I outline the restrictions of examining meaning in archaeological theory and describe the FCC model and its predictions. In this chapter I refer to the contribution of the evolutionary psychologist Boyer to the study of religion. I address archaeologists’ doubts about the applicability of analogies from distant times raised in evolutionary models, and I draw on theoretical sources to explain the conservative nature of religious symbols.

Chapter four describes the archaeological context and background for the case study including a brief paleoperspective review. It focuses on the assemblage of imagery found in the Natufian in the Southern Levant. A detailed summary is presented of human imagery items of these millennia.

Chapter five describes the archaeological background of the Pre-Pottery Neolithic and Pottery Neolithic periods with a detailed description of the anthropomorphic imagery of those periods.

In chapter six I survey the illustrations in Vol. II and ask if the iconography meets the predictions of the FCC model,. The analysis indicates that characteristics of the earliest symbolic behaviour proposed by the FCC model were present in the data and that scrambled genital shapes are incorporated in the iconography to signal fused sex, the first gender. Other beliefs such as the muelos belief, the Evil Eye belief and the ritualization of twins can be recognized in the record and provide sources of explanation.

Chapter seven focuses on aspects of male takeover of female ritual power as discerned in the data. It identifies therianthropic images and describes aspects of body art active in the data.

Chapter eight offers some alternative theories to those presented in this thesis.

The generally accepted view of this period in the Southern Levant is one of changed subsistence, an economy of domesticated resources and sedentary living (e.g. Bar-Yosef and Belfer-Cohen 1989b; Bar-Yosef and Meadow 1995). In chapter nine I address the ideological and institutional
Introduction

religious changes that accompanied changes in the economy and settlement. My model proposes that a process of change can be traced through the archaeological remains from the Natufian, where there is fairly good evidence for shamanism (and in particular for female shamans) to the Pre-Pottery Neolithic and Pottery Neolithic periods where fairly good evidence for much more hierarchically organized religion can be identified. I suggest too that the male elites laid claim to the land working in partnership with ritual specialists to authenticate the relaxation of the ancient rules of egalitarian social organization. Within this process of change I show the continuity of symbols of sexual imagery. During the period of the data some sites can be seen to serve primarily or exclusively ritual functions.

I suggest that the new organised religion is based on a contractual relationship with deities and communication with them is conducted through various rituals. Human and animal victims of sacrificial rituals became gods, invented for this purpose.

This chapter ends with a short conclusion.

By testing these surprising Neolithic figurines against an anthropological hypothesis of symbolic origins and against the historical evidence for images of deities, I follow De Heusch (1982) who declared: “Instead of brutally eliminating it, for the first time we are going to take the marvellous seriously”.
Human images of two main kinds characterize the Neolithic period – figurines and statues, and skeletons and skulls. The artifacts, especially small figurines of stone and clay, are the most common form of Neolithic human imagery, and have been the subject of the most research by archaeologists, anthropologists and historians. The research subject most accessible with the tools of archaeological theory has been that of the function of these artifacts.

From their earliest discovery at the end of the nineteenth century, Upper Palaeolithic and Neolithic figurines have stimulated interpretations from many disciplines. In the early history of research, scholars were generally split between those who see figures as evidence of female deities – ‘Goddesses’ – and those who offered different interpretations (e.g. Ucko 1962, 1968; Hamilton 2000:17; Talalay 1987:45-6). Other interpretations suggest social and anecdotal functions for the images.

In this chapter, following Bailey (2005:12), I will not attempt a marathon historiographic account of all figurine research undertaken. Instead, I will describe the main theories for figurines that researchers have offered for their data from different areas and periods.

Another assemblage of human images is that of the skeletal remains in burials. The skeletons are arranged in different positions, some gesturing, some decorated with jewellery, some whole and in articulation, others partial and disarticulated. I describe skeletal images in chapter four and note some similarities between the skeletal imagery and the human images in chapter seven to support one of my predictions that gods were born from sacrificed humans – they were created in man’s image.

2.1 Theories of supernatural beings – the Mother Goddess

From the first, these man-made artifacts were regarded as gods or more often as goddesses. Mithen (1999a) regards belief in supernatural beings as one of the remaining bastions of thought dividing humans from other animals.

“The material symbols involved in religious behaviour, especially those that represent supernatural beings, appear to capture the epitome of the human symbolic capacity. Not only does an image of a deity represent something that is not present in time and space; it represents something that could not be present.” (1999a:147)

An early and influential theory about figurines is the Mother Goddess movement. This school of thought claims that human society and religion begins with the worship of a Goddess in a peace-loving, egalitarian, matriarchal society. Bachofen (1967[1861]), an early matriarchy theorist, and others (e.g. Tylor 1871; Morgan 1877) argue that matriarchy is a primitive structure arising out of the rule of the mother over the family which evolves over time into the patriarchal system. Female divinities everywhere are regarded as survivals of this early mode of religious expression.

In the last century figurines from archaeological excavations were claimed unquestioningly to portray ‘The Great Goddess’ and ‘The Dying God’ (Frazer 1992[1922]) or ‘The Goddess and her Son Consort’, catch-alls for the interpretation of primitive religion (Goodison and Morris 1998:7-8). The Great Mother was assigned transcendental status as an eternal ‘archetype’ (Jung 1990[1956]; Neumann1955; and James 1959). Figurine study as evidence of female divinity had relevance for the feminist movement which embraced the Mother Goddess movement in its struggle to remedy the results of millennia of misogyny and marginalization of women in both the religious and secular spheres (Meskell 1994). The work of two archaeologists in particular, James Mellaart and Marija Gimbutas, both stressing the importance of a Goddess, attracted critical feminist attention.

James Mellaart and Marija Gimbutas

Mellaart (1962, 1967) published the finds of his excavations at the Neolithic site of Çatal Höyük in Turkey, positing that the stone and ceramic figurines substantiated a “belief in a goddess of fertility and abundance” and that Çatal Höyük was a prominent place of Mother Goddess worship with an altar and temple dating back to 9000 years ago. Mellaart’s publications inspired Hawkes (1968) and stimulated widespread new ideas about a Goddess religion, reviving earlier interpretations by Gordon Childe (1952) and Crawford (1991[1957]).

Marija Gimbutas, a professor of archaeology at UCLA directed major excavations of Neolithic sites in southeastern Europe between 1967-1980. Her publications (e.g. 1974, 1989, 1991, 2001), introduced new interpretations for figurines. She wrote in a symbolic vein combining traditional archaeological reporting with linguistics and mythological interpretation.
Her linking of archaeological and anthropological data was an early attempt at multidisciplinary practice, more acceptable to anthropologists than archaeologists (Tringham and Conkey 1998:24; Hayden 1985:93). Her growing commitment to the Goddess theory was increasingly supported, she claimed, by new emerging archaeological material. Her ‘Goddess’ interpretation of figurines saw an essentially female image, a female force, expressed in interchangeable anthropomorphic and zoomorphic iconography (e.g. 1991:35; Meskell 1994). Meskell (1994) gives credit to Gimbutas as one of the first prehistorians to attempt a systematic disentangling of early symbolism, spirituality and the Mother Goddess in Europe and the Mediterranean.

Gimbutas regards the numerous images of such female deities in her data as evidence for an early matrilineal/focal society throughout what she terms “Old Europe” (1974, 1991). Gimbutas recognizes features of divinity in her database of figurines. Her classification of difficult symbolic ideas provides for a divine iconography that overrides binary gender assignation. She regards androgynous deity images of females with phallus-shaped heads in the Neolithic period, (e.g. 1974:152-3) mixed with animal features, as derivations from Palaeolithic times. Gimbutas (1974) claims that supernatural powers were conceived as an explanatory device to induce an ordered experience of nature’s irregularities:

“These powers were given form as masks, hybrid figures and animals, producing symbolic conceptual art not given to physical naturalism. The primary purpose was to transform and spiritualize the body and to surpass the elementary and corporal. It follows then that formal reduction should not be ascribed to the technical inability of the Neolithic artist to model in the round but to requirements dictated by deeply implanted concepts and beliefs.” (1974:38)

**Gimbutas’ iconographic analysis**

Gimbutas (1986:3-17), like Leroi-Gourhan 1971([1965]), interprets motifs found on figurines in her data as having an overall structural meaning. Her detailed interpretation of iconography of prehistoric artifacts is presented in four publications (1974, 1989, 1991 and 2001). In his introduction to the volume “The Language of the Goddess” (Gimbutas 1989) Joseph Campbell compares Gimbutas to Jean-Francois Champollion, whose decipherment of the Rosetta Stone established a glossary of hieroglyphic signs to serve as keys to Egyptian religious thought. Campbell claims that Gimbutas’s classification and descriptive interpretation of some two thousand symbolic artifacts from the earliest Neolithic village sites of Europe —9000 to 5500 years ago provides a fundamental glossary of pictorial motifs as keys to Neolithic mythology and religion:

“My primary presupposition is that they can best be understood on their own planes of reference, grouped according to their inner coherence. They constitute a complex system in which every unit is interlocked with every other in what appear to be specific categories. No symbol can be treated in isolation; understanding the parts leads to understanding the whole, which in turn leads to identifying more of the parts.” (Gimbutas 1989:xv)

While her description of religion is local to her data, the iconographic analysis of signs and marks she found on a variety of artifacts can be applied cross culturally and reveals a metalanguage applicable to almost any prehistoric data set. The examples she offers from the Upper Palaeolithic demonstrate the amazing longevity of certain images and designs. I have been influenced by her work.

Symbols identified were both schematic and naturalistic and interpreted in her system as anatomical sexual characteristics of both females and males:

“It is evident that the sculptor was not striving for aesthetic effects; he was producing sculptural shorthand, and abstract symbolic conceptual art, images that were emblematic of the divine regardless of the extent of their schematization.” (Gimbutas 1974:37)

Several types of symbols in her ‘iconography of the Goddess’ appear in abstract hieroglyphic form such as V, X, M, triangles and diamonds. Anatomical aspects of the divine Neolithic deity incorporated in the motifs are, according to Gimbutas, breasts, buttocks, belly, vulva, eggs, vagina and uterus, some in the form of triangles, chevrons, zigzags, meanders, and for breasts, cupmarks. She suggests that the isolated V symbol has a denotative function standing for the pubic triangle (1989:6), and traces the development of elaborate decorative configurations from the original V symbol. She claims that semi-circular, bell or oval shapes are also vulva images (1989:99-106). Gimbutas points out the clearly phallic nature of long necks of both animal and human images (e.g. 1974:135). I suggest in chapter 6 that various geometric shapes such as the lozenge more resemble Assman’s ‘constellations’ – shorthand sequences of pre-mythic complexes of ideas in pictorial form, or ‘mythic speech’ – than Gimbutas’s anatomical features.

**Androgynous images**

Gimbutas identifies bisexual images where fused sex images are combined with bird images into hybrid bird-woman, and schematic steatopygous figurines (Gimbutas 1974:134-6).

The life-like erect phallus with small wings and a posterior of a woman is readily identifiable either as a bird’s body when seen in profile, or as a nude female figurine with a disproportionately
long and massive neck. In most cases Gimbutas sees this image as a hybrid having female buttocks and breasts outlined in the shape of a bird’s body, with a bird’s beak, a long neck and either wings or arm stumps. Her erect posture, with the upper part of the body bent forward is that of a bird. Such phallic bird deity images, she claims, dominate the Aegean area and Balkans in the 8th and 9th mill. BP. (1974:136). She notes too the appearance of an androgynous and corpulent goddess in the Hacilar, Sesklo and Starcevo complexes of central Anatolia, the Aegean area and the Balkan Peninsula:

“Throughout the Neolithic period her head is phallus shaped suggesting her androgynous nature and its derivation from Palaeolithic times (cf. phallic females: Marshack 1972:292-93).” (Gimbutas 1974:152)

Animals

Another group of ‘representational’ motifs incorporated into these images are, she suggests, attributes of the various animal aspects of the deity such of snake, bird, sow, bull, frog, bee etc. Common ornithomorphic features such as eyes and feet appear in naturalistic mode; ophidian attributes of a long mouth, fangs and small round eyes and link the deity with the poisonous snake.

Symbols relate to both cosmic water and rain and human fluids such as female moistures, amniotic fluid and breast milk (1989: chapters 4-10). These include naturalistic and schematic ‘exaggerated breasts’, divine and animal eyes (1989:chapter 6); nets, meanders, tri-lines, running snake/spirals, stream motifs bands of parallel lines and meanders which are said to relate to divine sources of nourishment (1989:chapters 4-5). According to Gimbutas’s interpretation, snake and snake coils, tree of life and spinal cord are symbolic of an energetic life force. Spirals, horns, crescents, half-circles (U-shapes) hooks, axes, hounds, he-goats, and excited (thyphallic) men all belong to this complex of meaning.

These theories, initially attractive to the feminist school, were unacceptable to others (e.g. Haaland and Haaland 1995; McDermott 1996, McCoid and McDermott 1996, Langdon 1999, Conroy 1993 and Talalay 2000) for their determinism and reliance on gender assignation of figurines. Gimbutas was criticized by archaeologists for her deterministic model that claimed that a peaceful worship of a Great Goddess was universally supplanted by patriarchal religions, and her “lack of quantitative methods” (Hayden 1985:22). Some archaeologists (e.g. Talalay 2000, Meskell 1994:79) rejected her essentialist theories in favour of multiple functional explanations. The controversy surrounding both Gimbutas’s methods and her claims for the data, unacceptable to successive schools of archaeological theory, have I suggest, detracted from her superb iconological analyses which remain unmatched in over thirty years of research. I believe the analyses, while made on her data, have far wider applications.

Researchers like Schmandt-Besserat support a supernatural function, adopt abstract definitions and avoid assignation of gender to describe figurines. For Hayden (1985:17): “…the figurines are not socially significant as females, but as metaphor for the supernatural transformable deity.”

Feminists, at the end of the century, were to object to the attempt to reconstruct a literal past attributing values influenced by Western attitudes to ‘mother’. For example, value-laden notions of virginity, chastity, sexuality and fertility were assigned to ancient religion (Goodison and Morris 1998:7; Conkey and Tringham 1995; Meskell 1994, Talalay 1993, Tringham and Conkey 1998; Dobres 1993). Such mythologized interpretations of the past were said to have materialized in response to female disempowerment in history particularly within religious power bases (Meskell 1994). Gender stereotyping and the “invented past” were deemed harmful to promoting a feminist future (e.g. Eller 2000; Dobres 1993:251).

This feminist scholarship of the 1990s opposed the Mother Goddess movement as non-progressive and deterministic, attacking early feminist invention of a ‘golden age’ as a utopian narrative rife with essentialism and biological determinism. Scholars (such as for example Conkey and Tringham 1995; Meskell 1994; Talalay 1993; Tringham and Conkey 1998 and Dobres 1993) objected to figurines displaying sexual characteristics being linked to ‘fertility’ and criticized these as facile interpretations that perpetuate contemporary Western assumptions concerning gender nature and culture.

2.2 Archaeological research on figurines

Much archaeological research on figurines has been occupied with repudiating the Mother Goddess movement and the essentialization of Mellaart and Gimbutas (e.g. Tringham and Conkey 1998). Scholars, however, focus too on attempting to access meaning thorough using archaeological tools available such as characteristics of items which could be used to reveal function such as specific contexts or their site-specificity (e.g. Marcus 1996). But most studies ignore the iconography of these articles.

Quantification

One of the problems archaeologists face when approaching iconographic aspects of the Neolithic symbolic assemblages is that the sizes of assemblages of imagery items, whether for objective reasons or due to field collection methods, usually rule
out quantitative methods. Assemblages are largely composed of fragmented parts most of which defy reconstruction, and many cannot be classified in known ‘types’. Interpretations made on the basis of publications of a few whole or reconstructed items do not reflect the realities of the record. There are, however, enough whole or reconstructed items for a qualitative study of some of the iconography.

Gimbutas was criticized for her lack of quantitative methods (Hayden 1985:22). However, after more than a decade of research replacing unsupported anecdotal interpretations with data rich treatments, other archaeologists such as Bailey (2005:14) reject this “fetish of measurement”. Bailey criticizes those adopting this methodology and their work – “exasperating for their blind empiricism” – when it was “far from obvious that it is of any value for the interpretation of material culture like figurines.” (2005:14).


**Context**

Where an object is found and what it is found with has come to be regarded as a crucial factor in the interpretation of figurines (Tringham and Conkey 1998:27; Marcus 1996). However, attempts by archaeologists to reveal function from find contexts are often frustrated by the lack of recorded contexts (e.g. Bailey, 1994b; 1996; Meskell, 1994; Biehl 1997). Where such information is available, apart from the rare ‘special context’ where figurines are found in relation to another feature, Neolithic figurines are mostly thought to be found in “bad microcontexts” (e.g. Biehl 1996:154) in surface collections, fills or with no clear relationships to other features. These cases are not useful for supporting anecdotal theories. Meskell (1994) complains:

> “Fragments of figurines are dispersed so widely over the site much as plant and animal remains are – that one need not wonder why everything is found in ‘association’ with them.” (1994:82)

**Textual sources**

Scholars from other disciplines use archaeological materials freely in their studies. For example, Keel and Uehlinger (1998[1992]:9) point out the awareness amongst biblical scholars that to achieve a reasonably comprehensive and reliable picture of the deity in their data, conventional text-oriented approaches need to be supplemented by archaeological visual sources and iconographical studies. With the New Archaeology’s (1960s-1970s) emphasis placed on context, to illuminate function, the study of symbolic artifacts by archaeologists is increasingly isolated from widespread sources of interpretation. Researchers either tried to comply with these restrictions or to by-pass them. In spite of the New Archaeology’s strictures (which many came to see as dictates), not all archaeologists restrict their explanation to material and contextual evidence. Recognizing the extremely conservative nature of symbolic material in the ancient Near East, Postgate (1994:176-184) for example, recommends the use of early historical documents as legitimate sources for prehistoric research. He urges archaeologists to engage with the written evidence, for increased cross-frontier awareness. Lesure (2011) offers a framework for assessing the relevance of particular comparisons.

Talalay, however, rejects the idea that artifacts can have the same function over three millennia, arguing that “Neolithic figurines are considered a multifunctional class of objects, their uses varying across space and time” (Talalay 1993: xiv).

Denise Schmandt-Besserat (1998a:11) notes that archaeology has amply demonstrated that in the Near East, from its beginning in the Pre-Pottery Neolithic A Khamian culture (~11,000 years ago) up to the Babylonian period sculpture is as a rule devoted to deities, and in historic times also to royalty (Spycket 1981). This contention is supported by tracing iconographic chains; for example of double eyed/headed images to twin gods or goddesses from Neolithic times, to late textual references to the two-headed Babylonian deity Marduk (1998a:11-12). Images and references to the posture of holding breasts, regarded as the hallmark of Near Eastern goddesses (1998a:13 and references) are traced for some five thousand years from the PPNB to the cuneiform texts. This method of identifying deities in prehistoric periods using historical imagery of traditional postures or gestures or narrative has not been contested. This same method relating images from prehistory and history is used by Amiran 1962; Dalley 2002 and Ziffer 2008.

In her interpretation of imagery from ‘Ain Ghazal in Jordan, Schmandt-Besserat (1998a) applies her rich knowledge of the area’s cuneiform texts to identify the greater Middle Eastern symbolic context in which figurines operate. She sees the figurines as quasi-universal icons whose main function is to personify some of the supernatural forces; as “spiritual beings... conscious subjects gifted with powers superior to those possessed by common men...” (1998a:112, 115). She traces the phenomenon of sexually ambiguous and dual gendered figurines found in archaeological assemblages throughout the Mediterranean coast to as far away as southern Iran.

An important contribution to research on figurine function is Schmandt-Besserat’s distinction between classes of cultic imagery in the Pre-Pottery Neolithic data at ‘Ain Ghazal, a distinction which has applications to other assemblages. She describes one kind of figurine (1998b: 13) as images of
divinities recognizable from historical personifications of goddesses (Amr 1980: 117). These are, she says, carefully made with particular gestures, well known in the ancient Near Eastern divine imagery tradition. She suggests that this group of carefully made items represents different divinities, and supports the likelihood of a pantheon of gods in the assemblage of ‘Ain Ghazal.

The other kind of function identified by Schmandt-Besserat is that of a class of artifacts of both animals (1997) and humans (in prep) functioning in magic rituals of wish fulfilment. Abundant archaeological data confirm the allusions in the cuneiform texts to the cultic use of clay human and animal figurines as apotropaic artifacts used in magic rituals. She shows that the cuneiform accounts of magic rituals from the ancient Near East reveal that creation could be effected through the act of modelling clay (in prep). The human items, according to Schmandt-Besserat, are distinguishable by their small size, the use of clay and limestone materials easily available on site and from the simple pinching manufacturing technique. These items are barely recognizable as human, without limbs or facial features; their only attribute is an erect posture.

While the texts confirm that potency of these items came from the magical ritual involved in their making, I suggest that their counter-intuitive iconography must also be taken into account. Broman Morales (1990:29) suggests that the discard patterns of early Neolithic Mesopotamian figurines are consistent with their use as wish-vehicles, used for a specific moment and discarded afterwards. Schmandt-Besserat (in prep) distinguishes potent figurines used in magic from those used in the public arena by material: clay for the more ephemeral magical act; and the more durable stone denoting a valued artifact destined for a formal public function.

For Cretan Neolithic figurines, Ucko (1962:47) lists distinguishing features such as material, manufacture and absence of signs of divinity to identify artifacts used in initiation rites; vehicles of sympathetic magic found in discard provenances, are categorised as sexless, male and female, and of a certain size and portability. These inanimate objects are claimed to guard, substitute, and protect. Thus Ucko in fact assigns potent supernatural functions to figurines in spite of their “absence of signs of divinity”.

Like Gimbutas, Schmandt-Besserat (1998b) recognizes the incorporation of “basic shapes with metaphorical significance in the iconography of figures: “...She describes the stylistic execution of the statuette Fig 71 as a “sophisticated composition based on the interplay of lines and curves ... the artist sculpted the female body according to an elaborate geometric framework” (1998b:110). Schmandt-Besserat identifies in the construction of the body a framing or bracketing of a shape around a central vertical axis:

“...that begins between the breasts and continues along the thighs. Shoulders, arms, breasts, fatty rolls, thighs, and knees are symmetrically arranged around this central vertical line; only the womb bursts out in the center as the focal point of the figurine. Triangles are another leitmotif. Breasts, lower arms and thighs constituted three triangles set in varying orientations. Finally the tip of the abdomen and the two upper arms form a final triangle superimposed over the body.” (1998b:110)

The horizontal axis, divides the body into three parts by clearly marked grooves with the abdomen again occupying the center bracketed by diagonal lines. Lines and curves combine to create geometric patterns. The semi-circle of the shoulders mirrors that of the fat rolls, enclosing the torso in a full circle (1998b:110).

2.3 Ethnographic analogy

Peter Ucko and the New Archaeology

The archaeologist Peter Ucko, champion of the theoretical school of New Archaeology (see chapter three), oversaw a revolution in the structure and outlook of his profession. Ucko promoted ethnographic analogy for archaeological interpretation, suggesting that the study of societies for whom the relics of a distant past were still components of a living culture was more significant than the academic and Eurocentric studies of “prehistory”. Ucko’s publications (1962, 1966, 1968), and a seminal article by Fleming (1969), point out the flimsiness of the evidence and the massive assumptions built into the existing consensus. They state that monothetic claims of the movement for a general Mother Goddess ignores diversity, gender and context and do not meet the norms of the new practices of archaeological study, and that presentation of data is not made in the context of the whole assemblage.

Ucko offers a range of ethnographic examples of what female figurines could be used for rather than being goddesses, idols or dominant women. He also looks for the missing men, while recognizing sexless figures.

The New Archaeology with their negative attitude to the possibility of studying religious artifacts through archaeological materials, rejects the interpretation of female images as goddesses. New Archaeologists substitute these with anecdotal androcentric models which classify figurines as “fertility idols”, “dancing girls”, “pretty ladies” and “concubines” (e.g. Nelson 1997:25; Goodison and Morris 1998, Hamilton 2000:18).
Anecdotal theories

With the Goddess theory discredited, archaeologists searched for 'multivocal' figurine theories to meet the theoretical requirement of the Interpretive Archaeology school. Literal social interpretations and those plucked from ethnographic use of figurines were investigated. These are on the whole anecdotal and seamless offering little or no supporting evidence (Bailey 2005:12). While the counter-intuitive element in figurine iconography is noted by many (e.g. Talalay 1993:50; Bailey 2005:137-141; Kuijt and Chesson 2005:155, Biehl 1996:161; Hourmouziadis 1973:74), decipherment of this difficult iconography has mostly been avoided. The scientific epistemology demanded by the new methods of the profession does not lend itself to research of this kind.

Since Ucko, archaeologists have examined the presence, and use and subsequent disposal of small figurines among non-literate tribes to suggest the type of explanations that the archaeologist should consider as possible functions for ancient figurines. While questioning the legitimacy of making use of parallels between cultures so widely separated in time and space, Ucko seeks support for such functions from features such as size, type and material.

Other possible functions suggested include: recreational playthings for children, devices for sympathetic magic, life passage accompaniments, fertility symbols, sexual aids, votive and healing objects, identity markers, afterlife accessories, effigies, talismans ritual figurines, puberty training models, contracts and territory markers. Cory (1947-8; 1951; 1961) documents the use of small clay figurines in certain parts of Africa during initiation rites – in particular the chisungu ritual of the Bemba people (Richards 1982[1956]). Such clay figurines are used solely for instruction, eventually being thrown away. This observation proves useful for researchers in explaining the discard contexts of Neolithic figurines in what appear to be refuse pits. The title of Talalay’s monograph Deities, Dolls and Devices (1993) suits the kind of multifunctional explanation required by the Interpretive Archaeology school of the 1990s. Beyond suggesting these as possible functions, however, support for these varied explanations is sometimes extremely fragile. Bailey (2005:12) in particular criticizes the poor simplistic arguments offered for some multifunctional interpretations.

Recreational dolls are recognized by various features. For Ucko (1962:45; Himmelheber 1960), they are characterized by clay material and typology such as stump arms which he compared to those of dolls of the Ashanti people, whose arms were said to be formed into simple stumps to reduce the likelihood of breakage when carried around by children. Since the largest of Ucko’s clay figurines is about three inches long, this is a rather obscure suggestion. Another criterion of Ucko’s for recognizing dolls or initiation figurines is the lack of any ritual context or signs of divinity on the figurines in his data (1962:47, 48; 1968:434). Talalay’s (1993) support for a doll function is based on three figurines found in three completely undisturbed areas which “may have been devoted to women’s work” which:

“...may have been given to children for their amusement while older members of the group carried out tasks such as grinding, spinning, or bead production.” (1993:48)

2.4 Social models

Power and domination

French structuralists and later, post-structuralists and Marxists, influenced figurine research. This resulted in the literal social interpretation of figurines with models of domination and resistance (as for example Gimbutas’s model of early matrilineal/focal society) positing issues of power, which became central to archaeological theory (e.g. Meskell 1994:10; Eisler 1987; Gimbutas 1974, 1989, 1991; Spretznak 1992). Others such as Kokkinidou and Nikolaidou (1997) recognize the metaphorical use of the human body. For them, figurines are:

“Material symbols of a complex of notions and values interwoven with gender arrangements or attempts to represent and shape cultural realities.” (Kokkinidou and Nikolaidou 1997:92,103)

Kokkinidou and Nikolaidou see

“... certain aspects of femininity were conceptually central, and as such they could have become appropriate vehicles for the communication of important cultural information and ritual knowledge.” (Kokkinidou and Nikolaidou 1997:101)

For Peter Biehl (1996) “the whole concept of these anthropomorphic representations is the abstraction of the human body” (1996:161). Talalay (1993:129 note 42), in a rare appreciation of Gimbutas, praises her provocative insight in stressing that these miniature forms are highly charged symbolic images (Gimbutas 1986:226) and notes that more attention is often devoted to the placement of symbols than to the realistic rendering of details of the human form. She points out too that the designation of most Neolithic figurines as fertility images is a misrepresentation of Gimbutas for whom early figurines, anthropomorphic and zoomorphic, reflect a ‘female force’ including categories of life-giving and sustaining, vegetation goddesses and gods, and images of death and regeneration. Talalay herself proposes (1993) that “the human body is an organizing metaphor”.
Some archaeologists choose to interpret figurines literally and propose social models. Reconstructing social organization and structures from archaeological evidence is however, notoriously difficult. Wright (2007) for example, sees figurines as portrayals of women and makes social and economic assumptions but ignores the counter-intuitive iconography. Goring-Morris et al (2009) comment that the increase in symbolic items in their data probably was “a means of alleviating scalar stress” (2009:205) caused by increased population and more complex social interactions which co-occur with changes in subsistence practices (2009:203). This oft-repeated comment (e.g. Belfer-Cohen and Bar-Yosef 2000:25; Goring-Morris 2000:115; Kuijt and Chesson 2005:155) assumes a potent function for Neolithic figurines, but does not address the source of this potency.

**Binary sex classification**

Some models suggest that metaphorical ways of expressing male and female indicate a binary structure in society. Following Leroi Gourhan (1965), and drawing on classical mythology, Hayden (1985:10-18, 21) describes major male forces in antlered and horned animals, snake and pillar imagery and linear representation as ‘male’ images balancing female figurines. French archaeologist Jacques Cauvin (1994, 2000b) rejects the emphasis on ecology and environment as the cause of change arguing that primacy should be accorded to a restructuring of human mentality. He discerns new religious ideas and changed iconography (2000a:69) interpreting the meaning and function of Near Eastern Neolithic figurines as a dual religious system focusing on male and female, the divinities of the Goddess and the Bull. Cauvin’s book (2000) entitled The Birth of the Gods and the Origins of Agriculture adopts an ideological approach to explaining the Neolithic which is at odds with many traditional understandings but which resonates closely with the idea that the Neolithic is much more than an economic transition. In contrast, Mithen (2004) shows that more careful analyses of figurine assemblages revealing greater numbers of unsexed items makes interpretations based on a male/female binary structure irrelevant.

‘Domination’ models, which posit control of one sex over the other, rely on the assignation of gender. Certain physical characteristics define figurines as female such as the presence of primary anatomical features (breasts and/or pubic triangle) and occasionally secondary anatomical features, such as swollen abdomens, narrow waists, wide hips or protruding buttocks. Large or petite body size and traditional postures might indicate that figurines are male or female; a beard indicates a male (Ucko 1968:173-4; Bailey 1994a:324; Mina 2007:268). Social ideals and values are incorporated into identification and there exist “deeply ingrained preconceptions that there would have been an association between obesity and fertility” (Ucko 1996:301). Fat deposition on the buttocks of some Upper Palaeolithic figurines was said to depict steatopygia, a characteristic of some African populations, an idea that has since been rejected.

**Gender Archaeology’s social theory**

Whitehouse (2007) summarizes the different foci pursued by gender archaeology, such as the identification of major androcentric biases in past interpretations; challenges to the essentialist binary systems of gender classification, a search for a third (or more) genders, and the intersection of gender with other categories of social organization.

In one of the very few attempts to research androgynous figurines, Naomi Hamilton (2000) describes archaeologists as slow to understand the separation between biological or physiological sex as understood in the social sciences (Ortner and Whitehead 1981; Caplan 1987). She suggests (2000) that the term ‘gender’ has been borrowed by archaeologists working on figurines and burials as a substitute for the word ‘sex’ presumably because gender sounds much more scientific and precise, while in practice it is widely misused. The gender of figurines does not depend upon physical attributes which show only sex, but upon social ones, and if we are interested in how early societies operated it is gender rather than sex that we should investigate, and the relationships between sex and gender (2000:22; Christou 2012).

Researchers must nevertheless explain the presence or absence of genitals on figurines and the apparent care with which they are depicted. Some have related these depictions to the fertility theory. Gopher and Orrelle (1996) suggest that figurines with mixed genital symbols relate to reproductive strategies and that “…intentional mixing of gender signifiers could represent an aspect of non-available or non-productive sexuality” or possible multiple gender models (1996:273).

**Identity theories**

Figurines have been regarded as an expression of individual identity, mainly of females. Anthropomorphic figurines, in particular, “entice us with a promise of human self-awareness, encoding cognition in the modelling and representation of the human form” (Hamilton 1996). A social theory offered by Bailey (1994a,b; 2005) relates the variety in figurine iconography and decoration to the identity of individuals or decreased ancestors. He links decorations of figurines from the Bulgarian Neolithic to the increased importance of the individual:

“...they were one of many categories of things through which people expressed maintained negotiated and contested identities and realities.” (2005:11)
Bailey (2005) suggests that the visual rhetoric of figurines is active in new kinds of relationships among people:

“With the Neolithic, an intensified, significantly more permanent, articulation of particular people to particular places (i.e. sedentism) had fundamental consequences for community composition, particularly in the reduction of flexibility of people’s relationships to each other.” (2005:197)

Kuijt and Chesson suggest that for understanding meaning in Neolithic cosmologies:

“...researchers approach the question of what Neolithic figurines meant and how people used them by integrating questions of function with those of the nature of representation and their context.” (2005:172)

They focus on ambiguous representation of human forms in figurines suggesting that such figural representation can illuminate the social context in which such artifacts were found. Like Wright (2007) they claim that figurines reflect the social body, in an inseparable relationship between peoples’ physical bodies and social bodies. Drawing on Douglas (1982a) Kuijt and Chesson (2005:155) suggest that symbolic artifacts such as figurines provided enduring representations of the personal and social thus addressing the stress of living in larger social groups.

Kuijt and Chesson’s hermeneutic theoretical position disassociates their data from a greater historical and anthropological context, making their conclusions about individual choice in matters of gender anachronistic for the Neolithic. I agree with Whitehouse (2007:31,36) when she argues that gender and sexuality as major components of personal identity are very much present-day notions and that “…concentration on the individual and issues of personal identity represents a peculiarly contemporary concern and may not be very relevant to prehistoric societies”. Chapman (2000:146-7) agrees with this view.

Another facet of the ‘individual identity’ theory is the claim that skeletal artifacts from the southern Levant and other places show that human images, and especially skulls, were in some way part of a ritual of ancestor worship. Schmandt-Besserat (2002:126) traces the origin of this theory to Kathleen Kenyon’s comparisons between the Jericho plastered skulls and a collection of ancestor masks from a 19th century culture along the Sepik River Valley of New Guinea. Kenyon’s conclusion that the plastered skulls were probably meant to honour the memory of revered ancestors (Kenyon 1957: 62) was adopted by many (e.g. Bienert 1991, 1995:360-363; Cauvin 2000b:247). Schmandt-Besserat (2002:126) rejects the ancestor cult theory suggesting that the archaeological data supporting an ancestor cult in the Neolithic Palestine is thin. She points out that while the carefully plastered and curated skulls at ‘Ain Ghazal support the theory, the trashed contexts of the Jericho skulls oppose it. In addition, she states that it is difficult to reconcile an ancestor cult with the fact that the majority of skulls are those of women and that a child’s skull too was plastered. The deposition of skulls in mortuary centres, she claims, and not only beneath homes, further weakens the ancestor cult theory. Michelle Miller draws on the ancestor worship theory in her interpretation of the Yarmukian cowrie-eyed clay figurines, choosing a joint literal and supernatural explanation (Miller 2002:232). She suggests that these figurines are of a deified ancestor, the ‘Matron of the Yarmukian’. Miller does not explain however, what her divine attributes are nor by which features she can be identified as divine.

2.5 Iconography

Theories based on iconographic features are hard to find. An exception is Morris and Peatfield’s (2002) case study of gestures portrayed in figurines. Using religious iconography sources, they interpret the postures of figurines from Minoan peak sanctuaries as those used to move into altered states of consciousness. These figurines, they suggest, are active in epiphany – meetings with the supernatural.

Lewis-Williams and Dowson (1988) address the recurring motifs found painted or incised on prehistoric imagery. They attribute them to entoptic images, visual effects within the eye seen in a heightened state of consciousness. Carr (1995) provides detailed illustrations from many places of motifs of such entoptic phenomena in prehistoric art from the Palaeolithic to the Neolithic which illustrate the temporal and spatial range of these motifs. Both of these studies which address iconography conclude that it relates to movement between worlds. This subject is referred to again in chapter seven.

Motif analysis

Biehl (1996; 2003) rejects the use of analogies from ethnographical, historical or mythological sources to identify systems which lie behind an apparent intentional breakage. He favours study of the decoration as a ‘rule-governed creativity’ on an abstracted human body to reveal a code system. He discovered (1996:156) that the uniform placement of one motif on the chest of the figurines in his data, reveals the kind of repetitive patterning rule-generated systems by which Bradley (2003) suggested ritual activity could be identified. I refer to this theory in more detail in chapter six. Biehl interprets the counter-intuitive images in the data as human beings acting as supernatural beings symbolically transformed by gestures, masks and symbols (Biehl 1996:14).
The androgynous

As more data on whole figurine assemblages is collected and prehistoric figurines are found to be largely ungendered, or sexless, the process of binary assignation is increasingly abandoned (Bailey 2005; Hamilton 2000:22; Kuijt and Chesson 2005:156). What is archaeology to make of this hybrid classification?

Hamilton (2000:17) addressing the interpretation of prehistoric anthropomorphic figurines from eastern Europe and the Near East rejects the methodology which classifies figures primarily by sex, and then translates sex into stereotyped Western gender roles which may not have relevance to prehistory.

She urges archaeologists (2000:22) to become familiar with examples of sex-gender dissonance, fluidity or simply difference from Western conceptions from the ethnographic record. She suggests that rather than arguing over the sex of figurines which have no sex indicated, sexless figures could give valuable information about the development and constitution of gender in ph society:

“Sexless figures may well reflect an absence of sex as a structuring feature of society.” (2000:28)

She illustrates how dual gender is expressed in archaeological items as an intentional confusion in the cognitive categorization of humans as male or females – a scrambling of indicators of male and female. In particular she notes how mixed genital imagery to express the androgynous becomes visible when viewed from different orientations (2000 Fig. 2.5).

A project for recording figurines from the Catal Höyük excavation [2009 Figurine archive report] uses 3D laser scans of figurines to add another dimension enabling visualization of three dimensional orientations. Meskell and Nakamura (2004) suggest these are important for identifying various visual cues or puns one might thus observe, in particular for those figurines that clearly have ambiguous or dual sexual characteristics. Preliminary findings (2004) suggest that this visual analysis has revealed a phallic appearance of many figurines. This visual play, Meskell and Nakamura (2004) suggest may have been intentionally or unconsciously created.

Hamilton describes (2000:22) modern androgynous social groups such as shamans, matchmakers and corpse handlers, who have special abilities attributed to them such as cursing or powers of healing. These special functions and abilities show a link between the state of androgyny, potency and the supernatural.

The anthropologist Wendy O’Flaherty (1980:285) describes the androgyne, a universal, archetypal symbol, widespread over many but not all cultures. The androgyne is known to the African Dogon peoples; in their myths, it is a true divine being, a creative figure containing both male and female physical elements (O’Flaherty 1980:288). In ritual acts, the original man is cut to split into two sexes. Reichel Dolmatoff (1975) describes this feature in Amerindian myth.

Models of androgyne drawn from both anthropologists and archaeologists refer to origin myths about social evolution/ construction of binary gender where in a primeval pre-sexual state of undifferentiated chaos, man is created from an original or perfect man, a divine genderless creator who was both male and female. Subsequent binary division is constructed after a number of attempts at creation by the intervention of society (Asher-Greve 1998:29). Elements of this theory appear in Mesopotamian creation myths, in Babylonian cuneiform, Greek and neo-Assyrian texts (Dalley 2002:117). Empedocles (500 BC), an early Greek philosopher, describes composite creatures made up of parts of animals and divine creatures in the pre-sexual era. These divine elements, according to the Epic of Creation, are parts of dismembered gods. The blood of the leader of these composite creatures is used in the mixture of clay from which mankind, with the genders male and female, is created. Both Dalley (2002) and Ziffer (2008) relate two headed gods found in Near Eastern archaeological assemblages to the perfect two headed androgynous man, the bisexual being from this pre-sexual era. Dalley (2002) notes that the term “the man with two heads’ came to be a term used for castrates. Ziffer elaborates suggesting two heads relate to two testicles – this man is neither male nor female – effectively the perfect divine being, the androgynous man. Ziffer (2008:27) relates the two-headed statues with a common chest known from the Pre Pottery Neolithic B in Jordan (Figs.57:1-2) to this common creation myth, in which man is created from earth in the hands of a divine potter (Amiran 1962; Ziffer 2008; Dalley 2002:118; Dalley and Ziffer 2008: 27). Schmandt-Besserat (1998a:11) points out that two-headed bust have multiple parallels in a long iconography and textual records of twin gods or goddesses from Neolithic times to the third millennium. Dalley (2002: 118) suggests that the earliest composite forms come from the Protoliterate period of the late 4th millennium BC.

Rhetoric

Researching the rhetoric of figurines, Bailey (2005) examines properties which could contribute to their efficacy in various functions. Renfrew (2004) and Kleijn (2006:982) also focus on the rhetoric that extreme simplicity of prehistoric art shares with modern art. Such studies of the efficacy or rhetoric of figurines address their potency but do not address the counter-intuitive iconography.
Conclusion

The most dominant characteristic of these artifacts, their ‘unnaturalistic’ appearance, is notoriously difficult to explain and is subsequently avoided by researchers. I suggest that explanatory theories, religious, social and literal, which ignore this aspect, present an inadequate assessment of the data. Most studies which do address the strange mixture of humans and animals, and dual sexed or androgynous characteristics, grant these images potent powers. A connection between unnatural iconography and unnatural potency is made in a seemingly intuitive way but no theoretical explanation supports this assignment, nor any explanation of why we see the reoccurrence of the same features over great areas.

In the next chapter I describe an anthropological symbolic origins theory which seems to address these features of the iconography. The theory relates to a sufficiently ancient period and wide geographic span to explain the extreme conservatism of certain features of iconography in human imagery, and their correlations in different places and periods.
 CHAPTER THREE
Theory and Methodology

In this book the predictions of a model from evolutionary anthropology are tested on archaeological artifacts from the Natufian and Neolithic periods.

Archaeologists have instinctively interpreted human imagery in prehistory in terms of religious objects. But while support for a religious function has to some extent been provided through traditional archaeological tools I propose that the most convincing support for their divinity lies in their counter-intuitive iconography. Boyer’s work on the origins of religion/understanding religion provides a theory for understanding such iconography which has been drawn on by archaeologists such as Mithen.

In this chapter I describe some of the strictures imposed by successive schools of archaeological thought which have put an examination of ‘marvellous’ iconography, like other interpretative subjects, out-of-bounds for archaeologists.

I propose simply that there is a fit/match between the predictions of the Female Cosmetic Coalition hypothesis, Boyer’s theories on religion and iconographic features of anthropomorphic artifacts of the Natufian and Neolithic periods in the Southern Levant. This confirms the supernatural nature of the images supporting the intuitive interpretation held by archaeologists for some half a century that these images represent supernatural beings, gods.

I describe first of all the features of archaeological theory that have inhibited this research. I present a description of the FCC model with its implications of ‘gender of power’ and costly signalling. I then offer some suggestions for overcoming the hesitancy of archaeologists in applying a theory over such a range of time and space.

3.1 Archaeological theory

The rigorous ‘scientific modes of practice’ of the New Archaeology of the 60s and 70s applied general laws of cultural process and covering laws models of explanation, which offered archaeologists wishing to deal with cultural subjects increasingly narrow options. Explanation focused exclusively on observable data and regarded historical and anthropological analogies as “non-observable speculation”. The particularistic, the historical or ideological were excluded.

A distinguishing feature of Binford’s New Archaeology was his ethnoarchaeological fieldwork. Like Marx, Binford wanted to address the ideological but felt that first it was necessary to establish the materialist constraints on variability. A theoretical shift from the systemic to the ‘ecosystem model’ explained cultural systems as reductive, materialist and functionalist. Debate on the status and security of claims about the cultural past, in which the ideational was excluded, brought explanation to a halt.

Processual archaeology was problem-focused but the research agenda was preoccupied with infrastructural economic and ecological problems.

New forms of archaeology, that emerged, the ‘post-processual’ or ‘interpretive’, repositioned the discipline within the social and cultural sciences. Ideational issues were to be addressed and social theory released from rigid definitions. A challenge was issued to the central conviction of logical positivism and empiricist theories that collected observational evidence, distinct from any theoretical claims, constituted a stable foundation on which systems of knowledge can be securely built. The post-processual theory removed the constraints of the New Archaeology but opened the door to relativist ‘anything goes’ theories, unconstrained by anthropology or history. Archaeology was to be regarded as social practice dealing with the meaning of ongoing processes without aiming at final and definitive accounts of the past. Theoretical acceptance of notions of co-existence of multivocal archaeological interpretations encouraged researchers to draw on a wide range of theoretical sources in the humanities, but this resulted in many trivial hypotheses which seemed increasingly to reflect modern or personal issues.

Ian Hodder (1982a, 1982b) brought back a focus on symbolic meanings in material culture and its active structural role in the social. His analogies, however, drawn mainly from ethnographic sources, are detached from any historical context and are difficult to apply to prehistoric contexts. Suspicion and avoidance of theology and symbolic anthropology seem to lie behind his reluctance to read material culture directly, which he noted may have been involved in telling stories or recounting myths.

However, time-resistant, cross-cultural symbolic structures preserved in pre-literate societies can make for relevant hypotheses on prehistory if we have theoretical grounds for constructing these. Rituals from pre-industrial societies too preserve unchanged aspects of ancient practices (Bloch 1986; 1992) and may include such minimal or ‘core’ structures central to the ritual process.
Durkheim (1961 [1912]: 230-231) describes how ritual through intense emotional experience arouses group consciousness:

“Through emotive, repetitive and collective ritual performance individuals achieve harmony and become conscious of their moral unity.” (1947 [1915]: 230-1)

Through ritual, according to Rappaport (1999):

“The worlds in which humans live... are also constructed out of symbolically conceived and performatively established cosmologies, institutions, rules and values.” (1999: 8)

Archaeological theory has begun providing formulas to address the challenges posed by post-processualist and interpretivist schools. Wylie (2002) rejects the “received view philosophy of science” adopted by positivism. She addresses the debate between two opposing views of explanation in archaeological theory – those who believe that explanatory insights would eventually emerge from a perfect neutral body of data (the ‘subject’) – and those who claim that explanation harnessed to clearly defined problems that a scientist brings to an explanation (the ‘source’) will improve our understanding of the past.

Wylie (2002: 131) advises, instead of vacillating between these interconnected strategies for securing interpretive inferences, adopting a hybrid model of the two combining richer multi-dimensional sources; with the empirical considerations on the subject side to create an inferential equation that can constrain reconstructive and explanatory claims about the cultural past.

Religion

An important development by archaeologists, is the return to the debate on religion in archaeology which involves considering the “intangible, the irrational, and the indefinable”, drawing increasingly on anthropological definitions to assist explanation (Bradley 2003; Insoll 2004a, 2004b). Some of these debates are, as Insoll (2004a) states, “remarkably naïve”. Others (Renfrew 1994; Renfrew and Bahn 1991: 359-60; Bowie 2006 [2000]) merely continue the tradition of normative description, producing ‘checklists’ which specify ‘context-independent’ indicators of religion. Renfrew’s list (1994) is largely drawn from later historical sources indicating his allegiance to the view (Renfrew 2001) that social institutions can only be identified from literate periods. The rituals and symbolism of earlier periods are largely ignored. Subjecting symbolic/ritual finds to artistic and linguistic models of explanation has further diverted research from considerations of religion.

The archaeologist Richard Bradley (2003) identifies the source of archaeology’s failure to research ideational subjects as a: “confused inadequate conception of ritual, a product of modern assumptions about the past, in which ritual and religious belief are separated from the everyday... Without a clearer notion of what they mean by ritual, it will be difficult for field archaeologists to interpret their observations.” (2003: 6)

In the same way, Bradley states, archaeological theory will continue to:

“drift between an obsession with adaptation and a search for meaning that will leave the subject as divided as it was before.” (2003: 6)

Bradley (2003: 12) recommends that archaeologists can arrive at an understanding of religion in their data through “...less emphasis on ritual as a thing in itself and more on the practice of ritualization” (see too Bell (1992); Humphrey and Laidlaw 2003 [1997]). The identification of ‘ritualized’ elements of the record can allow speculations about the behaviour which lay behind such activity.

3.2 Anthropological theory and the symbolic

Lacking the theoretical tools to deal with artifacts that do not seem to fit their conventional categories, archaeologists regularly assign them in archaeological reports to a “symbolic” realm. As Power (2001: 18) suggests, archaeology assumes that: “Hominins who were capable of making sophisticated tools and weapons, with the skills necessary to hunt large and dangerous animals, must have been communicating through symbols e.g. Pitts and Roberts.” (1997)

For over a century, anthropology has had to contend with issues related to the symbolic. If archaeologists wish to study the ‘symbolic’ element of the record, they cannot remain detached from this debate. While the ontological nature of symbolic syntax suggests that both historical and prehistoric sources are relevant for their study, archaeologists have thrown up their hands and declared that earlier sources are beyond their reach.

At a meeting of the Theoretical Archaeology group in 1994, I heard presentations by evolutionary anthropologists that addressed precisely those earliest symbolic elements of the prehistoric record which seem to elude explanation. For over a decade an interdisciplinary school of anthropologists and archaeologists, working with other disciplines, have returned to the investigation of the origins of symbolic behaviour, language and art pioneered by Durkheim (1961 [1912]).
Evolutionary Anthropology

Under Darwinist reasoning, symbolic behaviour and its origins present a challenge; why did humans, unlike other primates, invest so much in symbolism and ritual behaviour? Another puzzle is the human sexual division of labour, a system that emerged as part of an evolutionarily stable strategy with distribution and exchange underwritten by ritual taboos and myth (Chase 1994; Knight et al 1999:5). How could one explain how female hominins extracted levels of energy from males, unprecedented amongst mammals?

Current Darwinian models argue that female strategies in the domain of sexual or signal selection, rather than an adaptation to the environment, drove the earliest symbolic behaviour (Power and Aiello 1997:155, Power 2009). Female reproductive strategies, it is suggested, are linked to the emergence of symbolism and the sexual division of labour. A basic premise is the expectation of conflicting reproductive strategies between the sexes.

3.3 ‘Sham Menstruation’ or the Female Cosmetic Coalition model

Chris Knight, Camilla Power and Ian Watts (Knight 1987, Knight, Power and Watts 1995), addressing the evolutionary changes characterizing modern humans, cite the underlying causal factor as the energetic demands of encephalization in the hominin line (Power 2001). As the brain became larger in human evolution, archaic human mothers bore the escalating reproductive costs of producing large-brained infants and females suffered acute reproductive stress. This becomes critical inside the last half million years from H. heidelbergensis to H. sapiens/H neanderthalensis in the late Middle Pleistocene (specifically in the period from ~500-130kya).

Two phases of cranial expansion are recognized. In an earlier phase when encephalization was proceeding at a relatively slow rate, different female hominid strategies are suggested to offset the increased energetic costs associated with cranial capacity growth (Power and Watts 1996:310-11; Power and Aiello 1997). These include reduction in gut size (Aiello and Wheeler 1995), a higher-quality diet from feeding for longer each day, or from maintaining lactation over a longer period (Foley and Lee 1991:70); increased female body size (Aiello 1996; Power and Aiello, 1997); and selection for slower rates of development and increased fat stores in periods of resource stress (Prentice and Whitehead 1987).

At later stages, during the exponential increase in brain size associated with archaic Homo sapiens (cf. Leigh 1992; Aiello 1996) the postnatal trajectory of foetal brain growth became progressively extended (secondary altriciality). Intensification of energetic costs during lactation would have confronted mothers with problems in balancing their energy budgets. The model predicts that it is the level of energetic stress of females during this period (~500 kya to 150 kya) that drove the changes in female strategy to attract increased male energetic investment.

Essentially, the model of this school of anthropologists, called the Female Cosmetic Coalition (FCC), proposes that female coalitions coped with this stress by motivating males to secure greater and more reliable reproductive investment in the form of high energy foods. Symbolism emerged as a set of deceptive sexual signals aimed by female kin coalitions at their mates to achieve this (Knight et al 1995). Coalitions would include male relatives of female coalition members, whereas males who were potential or actual mates, the targets of the female coalitionary signals, would be excluded.

To achieve this, the model suggests that a strategy of rewarding more attentive ‘investor males’, and undermining would-be philanderers, who aimed to spend as little time as possible with a female to ensure impregnation, would be logical. Males approach females in response to female sexual signals. Behavioural ecologists assume that a female strategy can be deduced from the evidence of the female Homo sapiens reproductive cycle, formed by selection pressures. The modern human female’s reproductive cycle withholds accurate information about her true state of fertility. Concealment of ovulation and loss of oestrus deprives males of any reliable cue by which to judge whether a female is likely to have been impregnated and can be interpreted as a time-wasting deterrent to a male philandering strategy. The longer a male must remain with one female to ensure fertilization in any breeding season, the smaller his chances of fertilizing another (Dunbar 1988:160; Power and Aiello 1997).

Another sexual signal, however, menstrual bleeding, indicates impending fertility. This would distinguish imminently fertile females from pregnant or lactating ones, i.e. those most in need of extra energy. The signal triggers sexual competition both among males seeking out the imminently fertile females, and between cycling and non-cycling females.

The FCC model argues that instead of concealing the threatening sexual signal of menstruation, females recognized it as an economic opportunity. The model suggests that coalitions of late archaic/early modern Homo sapiens women communally appropriated this economically valuable signal, borrowing the menstruants’ signal and cosmically amplifying it by the use of body painting with blood-coloured substances signalling deceptive or ‘sham menstruation’. An initial context-dependent ‘sham menstruation’ strategy is postulated with deceptive displays staged only when a local female is really menstruating.
When cosmetic displays are staged as a default – on a habitual monthly basis irrespective of whether any local female is actually menstruating, females have effectively created a communal construct of fertility or ‘blood’ – no longer dependent on its perceptible counterpart. Body-painting within groups repeatedly creates, sustains and recreates this abstract construct. (Knight et al 1995:80-81). The ‘Female Cosmetic Coalition’ model focuses on strategies of cosmetic use by such protosymbolic ritual coalitions, which offer the prototype for ritual in general, and puberty and initiation rites in particular (Power 2004:78).

Thus this first incipiently sociocentric deception, maintained by a collective (Power and Aiello 1997:158) is regarded as the earliest symbolic behaviour.

This abstract construct was repeatedly created and sustained.

"Collective, deceptive, and amplified use of red pigments as body paint confused information available to men about women’s reproductive status…" (Power 2004:75)

The costly investment in body-painting performances of such ritually displayed alliances advertises their quality to the target investor males providing them with a comparative index (between female coalitions) of the support that would be available to offspring born into a particular coalition (Power 2004:78; Knight et al 1995).

Wrong signals

What signals were used in this female strategy to indicate that they would not mate until investor males brought them home meat? While primate females signal that they are the right species and sex and that it is the right time for fertile mating, human females do not have seasonally-governed mating periods.

The model predicts that they would resist male domination and constant access by using precisely the opposite mating signals. They would go on strike. Coalitions would broadcast to outsider males through loud collective deceptive signals demonstrating that they were the WRONG species, the WRONG sex, and it was the WRONG time to mate. In a communal performance signalling withdrawal from hetero-sexual relations, menstrual females place themselves in a ritually powerful state, an elevated sphere, above the natural, in the super-natural. The signal mobilizing this ritual power would read “WRONG!” (Knight et al 1995:93). The females would broadcast that they were bloody, male and animal thus unavailable for mating; their supporting male kin would adopt their bloody signal too. It is in these messages of “no access” that symbolism is born (Power 2004:79). By signalling that they were not available during the non-fertile period of menstruation, females conflated subsequent mating/birth seasonality with sexual display.

Lunar periodicity

To maintain solidarity in their sex strike, females need to maintain synchrony across the landscape to counter highly mobile males from sexual cheating. The moon provided an appropriate periodicity around which to arrange collective hunting alternating with periodic work/rest activity; this was governed by a monthly on/off rhythm. Lunar menstrual time structured through bisection yields a waxing and a waning each month. Strike action, the potent ritual ‘on’ state is scheduled during waxing moon climaxing with the return of the hunt by or around full moon. Ritual off state signals resumption of marital relations (cf Knight 1987; 1991; Knight et al 1995:82-3).

“Ritual signals cross-culturally should reflect this binary on/off logic, ‘on’ coinciding with crescent moon, ‘off’ with the moon’s waning.” (Knight et al 1995:83)

The model predicts therefore that ritual power is to be associated with the waxing moon.

Gender of power

Extensions of the original model by Power, and Watts focus on the origins of gender. Drawing on their research on rituals of initiation among the Khoisan people of southern Africa, Power and Watts (Power 2001:197-8; Power and Watts 1997, 1999:106) reveal that ritual potency is consistently expressed as counter-reality and counter-dominance, conceptualized as constructing a single gender in which both sexes equally participate (Power and Watts 1997). Thus the original unified gender is a powerful combination of male and female characteristics. This originated in coalitions where both females and their male kin jointly signalled their females’ unavailability. Power and Watts (1997, 1999 and Power 2001:198) call this the ‘gender of power’, a construction of gender as “an expression of ritual power”.

In this, opposites are combined into a symbolic unity (Power and Watts 1997:123,124), both detachable from the biological sex of individuals, but also periodically reversible.

“First gender mobilizes the ‘powers of the weak’ countering dominance with signals that generate a shared domain of counter-reality. This act appears both necessary and sufficient to establish the symbolic domain.” (Power and Watts 1999:128)

Predictions arising from this hypothesis are that communal symbolic constructs will incorporate the scrambled sexual
characters of this unified gender. Since performance was periodic, the symbol would also be periodically reversible.


“We whether belonging to a healer or to a menarcheal girl, it is the same potency. the same structure can be recognized in initiation and trance.” (Power and Watts 1997:105)

These overlapping ritual structures create a ‘grammar’ of counter-reality and liminality rooted in gender ritual (Power and Watts 1999:110; see also Huffman 1983:52; Garlake 1995:85 ff):

“All ritual syntax polarizes around this original subtext of gender difference and its counter-real unity; a signature of ritual power that simultaneously embodies the ideas of classification and contradiction which each sex can access.” (Power and Watts 1997:555-6, see also Rapport 1997:657-8)

Collective representations created in ritual performance

Like coalitional power, gender and collective representations would emerge in a performance of compulsory non-heterosexuality, a collective, anti-domination performance, transcending perceptual categories. Power and Watts (1999:103) predict that such performance would display an “impossible unity comprising attributes of both sexes”. Ritual power would be rich in WRONG signals:

“This fundamental signal of both counter-dominance and counter-reality, carries the entire community into the other world” (Power and Watts 1999:102)

confirming gender as symbolism’s ‘founding act’.

The model appeals to Durkheim’s (1961[1912]:230-1) assertion of how collective representations, concepts outside perceptible reality, create social-cultural order and are generated and instilled in communities through compelling homogeneity of movement and synchrony in ritual performance/display.

“Gender signals both counter-dominance, mobilizing the ‘powers of the weak’, and counter-reality, forcing all participants and onlookers to engage with a symbolic, non-perceptual world conceptualizing gender and culture as emerging at a single point of origin.” (Power and Watts 1999:104)

Power and Watts appeal to Turner (1967:98-100; 1969:92-4) who recognized the inversion of normal social order, or anti-structure, a world of deliberate paradox, in ritual, liminal and potent states, and an identity between sacred power, the assertion of egalitarian relations, and counter-reality.

Predictions

This model of symbolic origins generates predictions potentially falsifiable across a range of disciplines.

Relevant predictions for this model have been summarized (Power 2009 table 14.2). In particular I adopt those predictions applicable to my data of human imagery.

The model predicts that counter-dominance generates collective counter-reality and that “a full-blown symbolic repertoire would emerge as a result of the specific form of signalling used by females in their strategy of resisting male philanderers.” (Power 2004:78-79). This pantomime ritual action will result in a shared repertoire of fantasy constructs – ‘things’ – that exist only in a symbolic realm, for example, the first gods. I predict that the time-resistant syntax of ritual power predicted in the ethnography of magico-religious systems and transmitted with high fidelity, would be conserved in such ‘things’, fantasy constructs, in the material anthropomorphic imagery that appeared at the end of the Ice Age. These collective counter-real constructs, the first gods, would be recognized by their representation as WRONG + red (e.g. wrong species/sex/time). I predict too that symbolic responses from males to female ritual power would include the ritualization and elaboration of male substances and physiognomy.

An important prediction of the model is that in archaeology, the earliest evidence of symbolic behaviour will be found in a cosmetics industry focused on blood-red pigment. A two-tier process is predicted. An initial context-dependent strategy will be seen to be followed by evidence for habitual and routinized performance. Watts 2009: 72 describes a timewindow of ~500 to 150ky when the archaeological record of pigment use should show a shift from irregular to regular use of red ochre. This should correlate with the two periods of increased encephalization, not predating the marked increase in encephalization that begins in the middle of the Middle Pleistocene (between ~400ky and ~550ky (Ruff et al 1997; Rosenberg et al 2006) but predating the achievement of modern encephalization quotients, between ~200ky and ~100ky (De Miguel and Henneberg 2001).

Ritual potency expressed in surviving myth and ritual is predicted to display everywhere a characteristic signature, revealing its ancestry in menstrual inviolability. A tight set of constraints will surround ritual potency separating characteristics of ‘ON’ and ‘OFF’ signals: “we expect the rules
to match the improbable specifications of our model” (Knight et al 1995:91-2). Ritual power’s ‘ON’ period everywhere will be triggered by a show of blood (table below taken from Knight et al 1995:91).

<table>
<thead>
<tr>
<th>ON</th>
<th>OFF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loud signals</td>
<td>Weak signals</td>
</tr>
<tr>
<td>Waxing moon</td>
<td>Waning moon</td>
</tr>
<tr>
<td>Seclusion</td>
<td>Availability</td>
</tr>
<tr>
<td>‘Other world’</td>
<td>‘This world’</td>
</tr>
<tr>
<td>Night</td>
<td>Day</td>
</tr>
<tr>
<td>Wet</td>
<td>Dry</td>
</tr>
<tr>
<td>Bleeding/raw</td>
<td>Cooking/cooked</td>
</tr>
<tr>
<td>Hunger/beaten</td>
<td>Feasting</td>
</tr>
<tr>
<td>Flesh taboo</td>
<td>Flesh available</td>
</tr>
<tr>
<td>Production</td>
<td>Consumption</td>
</tr>
<tr>
<td>Kinship</td>
<td>Affinity</td>
</tr>
<tr>
<td>Gender inversion</td>
<td>Heterosexual polarity</td>
</tr>
<tr>
<td>Animality</td>
<td>Humanity</td>
</tr>
</tbody>
</table>

Although ritual power will vary both regionally and temporally according to political considerations, the model predicts through all variations that ritual traditions across all cultures and all historical periods will adhere to formal consistency, termed the time-resistant syntax of symbolic ritual and myth. It predicts that this syntax will act as a key to test the model against art traditions appearing at the end of the Pleistocene.

The evolutionary physiologist Pascal Boyer (1994) proposes that better and more precise understanding of the mind-brain, its evolution, its structure and its specific dispositions can provide explanations for religious beliefs and behaviours. I return to Boyer’s theories below and in chapter eight.


**Tests carried out on the model**

**Ochre**

In most Middle Stone Age contexts, the only recurrent artifact class other than stone tools is red ochre (Watts 2009:63). Different theories of ochre use are debated.

Some archaeologists (e.g. Klein 1995; Wadley et al 2004; and see Knight et al 1995:88-89) have suggested general explanations for early ochre use – foremost being the hypothesis that ochre was used as a tanning agent and/or as a functional ingredient in cements for hafting stone tools. Watts (2009:72-3) and Knight et al (1995) dismiss the tanning agent hypothesis and Watts (2009:91) suggests that at present, ochre in hafting cements is more parsimoniously interpreted in terms of symbolic considerations determining functional choices:

“Having discounted the two principal utilitarian hypotheses as alternative general explanations, it is the habitual nature of the behaviour from the end of the Middle Pleistocene in southern Africa (probably earlier in the African tropics) that permits the inference of habitual collective ritual with applications of red pigments to the body playing an integral part in ritual displays.” Watts (2009:80)

The archaeological predictions of the FCC concerning pigment use are that the initial focus should be on red rather than black white or yellow. The analysis of the pigment record at Blombos (MSA) suggests a preference for saturated red earth pigments (Watts 2009:90).

The model predicts that pigment use should not predate the marked increase in encephalization that begins in the middle of the Middle Pleistocene between ~400ky and ~550 ky (Ruff et al 1997; Rosenberg et al 2006). It should predate the achievement of modern encephalization quotients, between ~200ky and ~100ky (De Miguel and Henneberg 2001). Within this time-window (~ 500 to 150ky) a shift should be observed from irregular (context-dependent “sham menstruation”) to regular use of red cosmetics accompanied by a rapid spread of such usage to a regular monthly ceremony, performed whether or not a menstruant was present. The habitual use of red ochre can be considered a species-defining trait (Watts 2009:80-81).

Coalitions living in areas lacking blood-red earth pigments would be expected to incur heavy costs to procure them from elsewhere (e.g. Watts 2009:84; Hovers et al 2003).

Current evaluations of the archaeological record of pigment use appear broadly consistent with the predictions. This predicted timeframe could be tested on a deep sequence such as the Wonderwerk Cave (Chazan et al 2008) to confirm whether the frequency of ochre use was closer to 500ka or to 800ka.

**Signature of ritual power in hunter-gatherer rock art and ritual**

The FCC model has been tested against ritual, myth and rock art data from African hunter-gatherers; European Upper Palaeolithic (Power 2004), Australian Aboriginal myths (Knight 1987, 1991) and Portuguese fairy tales (Cardigos
1996). The most relevant predictions for my case study are those concerning the ethnography of magico-religious systems.

Ethnohistorical material from Khoisan communities, and in particular a study of the role of redness and brilliance in Khoisan cosmology by Watts (1999:13307) reveal that “the contexts in which red pigments were used by Khoisan peoples were overwhelmingly ritual” (1999:134).

Support for the concept of ritual power and mutable gender was found using data on Khoisan and Hadza ritual and myth, with illustrations from southern African rock (Power and Watts 1997). A ‘native model’ of gendered symbolic oppositions is presented; the indigenous model was found to represent gender as mutable through time, correlated with ritual potency, supporting predictions made by the sex-strike theory of the origins of symbolic culture.

The focusing on rituals of inversion among the Khoisan peoples of Southern Africa shows that gender among these hunter-gatherers and hunter-herders is constructed as an impossible unity, comprising attributes of both sexes (Power and Watts 1999:102). Lewis-Williams (1980:34) identifies a single belief system in their art and nineteenth century ethnography suggesting that a common structure and metaphor operated in menarcheal, first-kill and marriage ritual contexts, shamanic rainmaking and medicine dances. Lewis-Williams and Dowson (1989; Dowson 1994) regards San rock art as largely associated with various aspects of San shamanism, trance experience and healing.

Power (2001) examines initiation, puberty and nubility rituals of sub-Saharan communities, where the reiteration of the ideology and cosmology of the group would be a major focus. She reveals that WRONG signals – features such as gender-anomalous menstruants; bloodshed in rites of initiation as forms of circumcision for both sexes; cosmetic marking of members of both sexes of a ritual community, and the collapse of animal and human categories – are prevalent features of such rituals (Power 2001:198; Guenther 1999:98). Such elements are not accounted for by Lewis-Williams’s hypothesis.

Initiation ceremonies may focus on anthropomorphic imagery of specific androgynous creatures, or construct an implicit gendering through manipulation of symbolic and cosmological categories (Power and Watts 1999:101). Similarities between initiation rituals reveal a pattern: that both male and females used the same signals of ritual potency (Power 2004:78).

Potent animals and hybrid beings (wrong sex/species) are prominent too in San narratives and would mediate between the worlds in San cosmology (Lewis-Williams 1981; Solomon 1992; 1994; Knight et al 1995). These ritual structures from ethnography are applied to identify menarcheal ritual scenes in South African rock art, (Power 2004:83-4) and gender anomalous figures from rock art from Zimbabwe and South Africa (Solomon 1994:346; Frobenius 1931; Goodall 1949; Solomon 1992, 1994). These show the kind of ‘WRONG’ iconography predicted for collective fantasies in which humans metamorphose into non-humans and females into males.

European Upper Palaeolithic record

Power (2004:93) tests whether the prediction of the first gods looking ‘WRONG plus red’ might apply to the European Upper Palaeolithic record, and whether the model of the original signature of ritual power described here could be used as a tool for interpretation. She identifies a focus in the art on women’s reproductive signals, coalitionary activity, a link between women and game animals and evidence for the original signature of ritual power.

She identifies for example “WRONG signals” in anthropomorphic and therianthropic art and sculpture, in an association of women with bison (Leroi-Gourhain 1992:158); and in gender ambiguity in stylized Ukrainian figures. She suggests that the significant focus on the dress of female figurines of the Gravettian period is a signifier of women’s ritual and perhaps reproductive status; schematized female figures in dance formation (Bosinski 1991) may hint at kinds of ritualized synchrony. Marshack (1991a,b) demonstrates that vulvas, vaginas, and buttocks were repeatedly overmarked, presumably on different ritual occasions.

Both Watts’ work on ochre and Power’s work on the Upper Palaeolithic of Europe meet the predictions of the model that particular kinds of communal symbolic constructs would appear in the archaeological record.

3.4 Overcoming archaeologists’ skepticism

How can figurine studies draw on this model of symbolic origins? Tests conducted by Watts and Power demonstrate the longevity of symbolic chains associated with the model spanning a period of some ~164,000 years in southern Africa, probably extending back at least ~250 ka in the African tropics, shortly before our speciation.

An important interpretive principle for figurine studies in recent years has been the requirement that interpretation must be closely linked to the mini find-context of the exposed figurine or figurine fragment (Conkey 1987). The contextual school of archaeological interpretation aims to extract meaning from such find contexts alone. As defined by Hodder himself (1990:20), contextual analysis is to “read or interpret the evidence primarily in terms of its internal relations rather than
Evolutionary anthropology is based on the behaviour of our species, *Homo sapiens*. In Darwinian behavioural ecology, the behaviour of individual human social groups in the subsistence and mating systems, and the strategies of individuals, are evaluated in terms of costs and benefits. This acts as a kind of timeless coin, or context, against which behavioural traits can be compared, and predictions made. Power (2001: 41), Miller (1999) and Bogan (1997) locate the most likely arena for evolving human ritual behaviour in sexual conflict and competition rather than in subsistence. Evolutionary anthropology’s quest for understanding the origins of symbolic behaviour and the nature of religion and gods has produced theories to explain the timescale behind this behaviour which can help overcome archaeologists’ scepticism.

An understanding of the conservatism of ritual behaviours can be found for example in signal evolution theory. Zahavi and Zahavi (1997) show how highly standardized signals in animals developed along Darwinian principles. In mating competition, ‘advertisers’ developed signals designed to exploit the perceptual biases of receiver, thus constraining signals to those standardized signals, easy to transmit, which have proved most effective to meet the needs of receivers. Ritualized signals offer a basis for receivers to estimate the quality of the signaler:

“...uniformity within a species — ritualization — evolves out of the competition members of a species engage in to demonstrate their differences.” (Zahavi and Zahavi 1997: 68)

Such a process would be driven by observers who were interested in receiving reliable and uniform signals of quality from signalling coalitions, which by their nature would be long-lived and conservative.

In addition, appeal can be made to Durkheim’s (1961[1912]) requirement of ritual as a generator of collective representation. Collective representations, Durkheim suggests, were generated in the first place through ritual, and this places rigid constraints on their faithful transmission (Gellner 1992). Such collective representations according to Durkheim would be formed and transmitted in standardized and ritualized performance, since errors of transmission would erode this process. A precise, intense collective ritual sequence, demanding a unity and synchrony of action, highly stereotyped, amplified and periodically reiterated, would develop to create and preserve structure in society. Thus the combination of ritual, the collectivity and its religious beliefs were powerful forces for conservatism (Power 2007: 17).

Further support for understanding the conservatism of religious ideas comes from modern cognitive anthropology and evolutionary psychology, in particular in the work of Pascal Boyer. Boyer (1994) considers that salient transcendent
The Handicap Principle is a very simple idea: ability to bear the cost and signal quality. Costly displays act as ‘showing off’ (1997:229) and the differences members of animal species to demonstrate their.

I turn here to Zahavi and Zahavi (1997:68) whose theory of Costly signalling describes the competition between individuals to acquire resources. Zahavi and Zahavi (1997:226) invoke the ritual potlatch ceremony of the indigenous peoples of the Pacific Northwest Coast. Ostentatious hospitality and gift-giving are costly signals demonstrating the quality of the organizer of the feast. An example of human handicap behaviour, though not costly in the same way, is the ritual act of spitting described by Dundes (1992:276) as a defense against the Evil Eye (see chapter six). Spitting is a visible reliable act showing that the person has moisture (life substance) to spare.

3.5 Underlying argument for ritual as costly signalling

Costly signalling

I turn here to Zahavi and Zahavi (1997:68) whose theory of the ‘Handicap Principle’ describes the competition between members of animal species to demonstrate their differences. Costly displays act as ‘showing off’ (1997:229) and the production of such wastefully extravagant signals show an ability to bear the cost and signal quality.

The Handicap Principle is a very simple idea:

“Waste can make sense, because by wasting one proves conclusively that one has enough assets to waste and more. The investment – the waste itself- is just what makes the advertisement reliable.” (Zahavi and Zahavi 1997:229)

For examples of such handicap behaviour amongst humans, Zahavi and Zahavi (1997:226) invoke the ritual potlatch ceremony of the indigenous peoples of the Pacific Northwest Coast. Ostentatious hospitality and gift-giving are costly signals demonstrating the quality of the organizer of the feast. An example of human handicap behaviour, though not costly in the same way, is the ritual act of spitting described by Dundes (1992:276) as a defense against the Evil Eye (see chapter six). Spitting is a visible reliable act showing that the person has moisture (life substance) to spare.

Concepts such as conspicuous consumption (Veblen 1994[1899]), wasteful advertising Mauss (1924) and the accumulation of symbolic capital (Bourdieu 1977) view generosity as individually costly, but collectively beneficial as a form of social competition. Bliege, Bird and Smith (2005:222) demonstrate how the application of handicap theory to these seemingly irrational behaviours can explain the benefits accrued. They hold the view (2005:221) that signalling theory provides an opportunity to integrate theories of symbolic communication and social benefit with materialist theories of individual strategic action and adaptation. The accumulation of symbolic capital, Bourdieu argues is just as ‘rational’ as the accumulation of economic capital, particularly since such capital may be freely converted from one form to another, ultimately in order to gain advantages in the form of additional wealth, power, allies and marriage partners (2005:223).

Costly signalling theory is increasingly applied toward an understanding of religious ritual (Boone 1998, 2000; Irons 2001; Sosis 2003; Sosis and Alcorta 2003; Sosis and Bressler 2003). It contributes too to an understanding of prestige-based hierarchy (Bliege Bird and Smith 2005:221-2; 232), and how prestige may be increased through gaining more powerful ritual knowledge (Godelier 1986, Stanner 1966). Through costly signals, such as ceremonial sponsorship, signalers acquire authority or prestige to resolve conflicts; the long-term benefits of these may include priority of access to resources during periodic shortages (Boone and Kessler 1999; Boone 2000). In particular men gain prestige and other advantages through competitive efforts which provide effective signalling media (Bliege Bird and Smith 2005:233).

I describe next the kind of ideological changes that had to be negotiated in the transition to a new social contract, and suggest some ways in which religion achieved this.

A premise of the hypothesis that cosmetics function as displays of quality by members of the coalitionary alliances, proceeds from the underlying argument for ritual as costly signalling. The greater the effort needed to persuade your target audience (because of inherent conflicts of interest) the costlier the signals.
need to be (Krebs and Dawkins 1984). Producing violations of the realistic requires costly huge efforts, repeatedly invested to overcome receiver resistance in order to establish imaginary communal constructs. In the original scenario of the FCC model, the symbolic body painting requires the collection, preparation and application of brilliant red pigment; these efforts, the investment of energy and resources required to sustain a pantomime of wrong signals, constitute costliness.

Honest costly investment is shown to be reliable in demonstrating commitment to the cohesion and longevity of a social group in that it discourages free loaders and prevents desertion. Sosis and Bressler’s (2003) comparison of the longevity of religious and secular communes in 19th century America find that costly religious observances are reliable in demonstrating commitment to groups, underpinning cohesion and increasing the lifespan of those groups.

Any artifacts which reveal costly investment of energy but are not obviously related to subsistence, in my data, are usually defined by archaeologists as redundant behaviour. I suggest that, according to theories of competitive signalling and ritual performance, this redundant behaviour acts as a cognitive aid to establish and maintain communal constructs and time-resistant mental images of the supernatural.

Archaeologists can benefit from the prediction that cost, repetition standardization, homogeneity and the constraints of features underpin the conservation of a particular kind of enduring/time-resistant iconography. Anthropological theories that attempt to provide general models of religious behaviour by drawing on universal features of human cognition are, therefore, attractive to archaeologists.

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In order to progress with the aim of this study – an understanding of iconicographic features of the human imagery – I adopt a multidisciplinary approach on the lines of Wylie’s recommendation of hybrid models of scientific practice, to combine multi-dimensional sources with the subject side, to constrain reconstructive and explanatory claims about the cultural past (Wylie 2002:10). The sources that I will use come from evolutionary anthropology – whose tools are the biology and behaviours of humans. I will test the predictions of the “Female Cosmetic Coalition” model on data from archaeological assemblages from Neolithic millennia in the Near East and parts of the Fertile Crescent for evidence of time-resistant syntax of “wrong” iconography. I will give a brief summary of the archaeological cultures concerned, and a description of anthropomorphic figurines found in these remains which have been regarded as ‘gods’. I will focus on the expectation of the model that the first gods will be represented as WRONG+RED.
In chapters four and five I present an overview of the archaeology of late hunter-gatherers and early farming cultures in the southern Levant and describe human images, regarded as gods, found in these cultures that span some 6,000 years. A collection of some 200 drawings of these items discovered in these cultures are presented in Part II of this thesis.

The artifacts come mainly from present-day Israel and Jordan, along with examples from the same periods from the Palestinian Authority and neighbouring countries. In some periods, when the figurine assemblages of human images are small, all items are presented. For periods where large sets are retrieved, both whole and fragmentary examples of every type are selected. Some of these are unique. No attempt at quantification is made, but some conclusions about whole assemblages are offered. This work does not attempt an exhaustive parade of identifying parallel artifacts in different places, but presents a full but manageable number of examples from the southern Levant and nearby against which to test my predictions.

4.1 Paleoperspective – Out of Africa

The investigation of Neolithic symbolic iconography must be viewed in the context of the wider debate about an African origin for behavioural modernity, the palaeoanthropological perspective of the increasing consensus on the African ancestry of our species and its subsequent migration and dispersion beyond Africa (Ingman et al 2000; McDougal et al 2005). This provides the context and time-frame for thinking that there may be significant cross-cultural universals. While sparse but significant data suggests that the ‘parcel’ of modern behaviour relating to female menstrual rituals is found in pre-Natufian contexts in the Near East, other elements suggest that a male counterrevolution for control of ritual may have begun much earlier and can predate, or occur in the absence of any Neolithic. In addition, optimal conditions for women’s solidarity as hypothesized by the FCC model, would probably have been seriously undermined some 10,000 years prior to the Natufian as revealed by evidence for faunal and climatic change.

Support for the origins of anatomically and genetically ‘modern’ human populations in Africa between ~150 and 200kya is accumulating. Archaeological evidence reveals the presence of a ‘parcel’ of remains related to symbolic behaviour which increasingly indicates that symbolic traditions extend back in parts of Africa to as long ago as ~300ka (thousand years ago), and in the Near East to some ~135ka. Defined as ‘modern human behaviour’ (Henshilwood and Marean 2003), a gradual and piecemeal pattern of development of new technological and behavioural innovations can be documented within Africa (McBrearty and Brooks 2000; McBrearty 2007).

Archaeological evidence of symbolic behaviour present in MSA South Africa includes features such as the appearance of large quantities of red ochre pigment and sporadic occurrences of perforated marine shells/beads and geometric engravings on red ochre (e.g. Henshilwood et al 2002; Henshilwood 2007). Even earlier evidence from Central Africa includes death rituals and associated ceremonial (White et al 2003; Mellars 2006, 2007; Bouzouggar et al 2007) extending back in parts of Africa to before ~200,000ka.

Evidence is accumulating too for the migration of a small subgroup of Homo sapiens beyond the continent of Africa at ~100ka (e.g. Mellars 2006). The earliest evidence for Homo sapiens having migrated beyond Africa comes from the immediately adjacent parts of the Near East (Hovers et al 2003; Bar-Yosef 2000; Mellars 2002) well before ~100ka.

Symbolic behaviour in the prehistoric Near East

Prior to the Natufian the very sparse evidence for symbolic behaviours in the Near East suggests vulva/menstrual symbolism.

Shells and shell beads

The sites of Es-Skhul and Qafzeh in Israel provide some of the earliest consensually agreed evidence for symbolic culture – most dramatically in the form of ritually elaborated burials, deer antlers and boar mandibles, being held by males. There is evidence too for red ochre (probably implicated in the mortuary practices) and for marine shell use (Wreschner 1975;; Vandermeersch 1969; McBrearty and Brooks 2000; McBrearty 2007; Barham 2002, 2007; Henshilwood 2007; Hovers et al 2003; Bar-Yosef 2000; Mellars 2002, 2005, 2006).

Personal ornamentation (hereafter parure) has long been recognised as a hallmark of modern human behaviour (d’Errico et al 2005; Mellars 2005), and beads and pendants are among the oldest unambiguous evidence of its use. The marine mollusc record for the Near East has been recorded by D. Bar-Yosef (1987); Bar-Yosef Mayer (2006).
A bead tradition dating to as early as 135,000 ka is evident from Es-Skul Israel (Bar-Yosef Mayer et al. 2009; Vanhaeren et al. 2006). Elemental and chemical analyses of sediment matrix adhering to one *Nassarius gibbosulus* Fig. 3 from Es-Skul indicate that the perforated shell bead comes from a layer containing 10 human fossils and dating to ~100 to 135 ka, about 25,000 years earlier than previous evidence for personal decoration by modern humans in South Africa (Vanhaeren et al. 2006). The lower levels of the burial cave of Qafzeh contained human graves, lumps of red ochre and ten *Glycemeris* valves Fig. 1 some of them bearing ochre stains (Bar-Yosef Mayer et al. 2009). The marine shells were naturally perforated, and several valves bear traces of having been strung. These ochre stained shell beads from Qafzeh Cave come from a burial context associated with a thermoluminescence date of ~92 ka (Taborin 2003) predating the MSA evidence for ochred shell beads Fig. 2 from Blombos Cave (~77 ka) (d’Errico et al. 2005; Henshilwood et al. 2004).

Pierced shells, some with red ochre, have been recovered from the Aterian levels at Grotte des Pigeons, Taforalt, Morocco (Vanhaeren et al. 2006; Bouzouggar et al. 2007). The *Nassarius gibbosulus* Fig. 3 beads have been securely dated to about 82,000 ka.

These, together with red ochre accumulation, incised and worked ochre pieces, are related to female ritual performance.

In the period from Es-Skul and Qafzeh up to my data period, very few incidences of this symbolic activity have been identified.

Bar-Yosef Mayer (2005) summarizes changing shell types appearing on Upper Palaeolithic and Epipaleolithic sites in the Near East. Drawings of some early shell species found in these periods appear in Part II. Small globular gastropods, such as *Columbella rustic* Fig. 4 and *Nassarius gibbosulus* Fig. 3 some of them naturally abraded ready-to-use beads, and *Glycemeris* bivalves Fig. 1 appear from the Middle Palaeolithic (Bar-Yosef Mayer 2005:177). Bar-Yosef Mayer traces increasing diversity of types through the Upper Palaeolithic and Epipaleolithic. The diversity reflects an increased preference for new shapes.

*Dentalia* Fig. 6 are added to the repertoire of shells collected beginning in the Upper Palaeolithic through the Epipaleolithic and the Natufian. Elongated gastropod types join the repertoire, such as *Mitrella scripta* Fig. 7:1 in the Upper Palaeolithic and *Anachis miser* Fig. 7:2 in the Epipaleolithic. These are less globular with more pronounced and extended spires. The bivalves and *Dentalium sp.* appear in both smooth and ribbed types.

### Ochred shells

Sporadic finds of ochre-stained gastropods (vulva/menstrual symbolism) appear in the late Upper Palaeolithic site of Ein Aqev D31 in the Central Negev where 11 *Arcularia* shells Fig. 8:1 were collected, 3 covered with ochre (Marks 1976:235). The Epipaleolithic site of Wadi el Julat in the Azraq area of Jordan (Garrard et al. 1985, 1987) produced 6 *Arcularia* shells, one covered in ochre. At the Late Epipaleolithic site of Shunera IV, several ochre smeared marine gastropods were uncovered (Goring Morris 1987:195).

The iconographic similarity of some shells to genitalia has caused some to suggest that this may be the motivation behind their selection. The cowrie shell e.g. Fig. 27:1-3 has been related to female external genitals and *dentalia shells* Fig. 6 to phalli (e.g. Singer 1940; Biggs 1963; and Valla 1999). The association of vulva imagery and red ochre is suggestive of menstrual symbolism. This is discussed further in chapter six.

### Ochre Processing

Evidence for ochre processing appears together with the earliest stone tools identified in Middle Palaeolithic sites. Stains of ochre are clearly visible on the rim of a quem-like stone, one of the earliest stone objects to originate from the Lowest Upper Palaeolithic layer in Qafzeh Cave (Ronen and Vandermeersch 1972 fig. 8).

The presence of ochre in Upper Palaeolithic occurrences and its association with grinding stones is prominent. Along with pieces of raw ochre and smeared stones, stains of ochre were also found on flint artifacts, for example in the Lagaman sites VII and XVI of northern Sinai (Bar-Yosef and Belfer 1977:81). The flint artifacts were probably used to scrape or cut the ochre lumps. Evidence for ochre processing was revealed in Layer D Middle Upper Palaeolithic layers at Hayonim Cave (Belfer-Cohen and Bar-Yosef 1981:34-35), where artifacts with ochre residues were collected, and flint artifacts mainly scrapers and burins carried traces of ochre. One rubbing stone was covered all over with ochre.

Wright (1992:26) listed ochred tools from Upper Palaeolithic contexts. Coimann (2005:162171) reports ubiquitous residues of red and yellow pigments at the Late Levantine Upper Palaeolithic site Thalab al-Bubahraya. A strong correlation between scrapers, ochre and hematite pigments imply that these minerals could have been used in scraping activities that involved the use of ground pigments.

Limestone and basalt grinders, three of which appear to have been used for ochre processing, were recovered from Boker BS (Jones et al. 1983:323-5). From Ksar Akil Layer V in
Lebanon (Late Upper Palaeolithic) a basalt pebble covered with ochre was found.

Givat Hayil 35 an Epipaleolithic (Ramonian) site in the Western Negev (Rosen and Horwitz 2005:221-2 ) revealed reddish discoloration on a heat fractured limestone anvil, or possible large hammerstone, which suggests ochre processing; two large chunks, and chips of ochre were also discovered on the same site.A cobbled with one extremity showing traces of ochre was reported from El-Khiam (Perrot 1951:139).

**Changed conditions – fauna – hunting**

The benefits achieved by women’s solidarity, based on large animal hunting, would probably have been seriously undermined some 10,000 years prior to the Natufian period. African types of megafauna that had been a feature of the Near East through the Late Pleistocene had largely become extinct by ~20,000 years ago, leaving only aurochs remaining among the large game species (Harris 1985:153, Cohen 1977:132). The desiccation associated with the LGM (~22-17ka) saw intensification of selective hunting techniques. Wolf’s (1988) reconstruction of prehistoric hunting methods, based on analysis of age profiles of several ungulate species from Levantine Middle and Upper Palaeolithic sites, demonstrates a change between the Late Upper Palaeolithic and Epipaleolithic. She suggests (1988:92) that this infers a change in exploitation patterns from the catastrophic collective hunting of medium game (drives) observed for much of the Middle and early Upper Palaeolithic to a hunting technology permitting selective targeting of prime-age adults of the species in Epipaleolithic levels (~32-26ka).

**Burials**

Evidence for the use of death rituals and associated ceremonial appears very early in Africa. Three human skulls of a juvenile and two adult males from Herto in Ethiopia are provisionally dated to ~160,000 years ago (White et al 2003; Clark et al 2003; McBrearty 2007:137). The bodies appear to have undergone symbolic ritualistic treatment. The adult skulls bear traces of cutmarks, and the juvenile skull shows traces of polishing to its surfaces and edges.

Early evidence located just beyond the bounds of Africa, but associated with typically ‘African’ forms of early anatomically modern humans, lies in the clear indications of

‘symbolic’ expression represented by the human burials at Es-Skhul and Qafzeh in Israel. These are apparently associated not only with intentional grave offerings, but also with deliberate heat-treatment of red ochre pigments (to change the colours) and a few specimens of perforated marine shells (Hovers et al 2003; Vandermeersch 1970).

Hovers et al (2003:510) suggest that ochre found in context with intentional burials at Es-Skhul was being used in a different symbolic context. In their reply to Hovers et al Knight et al (2003:513) note that it is misleading to assign mortuary symbolism to a separate and unrelated category. The same symbolic structures can appear in all categories. For example intrinsic to hunter-gatherer symbolic initiation is the concept of ‘death’ followed by ‘rebirth’ (Van Gennep 1961) [1908]). In initiations, ‘blood’ signals connote concepts variously translated as ‘temporary death’, ‘fertility’, ‘ritual inviolability’ etc. (Knight 1991).

Belfer-Cohen and Hovers (1992:464) draw attention to the dearth of burials in the 30,000 year period separating the Natufian and the Levantine Palaeolithic. For the intervening Upper Palaeolithic and Epipaleolithic occupations only a few burials, besides isolated skeletal fragments, are known. These include the female skeleton from Nahal Ein-Gev 1, buried with three bovid horns near her left shoulder, culturally dated to the late Upper Palaeolithic (Arensburg 1977); the skeleton of a male from the early Kebaran at Ohalo II (~23,000 years ago) (Nadel and Hershkovitz 1991; Nadel 2002); the burial of a woman in a hut at Kebaran Ein Gev 1 (~16,000 years ago) (Arensburg and Bar-Yosef 1973) and two fragmentary skeletons from the Geometric Kebaran at Neve David (~15,000 years ago) (Kaufman and Ronen 1987; Kaufman 1989).

**Themes all through the mortuary ritual**

In spite of their small number, burials in Africa and the Near East prior to the Natufian incorporate several features of ritual which were to be evident in later mortuary ritual.

The Herto skulls can be said to represent an extremely early example of treatment to and curation of skulls; the mortuary rituals in Es-Skhul and Qafzeh suggest that a selection for male elaboration in the mortuary ritual was evident from as early as ~100 ka. The Es-Skhul burial contains animal bones; the Epipaleolithic Ein Gev 1 burial is an early occurrence of burial associated with a structure. The Ohalo II male burial had a deformity and evidence of a penetrating wound to his rib cage, was buried in an elaborate position, and had an incised bone tool near the skull. An erect stone and a stone circle were part of a burial complex next to the burial (Nadel 2002:63). Fragmented basalt grinding tools were associated with the burial of a male at Neve David (Kaufman and Ronen 1987) – early evidence for the deposition of groundstone in a grave; shell beads of *mitra cornicula*, Fig. 7:3 a gastropod with an elongated sphere, were found near the head and neck of the skeleton.
It is significant too that some of the subjects of symbolically elaborated burials appear to have been males. The African Herto skulls, the Es-Skhul 5 burial, the Ohalo II burial and the Neve David burial were all said to be males; while the skeleton from Nahal Ein-Gev 1 with three bovid horns was that of a female. We must however, take into account the difficulties in sexing bodies on the basis of skulls alone (see May et al 2010 below).

Aggregation sites

Goring-Morris and Belfer-Cohen (2002:69) assume that many prehistoric occurrences represent aggregation sites or localities which served the function of strengthening group cohesion. Such sites are recognized in the Levant already by at least the Epipaleolithic period (2002 note 1) e.g. Early-Middle Epipaleolithic sites Kharaneh IV and Jilat 6 on the Transjordan plateau and the Later Natufian site of Rosh Horesha in the Negev Highlands.

4.2 Terminal Pleistocene cultures

Terminal Pleistocene cultures in the southern Levant are spread over ever increasing territories but last for increasingly shorter durations sug gesting an accelerated pace of change. Different dating systems have been proposed for these millennia. A chronology is arrived at by combining exact measurements made in various ways with relative dating according to cultural characteristics. Researchers must choose between using a calibrated (calendar years) system or the uncalibrated (radiocarbon years) (Simmons 2007:7).

While archaeologists attach importance to more detailed divisions of periods, for the purposes of this study on iconography where relatively few artifacts exist, a general scheme to orientate the reader is offered. For chronology of my data period I follow Barkai (2005) using chronology for the Natufian and Pre-Pottery Neolithic cultures based on Goring-Morris and Belfer-Cohen (1998:75) while dates for the PN, the Pottery Neolithic are based on Gopher (1995a:208).

Although most artifacts in the data come from the same general area, dating systems vary between countries making it difficult to use one system to cover all the data. To give an approximate indication of the periods in which artifacts were found, I use terminology familiar in the southern Levant by names such as Natufian, Pre-Pottery Neolithic A, B and C, and Pottery Neolithic. I refer too to artifacts from other earlier and later periods.

Various investigative techniques have reconstructed a fluctuating climatic regime in the area of my data. Changing rainfall patterns meant that areas suitable for hunting and gathering, and later for cultivation and pastoralism were in turn expanded and constricted, explaining changing settlement patterns in the area.

Local and global climatic events and conditions had created a particularly fertile niche in the Near East, of about 1,100 km long and 250- m wide, called the Mediterranean zone. It provided more floral and faunal species than other areas of the Levant (Zohary 1969; Zohary and Hopf 1994, Colledge 1991). Resources in the Mediterranean belt would have been stable (Bar-Yosef and Belfer-Cohen 1989b), while changing precipitation would place stress on the surrounding steppe and desert belts.

While isolated examples of partially preserved stone lines (wall bases?) can be traced back to the Epipaleolithic (e.g. Bar-Yosef 1975; Martin 1978; Goring Morris 1987:141; Goring-Morris and Belfer-Cohen 2008; Kaufman and Ronen 1987; Kaufman 1989, Maher 2005) the much more frequent appearance of numerous clusters of stone structures in the Early Natufian period was regarded as evidence of sedentism, driven by an abrupt environmental change. This was thought to result in demographic stress, increasingly reduced availability of large game and competition for territories that necessitated a shift of resource scheduling (Bar-Yosef 1998:168). Climatic amelioration associated with the early Natufian would have encouraged the growth of wild cereals in the hilly areas (Henry 1983).

There is no consensus on how and when the change to agriculture and sedentary living occurred. Social differentiation and possible inter-group conflict may have resulted from the changed economy (Bar-Yosef 2007: xi), and it is debated whether this was a sudden or protracted process. Mithen (2004a:17) suggests that the notion of a “Neolithic Revolution” – a term popularized by Gordon Childe (1961[1936]) – has been replaced somewhat by the recognition of continuity between Pleistocene hunter-gatherers and early Holocene farmers (e.g. Bar-Yosef 1998). My presentation of these cultures focuses on their symbolic assemblages of burial and human imagery.

4.3 The Natufian culture ~ 12,500 to 10,200 years ago.

First in the sequence of cultures in my case study is the Natufian culture identified in an area stretching from northern Syria to the Negev desert, but centred primarily in present-day Israel. The most substantial sites are located within the fertile western flank of the Levantine Corridor, a narrow north to south strip of land sandwiched between the Mediterranean Sea on the west and the desert to the east (Byrd 1989:161-163) (see map below for main sites mentioned).
Archaeological Background to the End of the Natufian
The interval from approximately 24,000 – 13,000 years ago in the Levant is commonly referred to as the Epipaleolithic period. The Natufian is known as a late Epipaleolithic or early Holocene culture. It is believed to follow the early and middle Epipaleolithic cultures of the southern Levant (e.g. Garrard et al. 1994; Bar-Yosef et al. 1992; Goring-Morris 1987, 1998; Henry 1989) and is dated to just before the end of the Pleistocene Ice Ages. Researchers divide the period into Early, Middle and Later Natufian. The early part of the Natufian enjoyed mild, humid conditions with optimal rainfall. The later part suffered from the desiccation caused by a sudden freak return to near glacial conditions, a phenomenon known as the Younger Dryas, whose effects were to persist throughout the Neolithic (Bar-Yosef 1998 and refs therein). The sheer volume of material remains in the Natufian within a short time-span contrast with the sparse remains of the preceding Paleolithic cultures which appear over much longer time-spans (Bar-Yosef 1997).

In the Mediterranean zone, large Early Natufian sites are strategically located close to permanent water sources in the biotic zones, seemingly to exploit the wild prototypes of emmer wheat and barley which are to be domesticated later (Henry 1973:189). These wild grain resources are not evenly distributed across the landscape and a selection for locations with wild grain stands for establishing settlements in these areas seems to have operated. The faunal assemblage reveals changes in animal exploitation with increasing selection for ‘small game’ and new species (Stiner et al. 2000).

Rich assemblages of bone, groundstone and lithic artifacts are found on Natufian sites. An early kind of stylized arrowhead, the lozenge shaped Harif point appears at this time (Marks 1973; Marks and Scott 1976; Gopher 1994). Examination has revealed that groundstone items were used for food processing, crushing burned limestone and red ochre (Dubreuil 2004; Weinstein-Evron 1994). The flint and groundstone assemblages are regarded as evidence of intensive food collection or possible cultivation, though almost no botanical evidence has been collected.

**Natufian Architecture**

Natufian structures are circular, made of stone, and many are partially sunk into the ground. Post holes in some sites are assumed to have supported roofs. Bar-Yosef (1998:162) notes that these were first referred to by Perrot (1966) as “pit-houses” in the terminology used for dwellings of some American indigenous people. This assumption that such structures were dwellings led excavators to interpret sites as the remains of villages and the Natufian was regarded as a sedentary or semi-sedentary culture and considered a forerunner of later Neolithic farming communities. Goring-Morris and Belfer-Cohen (2008:273) note that ritual activities at some early Natufian hamlets is suggested by the presence of monoliths as at for example Wadi Hammeh 27 (2008:Fig.4 reconstructed after Edwards 1991), Eynan (2008:Fig.10 after Perrot 1966; Perrot et al. 1988) and Rosh Zin (2008:Fig.10), and the presence of other mobile symbolic items.

Occupations were both in caves and in open territory. Features of the architecture, I suggest, support an interpretation of ritual activity addressing both underground (chthonic) and celestial deities.

Natural penetrations of the earth’s surface such as caves, crevices and niches in bedrock are common locations for communication with the underworld. I suggest that features of the Natufian such as cave occupations, subterranean construction, bedrock mortars and cupholes simulate these natural features and provide such liminal locations.

Ascent symbols such as monoliths, trees, towers (PPNA) and mountain locations are traditionally associated with communication with both the celestial and underground worlds (Cook 1974:9).

The image of the Cosmic Tree or Tree of Life belongs to a coherent body of myths, rites, images and symbols which together make up what the historian of religion Mircea Eliade (1978:26) has called the ‘symbolism of the Centre’. All symbolic images of the Tree participate to some degree in this symbolism. The Centre is the point of ‘absolute beginning’ where latent energies of the sacred first broke through and supernaturals beings first created man and the world. In the symbolism of myth and religion it is imagined as the axis of the world (Axis Mundi). The idea of the cosmic axis is extremely ancient and widely diffused embodied primarily in three images which are to be found in a great variety of forms throughout the world. These are the Pillar or Pole, the Tree and the Mountain (Cook 1974:9).

Trees are also considered interchangeable with a goddess in the later iconography of the ancient Near East (Keel 1998:19). The goddess Asherah appears in the form of a tree. Evidence for posts in the Natufian may indicate not roof supports, but worship of celestial gods whose burnt offerings required roofless structures (Parry 1982:83; Jones and Pennick 1995:12) and which allow smoke from burnt offerings to ascend. Deposition of human remains in relation to post holes suggests sacrifice to such celestial gods e.g. a post hole intrudes into the grave of an elderly female at Eynan (Perrot et al.1988:29,32).

Natufian sites are characterized too by installations such as pavements, hearths, graves and pits (Bar-Yosef and Valla 1991; Perrot 1966; Valla 1995). The largest Natufian sites contain several structures. Both the ritual significance in Natufian
Archaeological Background to the End of the Natufian

structures and the labour required for their construction support their description as monumental architecture.

The definition of sedentism, once based on the presence of durable architecture (e.g. Bar-Yosef and Belfer-Cohen 1989b: 447-8; Valla 1995:183; Lieberman 1991) today rests on biological data (e.g. Tchernov 1991; Bar-Yosef and Valla 1991:5 and refs therein).

Natufian burials

Several hundreds of individuals (Belfer-Cohen 1995), men, women and children, are buried in caves, pits or in abandoned structures in some sixteen sites in Israel and Jordan. The majority come from richer sites such as Hayonim Cave (Belfer-Cohen 1988), El-Wad (Garrod and Bate 1937) and Eynan (‘Ain Mallaha) (Perrot et al 1988). Burials are both single and multiple. Skeletons are found whole, disarticulated or as single bones.

Bone parcels of partial skeletons, disarrayed clusters of bones, often of cranial and axial bones, are considered to be secondary burials (e.g. Belfer-Cohen 1988:132; Bar-Yosef, 1998:164; Nadel 1992:133). The definition of secondary burial originates in analogies from modern hunter-gatherers and is associated with the idea that burials of packets of bones represent the bones of loved relatives ‘brought home for burial’ (e.g. Rollefson 2000:185). The custom of secondary burial may be regarded too as an elaborate form of the general tendency toward representing death through manipulation of the corpse – marking a liminal or intermediary period during which the remains of the deceased are recovered, ritually processed by defleshing and drying, and moved to a new location (e.g. Huntingdon and Metcalf 1979).

Hertz (1907) drawing on Hubert and Mauss (1964[1899]) notes a connection between secondary disposal and sacrifice in the conception that objects must be destroyed in this world by violent killing, or slow decomposition in order that they may pass to the next (Hubert and Mauss 1964[1899]). Sequential burial pits with evidence of opening and adding or removing bones are a feature of Natufian and following Neolithic mortuary ritual (Byrd and Monahan 1995).

Congenital condition

A distinguishing feature of the Natufian skeletal population is the presence of a congenital dental condition in some skeletons from El-Wad for example – many skeletons with this condition are decorated (Belfer-Cohen 1995:12).

Ochre/burial data

Rich evidence for ritual symbolic behaviour in Natufian burials reveals continued use of red ochre pigments. Ochre pigments are found in Natufian sites and graves, on human bones, and evidence for processing appears on groundstone and flint tools. Ochre lumps were recovered from the site of Wadi Hammeh 27 (Edwards 1988:312); Erq el Ahmar (Neuville 1951) as well as from burials at Eynan (Perrot et al 1988:87, 90.91).

Many ochre stained bones were revealed at Nahal Oren (Fiedel 1981:176-8) and at Wadi Hammeh 27 (Webb and Edwards 2002:116, 119) where long bones from a multiple burial were stained with red ochre (2002:109). A dot of red ochre marked the forehead of a male from Hayonim Cave (Noy & Brimer 1980, citing Bar-Yosef 1979:95).

A fragment of a Cerastoderma glaucum (Fig.8:2-3), a ribbed bivalve shell from Eynan (‘Ain Mallaha), has an artificial hole above the umbo and has ochre stains on the lip (Bar-Yosef Mayer 2007:156). A dentalium bead segment with traces of red ochre on its surface, a gastropod and a broken bivalve with artificial perforations were found at Raqefet Cave (Nadel et al 2008:123).

Ochre processing

Belfer-Cohen and Hovers (2005:300) reviewing ground stone assemblages of the Natufian and Neolithic in the Levant, relate red-stained items to the preparation and processing of pigments such as ochre, a habit that persisted well into the Neolithic.

Ochre stains are noted on ground stone artifacts from Eynan (‘Ain Mallaha) (Perrot 1966:466). In Hayonim Cave, Belfer-Cohen (1988b:305; 1991:578-9) found ochre-stained groundstone tools both in the graves and in the living area of the cave; a unique Early Natufian clay ball from Hayonim Cave is smoothed and polished and its surface bears prints and ochre stains (Belfer-Cohen 1991:576, fig. 8:5). An ochre stained cupmark is noted at Hayonim Cave (Belfer-Cohen 1988:111); and traces are found on a hammerstone (1991:576) and on incised limestone fragments (1991 Fig.8:2, 6). Ochre stained pestles were recovered from most of the core area sites (Belfer-Cohen 1991:584); at Hayonim Cave (Belfer-Cohen 1988b:111); they were observed at El-Wad Cave (Garrod and Bate 1937:41; Weinstein-Evron 1998) and Wadi el Hammeh 27 (Edwards 1991:129).

Use-wear analysis on ground stone items found in the burial cave of Hilazon Tachtit (Dubreuil and Grosman 2009:950) shows them to have been used for processing hides with ochre which the authors suggest may have been for hide decoration.

Shamanism

Traditionally shamanism has been regarded as primarily a phenomenon of the tribal religions of Siberia and Central Asia and North and South America (Siikala 1987:208-215; Furst 1987, 1992[1976]:4; Gill 1987:216-219). The terminology and basic definitions of shamanism which apply across the board originate in Siberia and Central Asia.

Today the term shamanistic religion is applied to societies that regard ecstatic trance as the primary religious experience. Lewis-Williams’s (1997:323-4) definition of ten central characteristics of shamanism as it is practiced in hunter-gatherer societies, frees the use of the word shaman from its conflation of human and animals predicted by the FCC model to relate to the supernatural. Where once animal identity was borrowed to signal the ritual state of females and their movement between worlds, in shamanism, animal powers and appearance are fused with the person of the shamans in their out-of-body flight to supernatural realms. Wrong species signals, a conflation of human and animals predicted by the FCC model to relate to the supernatural. Where once animal identity was borrowed to signal the ritual state of females and their movement between worlds, in shamanism, animal powers and appearance are fused with the person of the shamans in their out-of-body flight to supernatural realms. Wrong signals, indicating the supernatural, have been appropriated by ‘ritual specialists’.

Assuming that ritual specialists were present in all hunter-gatherer communities throughout the world and on all continents regardless of other differences (e.g. Eliade 1964; Winkelman 1990; Harner 1973; Vitebsky 1993; Bar-Yosef 1997:176-7; Lewis-Williams 1984) it should be possible to identify shamanistic ritual in the Natufian. In particular, the remains of non-perishable animal parts could indicate the animal powers active in shamanic rituals. Animal power symbols might be incorporated in shamanic regalia, parure and other paraphernalia. In some Siberian groups, the family clan took care of the shaman’s vestments and ritual objects (Diakonova 1994:251) and practiced a special form of burial for the shaman with his costume.

The vestments incorporate the shamanistic worldview. Regalia were considered to be the armour of shamans; pendants or other elements signal their ability to change into animals; other parts give them the ability to see and communicate with spirits of the other worlds and with the souls of the living and the dead (Diakonova 1994: 252).

In sum, the shaman’s costume broadcasts the shamans’ status and abilities to communicate with other worlds (1994:252). The entire costume is considered a ‘live organism’, a mixed image of a beast and a bird (e.g. Prokofyeva 1971; Pavlinskaya 1994; Theodoratus 1994:221; Furst 1992:140).

Animal motifs are dominant in Natufian material imagery and Grossman et al (2008) have drawn attention to animal parts deposited in burials as an identifying feature of a shaman burial.

By the same token, beads made of marine shells, animal bones and teeth found on Natufian sites and in graves, can be regarded as part of shamanic regalia buried with the shaman and indicating their powers drawn from these animals.

I review the evidence for animal parts included in Natufian graves, and in the ornamentation found in the ‘decorated burials’.

Animal remains in burials

Animals found in whole or part, intentionally placed in Natufian graves, include dogs, horses, tortoises, stone martens, aurochs, gazelles, golden eagles and wild boar.

**Dogs:** Intact remains of dogs, the first domesticates, are found in graves with humans, often clearly in contact with one another (Valla et al 1991:102; Tchernov and Valla 1997; Perrot et al 1988; Davis and Valla 1978). Ronen (2004:153) points out that the wolf, *Canis lupus*, is widely accepted as the most probable ancestor and closest relative of the domesticated dog (Scott and Fuller 1965:54; Davis 1987; Clutton-Brock
Gazelle horn cores and tortoise shells and various animal parts are intentionally deposited with skeletons (e.g. Grosman et al. 2008). Tortoise carapaces are found in a number of Natufian graves, the most spectacular being that of a female shaman at Hilazon Tachtit (Grosman et al. 2008) where remains of more than fifty tortoise shells are deposited. The grave also contains body-parts of stone martens, aurochs, golden eagle and wild boar (2008:17667). Carapaces are also found in a grave at El-Wad (Garrod and Bate 1937:14) and a burial at Hayonim Terrace contains a complex arrangement of two dogs, and two tortoise carapaces with two humans (Tchernov and Valla 1997). In the same burial a male skeleton has a gazelle fragment under his right arm and chest and a gazelle horn on the upper thorax and right shoulder (Valla le Mort and Plisson 1991).

Gazelle horn cores are found in burials of both males and females. Most references to horn cores mention that they are from a male animal. In Raqefet Cave a horn core of Gazella gazella lies close to the palm of an adult skeleton; in a female burial at Eynan, four gazelle horn cores are found; one pair placed near the head (Perrot et al. 1988:59); a fragment of bowl and a horn core appear with a female shaman in Hilazon Tachtit (Grosman et al. 2008). At Kharaneh (Muheisen 1985), a male skeleton has two gazelle horn cores placed on either side of the head. A complete horn core of Bos primigenius with three perforations was found standing in an arched position in the ground at Azaq 18 (Garrard et al. 1987:21).

A high percentage of horn cores from the faunal assemblage of El-Wad Terrace was burnt (Weinstein-Evron et al. 2007:95); similarly a cache of 15 burnt horn cores of male gazelles was found in Hayonim Cave (Belfer-Cohen 1988:90). At Nahal Oren burnt polished small gazelle horns were collected. Fragments of antlers were present in a burial at El-Wad (Garrod and Bate 1937:15).

Other non-perishable animal parts – horse teeth (molars) are found deposited in the grave of a decorated adult female accompanied by 6 human skulls (four adults and two children) at Erq el Ahmar (Neuville 1951). A single horse molar lies next to each cranium.

Remains of wild boar are deposited in graves in El-Wad Terrace (Weinstein-Evron et al. 2007:89) in Hilazon Tachtit (Grosman et al. 2008), and in Raqefet Cave (Nadel et al. 2008:112).

In addition to the animal remains, there are single instances of bone tools, figurines, groundstone items, and flint in graves.

Symbolic meanings of animal parts deposited in graves

Possible meanings relevant to shamanic ritual can be suggested from some of the animal remains found in graves. Some interpretations are drawn from history and ethnography – some are specific and some cross-cultural. I present some examples relating animals found in Natufian graves to shamanic ritual; these may provide indirect evidence that these are indeed burials of shamans.

Dogs

Collins (1992) lists cross-cultural references to rituals and tasks associated in particular with puppies and the healing properties of dogs. In Mesopotamia, the dog was considered sacred to the goddess Gula, a healing deity. The clearly close relationship between a dog and a female in a grave at Eynan recalls the pictorial representations of the Sumerian goddess of healing Gula, who is shown seated, accompanied by a dog, her alter ego and symbolic animal (Black and Green 1992:77,101). While goddesses and dogs appear together in iconography, the dog alone can represent the goddess (Fuhr 1977: 137-138).

Young dogs play an extensive role in Hittite ritual. In the ritual of ‘Zuwi’ (Collins 1992) puppies act as agents of purification in a transfer ritual where they would lick away a sickness or impurity. They are also used apotropaically to protect from evil, are sacrificed, and used in severing rituals (Collins 1992). The presence of dogs in some Natufian graves may indicate that these are graves of shamans whose healing powers are identified with and performed through the accompanying dogs.

Gazelle horn cores

An element of the gazelle frequently found deposited in graves is the horn core and this is often found burnt (see above). Among the Kalahari Ju’hoan Bushmen, Bieseley (1993:108) relates, magical transformations can be accomplished by burning horns. In African trickster tales which are closely associated with themes of origin (1993:110:196), hair and horns are two of the instruments used for entering a trance and changing the weather (1993:112). Medicine smoke raised by burning eland horns and pouring fat onto coals in tortoise shells would summon the lightening and the rain (1993:103-5, 109, 114). Rain medicine is carried in a tortoise shell box (Bieseley 1993: 98, 104, 114). Schapera (1971:48) describes rainmaking ‘medicines’, compounded of many different ingredients which are burned together in a potsherd, crushed to powder, mixed with fat, and kept in a horn. Thus burnt horn cores in a grave might relate to the rainmaking powers of a shaman.

1987). At Eynan, a woman is buried with a young puppy, her left hand resting on the animal (Perrot et al 1988:34).
**Horses**

The horse is the characteristic means of accomplishing the shamanic journey and an essential element in shamanic ritual in Central and North Asian (e.g. Eliade 1964:67,151; Diakonova 1994:249; Diachenko 1994). The horse is also regarded as the pre-eminent funerary animal (Eliade 1989[1954]:67, 70). It is the most important and ritually elaborated animal in the Franco-Cantabrian decorated caves of the Upper Palaeolithic (Bahn and Vertut 1988:120) where Lewis-Williams (1997:337) suggests a certain amount of the imagery can be said to be shamanic (and see Eliade 1978:503).

The horse is the earliest known engraved animal in the Levant. Incisions on a limestone pebble from Upper Palaeolithic (~29-27kya) Hayonim Layer D are interpreted as depicting a horse (Belfer-Cohen and Bar-Yosef 1981; Bar-Yosef 1997 figure 4). Marshack (1997:62, fig.8) describes a sequence of engraving on the artifact as showing the same kinds of overmarking found throughout the European Upper Palaeolithic. During the sequence a running horse is depicted, then killed by darts or spears. The stone is overmarked with red ochre. Marshack (1997:62) suggests a possible function for the artifact such as a rubbing stone to make ochre powder or a symbolic “killing”, possibly as part of hunting magic scenario by a hunter or ritual specialist such as a “shaman”.

Describing the symbolic role of animals in historical burials, Crabtree (1995:21) suggests that animal bone remains from ritual contexts can provide valuable evidence about the use of animals in ritual and about their symbolic, rather than purely economic, function. Quoting Meany (1981:131), she claims that:

“even if only one horse tooth were buried, it may have been symbolic of the whole horse, and therefore of the journey to the other world.” (1995:21)

Crabtree (1995:23) suggests too that single teeth may represent token bones, symbolic of the whole animal. The horse molars from the Erq el Ahmar burial might thus indicate a steed for the journey to the other world and suggest that they are related to the burial of a shaman with powers of travel between worlds.

**Carapaces**

It is suggested that the breakage patterns of remains of tortoises in Hilazon Tachtit (Grosman et al 2008:17667) indicate their consumption as part of a feast the intermediate of the deceased. The ethnographic references to burnt tortoise shells as rainmaking aids, and the use of tortoise shells as rain medicines (see Biese 1993 and Schapera 1971 above) however, suggest that their symbolic function too must also be considered. The fact too that patterns of tortoise carapaces are included in the repertoire of motifs of the Natufian for example on engraved groundstone vessel fragments from Wadi el Hammeh 27 (Edwards 1991:Fig. 10) supports the suggestion for their symbolic function.

**Parure**

A small number of skeletons (6%) from Early Natufian sites (Belfer-Cohen 1995) are decorated with necklaces, bracelets, pendants, headaddresses and belts made of animal teeth, bones and shells, especially dentalium shell beads and carved bone pendants.

Pendants are cut from particular parts of animal bones. The distal ends of gazelle phalanges for example, are carved into beads; some 32 pendants may have been a headdress of a young child in a group burial at El-Wad (Garrod and Bate 1937:126 and Pl. 12c). Such beads formed part of the necklace of an adult male, and a male adolescent at Eynan (Perrot et al 1988; Perrot 1966). The use of gazelle bones in beads may suggest that those who were buried wearing such beads were shamans or their relatives with special powers of flight.

Bone pendants cut from the tibio-tarsus of partridges formed part of the ornamentation of an adult (male?) at El-Wad (Garrod and Bate 1937:126), and part of a headdress of another adult at the site (1937: 125 pls.11b,12a); a bracelet of such pendants adorns the wrist of a male buried at Hayonim Cave (Belfer-Cohen 1995:13). This might indicate that shamans buried with these beads had certain powers attributed to the partridge such as flight.

The twin beads found at El-Wad Fig.14 were cut from unidentified animal bone. However their potency may lie in their iconography. I offer interpretations for the iconography of different ornaments made from animal bone in chapter six.

Parts of animals used in the parure include fox, gazelle and partridges. Perforated fox teeth are incorporated in the parure for example at Hayonim Cave where a female has one near her head and one between her legs. Belfer-Cohen (1995:13) speculates that these may have belonged to a belt of dentalium and bone pendants; a male buried at Hayonim Cave had an armlet of perforated fox teeth (Belfer-Cohen 1995:13) and single tibio-tarsus beads, bone pendants and beads are found in other burials at Hayonim Cave (1995:13). At Raqefet Cave, Lengyel and Bocquentin (2005:280) note that an adolescent is associated with two canines of wolf or fox.

Later historical symbolic meanings are attached to foxes and partridges (e.g. Graves 1948:327-329). Fox teeth in parure may be associated with the healing power of dogs.
I suggest that the beads made from animal parts in the parure, like the shells, signal ritual potency. This quality, like that of shells can be identified in their shape. The significance of bead shapes is described further in chapter six.

Two kinds of dentalium bead headdresses are illustrated from El-Wad Cave. An adult male in El-Wad Fig. 15 has a circlet of bands of dentalia around his head. Another headdress from El-Wad appears to cover more of the cranium Fig. 16. At Eynan dentalia arranged in fan shapes adorn an infant burial Fig. 17 (Perrot et al 1988 Fig.22).

Social stratification

The selection of some six percent of burials for ornamentation is the prime evidence cited in support of social stratification. It is suggested too that differences in parure between sites could mark distinct group identities (Belfer-Cohen 1988b).

Wright (1978) suggests that social stratification can be identified in the Natufian. He claims to identify two different subgroup affiliations in types of group burials in the El-Wad Cave and Terrace. In addition, Wright (1978:14) suggests that the dentalium shell symbolizes a particular status position that was inherited within one of these affiliations. In a re-examination of the burial evidence cited by Wright to support his claim for social stratification in the Natufian, Belfer-Cohen (1995) exposes some discrepancies regarding the chronological assignment. Belfer-Cohen (1995:15) argues too in response to Wright that the widespread occurrence of the dentalium beads does not support a claim for luxury goods. I believe that here, Belfer-Cohen is relating to economic status, while Wright, (1978:221) is referring to ritual status shared by particular individuals. I concur with Wright’s suggestions, and suggest that it is the ritual potency identifiable in the iconography of dentalium beads that confers status. I develop this idea further in chapter six.

The variations of intact and dismembered skeletal remains, decorated and undecorated subjects and varied positions which appear in Natufian graves do, however, suggest some kind of social differentiation. This idea is raised by Gopher (1995c) who notes that the selection for a small percentage of skeletons for elaboration requires a form of social explanation, especially for children. Gopher (1995c:914) suggests that elaborate child burials hint at the existence of some kind of an ascribed status or even hereditary inequality.

If some Natufian burials are considered to be those of magic-religious specialists, then some of these variations might be explained as different ritual affiliations and evidence for differential powers or success of the ritual specialists/shamans preserved and buried with their regalia. The presence of six per cent of subjects wearing ornamentation signalling ritual potency might suggest an internal stratification of a select group. The stratification is of a ritual kind indicating that shamans or ritual specialists active in these millennia may have acquired an elevated ritual status.

Grossman et al (2008) present some of the most compelling evidence for shamanism, and a mortuary ritual apparently involving feasting.

Kuijt and Finlayson (2009) describe storage units through the Natufian “grain bins” to the PPNA granaries which they relate to sedentary living. The discussions about food storage (Kuijt and Finlayson 2009; Kuijt 2009) do not, however, relate to the decoration of grain processing tools such as sickles and mortars with motifs of animals and meanders (e.g. Noy 1991:fig. 5:1, fig.6) and that in the Natufian and PPNA especially, pestles were phallic shaped (see chapter six). The paraphernalia surrounding grinding may indicate a ritual context for the substance.

Status and burial position

Burial positions of the interred or ‘unusual arrangements of the body’ are varied. Some flexed bodies are deposited in a ‘sitting’ position, some apparently bound with open legs e.g. Figs.18,19 others are tightly flexed, possibly bound into a curled-up position on their sides or placed on their back; there is too a wide variety of hand positions and head orientations (Grindell 1998).

Consistently high social status indicates the importance of shamans as social leaders in their societies (e.g.Winkelman 1990:333). Status in burial may be expressed by selection for a particular burial position or location. Both archaeological and ethnographic sources cite special burial positions for persons of high status or shamans. These ascriptive burial positions are said to relate to access to the other world – horizontal for accessing the underworld, or upright for the celestial. A cave location might be chosen for access to the underworld; a mountain location for celestial access (e.g. Parker-Pearson 1999:77; O’Shea and Zvelebil 1984). Skeletal remains in a seated or reclining position in Oleneostrovskii Mogilnik cemetery were interpreted as shamans’ graves (O’Shea and Zvelebil 1984:36,3b). This burial position it was suggested was ascriptive or hereditary.

In an example from the Lower Congo area of Africa, the corpse of an important man was buried standing up, and fabrics were wrapped around the dried corpse (Barley:1994:119).

The sitting position, too, is related to trance journey; in the Sora tribe on the east coast of India, a shaman undertaking a trance journey to the Underworld, sits down with her legs pulled up to her chest Fig.17.
stretched straight out in front of her, a posture not used at any other time (Viterbsky 1993:18).

Bird and Monahan (1995:261) drew attention to this rare sitting position in the Natufian mortuary assemblage.

The identification of position from Natufian burials is however problematic, due to the lack of a standardized consistent body of terminology, and the state of preservation of the skeletons. Examples of sexed Natufian sitting burials were mostly of females, some decorated, some with animal parts in the grave, and some with open legs.

Thus burials where the body is placed in an upright position, sitting, kneeling or crouching as opposed to lying may indicate a status burial, and suggest another possible means of identifying shamanic burial.

**Shamans in the burials**

Male female and child burials had features which might identify them as shamans and suggest that hereditary status operated. From a rough estimate of some 40 sexed adults with features which could suggest ritual specialist/shaman, 23 were male and 16 female. More females had sitting or upright burial positions, dogs and tortoise carapaces in burials; the only horse remains were found in a burial where a female was the sole intact burial.

**Summary**

This short review of some possible interpretations of animal remains found in graves suggests that their inclusion may be related to shamanic ritual, trance equipment; steeds for otherworld travel and symbols of the traditional role of healing. Other features such as burial positions may also be ways of identifying shaman graves.

The presence of what appear to be considerable numbers of female shaman burials suggests that ritual power was not wholly in the hands of males; in the Natufian period females still appear to play a significant role in ritual affairs.

**Natufian population – physical characteristics and evidence of violence**

The Natufian skeletal population appears free from serious disease or deficiencies, but occasional evidence for violence has been documented (e.g. Bocquentin and Bar-Yosef 2004). Skulls with attached remains of vertebrae (Perrot 1966; Perrot et al 1988:49, Fig. 27) suggest possible evidence for in vivo decapitation and challenge theories of the non-violent nature of the population.

Some (e.g. Perrot et al 1988: 93; Belfer-Cohen 1995: 9-11; Nadel 1992: 133; Bar-Yosef 1998: 164) claim that a cult of deliberate skull removal from graves started in the Late Natufian. Isolated skulls, and crushed and fragmented skulls, are found throughout the Natufian (Bienert 1991), some decorated with red pigment; some with weapons lying by them (Perrot et al 1988: 22, 46; Orrelle 2008a). The curation of cranial and mandibular fragments (e.g. Neuville 1951:109-110), and the decoration covering a head trauma (Belfer-Cohen 1991, 1995:12) suggest a sacrality of the injured or fragmented skull.

In one site especially, congenital characteristics of the population include a high frequency of an inherited condition of missing third molars relative to other populations of comparable tooth size, pointing to consanguinity between the people buried there (Smith 1995).

**Natufian imagery**

The Natufian symbolic assemblage includes a small group of three-dimensional images. These are mostly of animals with some humanlike parts mainly heads and genitals. Naturalistic carved animal images are also found in the Natufian.

The highly schematic abstract Figs.20:1-2 are thought to be human heads (e.g. Perrot 1966; Yizraeli-Noy 1999:24). Marshack 1997:75 suggests that these are perhaps “spirit” heads in which over-large eyes are the dominant feature.

Fig.20:3 has a horizontal incision at the neck. This is the earliest example of this feature which came to characterize human ‘heads’ throughout the following periods.

Images of what appear as detached male or female genitals are present. A realistic representation of a phallus carved on limestone Fig.21:1 may be post-Natufian. Fig.21:2 appears to have a phallic prepuce at each end; one is incised with an encircling groove apparently to indicate the foreskin, and has a slit at the top. Both prepuces are square. Fig.21:3 is an elliptical oval pebble with a single incised horizontal groove. Fig.21:5 is thought to portray a phallus (Weinstein-Evron and Belfer-Cohen 1993). Weinstein-Evron and Belfer-Cohen (1993: 104) point out that phallus shaped pestles have been recovered from Hayonim Cave and Wadi el Hammeh (Belfer-Cohen 1991; Edwards 1991) and El-Wad (Garrod and Bate 1937; Weinstein-Evron and Belfer-Cohen 1993).

Oval pebbles with central vertical incised slits e.g. Fig.22:1-7 are suggested by some (Gopher and Orrelle 1996; Stekelis 1972; Edwards 2007) to indicate female genitals. These
items continue to appear in later periods. Some have multiple linear incisions e.g. **Fig.22:4-7; Figs.23:1-2** on one or both facets. Others, for example **Figs.23:3-4** are incised with grid geometric motifs.

An elliptical artifact made on a horn core **Fig.24:1** has a human head at one end and an animal-like head at the other. Bar-Yosef (1998:166) suggests that this item shares the same ideology as the joint dog and human burials. Human and animal features are mixed in **Fig.24:2**, a combination of an animal and a phallus, and it has been suggested that **Fig.24:3** has bird-like characteristics (Noy1991:564); she did not include it in her catalogue of human images (Yizraeli-Noy 1999). Bar-Yosef (1997:171) suggests that it is a baboon. A unique figurine attributed to the Natufian **Fig.25** is said by some to represent a couple engaged in sexual intercourse (Perrot 1966; Noy 1991; Weinstein-Evron and Belfer-Cohen 1993; Bar-Yosef 1997). The meander motif on the groundstone processor **Fig.26** contemporary with the Natufian appears to resemble snakes.

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The emergence of the Natufian communities from a world of Levantine hunter-gatherers is seen as resulting from both economic and social circumstances. Bar-Yosef (1998:167-8) explains a process of semi-sedentary human groups acquiring a ‘firmer hold over territories’ as part of strategic moves in competition for resources. In this Natufian culture, described as a major turning point in the history of the Near East (Noy 1986), it appears that climatic fluctuations and other factors motivated human groups to develop strategies to cope with the changing availability of game and vegetal resources on their nomadic route. The solution, it is suggested, was the establishment of a series of semi-sedentary Early Natufian hamlets in a delineated homeland.

The small imagery assemblage attributed to the Natufian, albeit often some from insecure provenances, includes iconography of ambiguous categories of humans and animals in both schematic and naturalistic styles which suggests signals of a supernatural nature. This would indicate that the WRONG SPECIES signal of the supernatural was operating.

The ochre record and the evidence of shell bead jewellery suggest continuity with African origins of ‘modern’ behaviour. Ochre, the WRONG TIME SIGNAL is found in Natufian sites and graves, on human bones, and evidence for processing appears on groundstone and flint tools. There is an example of an ochre-stained shell. Skeletal remains are interred in strange postures, some of them decorated, some in graves which include red ochre. A rich assemblage of shell beads, and beads made from animal parts is evident on site and in the graves possibly identifying them as shamans’ graves. Motifs in shell bead ornamentation foreshadow common motifs in later prehistoric periods.

The data provides evidence for hierarchy in the mortuary remains and distinct features identify graves of ritual specialists (shamans). Such graves are recognized from ornamentation, animal inclusions, special burial positions and congenital conditions. Ritual appears to be under the control of ritual specialists, shamans, and it appears that female shamans were still a considerable force. Child burials with distinguishing features of shamanism suggest that shamanic powers were hereditary and that a form of ascribed status was operating.
5.1 Pre-Pottery Neolithic period
~10,200 – 7,600 years ago

This archaeological unit is named by Kathleen Kenyon (1957), the British excavator of Jericho, to distinguish early Neolithic remains from later pottery-bearing units. She divides it into subdivisions called Pre-Pottery Neolithic A and B; I shall use her original Pre-Pottery Neolithic names (hereafter PPNA and PPNB). A later unit the PPNC was defined. Together these Pre-Pottery units span some 2700 years. Desertic sites, such as those in Sinai, make up a different entity (Goring-Morris 2000).

Pre-Pottery Neolithic A ~10,200-9,500 years ago

The southern Levantine PPNA sites were originally found mainly in the Jordan Valley and the hilly areas of Israel. A greater geographical distribution was identified with sites in the Central and Northern Levant in Southern Jordan and in Turkey (Kuijt and Goring-Morris 2002:367, table II, 369-382; Mithen 2004a). Selected sites are shown on the map for the period. The iconography of human imagery in this period differs from that of the earlier Natufian assemblage, and iconographies in the different regions where PPNA remains are found can vary. The choice of settlement locations is no longer seen to be for optimal foraging of vegetal and animal resources, but is thought to relate to cereal cultivation.

Two cultures have been recognized in the Jordan Valley during this period – the Khiamian and the Sultanian (Echegaray 1966, Crowfoot-Payne 1983), both defined largely by their lithic industries. The Khiamian is believed to represent the seasonal activities of small, ephemeral groups of mobile hunter-gatherers outside the expanded Mediterranean vegetation belt of the Early Holocene. In the Jordan Valley sites, natural pink and purple flint is extensively used (Kuijt and Goring-Morris 2002). Large amounts of oats and barley seeds, and small amounts of acorns (see Rosenberg 2008) and pistachio were collected in this area. Kislev (1997) described possible domesticated cereals at Nettiv Hagdud. Broken tools and figurines are found in contexts of small pits and in relation to the walls of structures (Noy et al 1980, Noy 1986; Yizraeli-Noy 1999).

The Sultanian sites favour locations in the contemporary steppic environment of the Jordan Valley. Intensive collection or cultivation of cereals, mainly barley and some wheat is postulated for these Jordan Valley sites and those in the Damascus basin and Mureybet (Kislev et al 1986; van Zeist and Bakker-Heeres 1982; Hopf 1983). The overall picture is of a broad spectrum economy similar to that of the Natufian. Remains of hunted animals found in Jordan Valley sites include predominantly gazelle, some fallow deer, wild boar and wild cattle, birds, lizards, tortoises and foxes. Carruthers and Dennis (2007) report bones of wild goat from WF16 in Jordan showing some possible indications of being under human control, a kind of proto-domestication. New marine shell types such as Glycemeris bi-valves and cowries Fig.27:1-3 appear alongside dentalia. Shells are brought mostly from the Red Sea and less from the Mediterranean coast as was the case in the Natufian (Bar-Yosef 1998:172).

Architectural structures of the period are of stone, circular and oval-shaped as in the Natufian tradition, with mud coatings and floors of beaten earth. Some are subterranean, others divide internally, and form transected circular or oval shapes. Small stone or mud-brick structures are regarded as ‘silos’. A tower constructed of stone in Jericho is considered to be a public structure which Barkai and Liran (2008) suggest was aligned to the midsummer solstice sunset and was thought to fulfil a cultic role (Kenyon 1981; Bar-Yosef 1986; Ronen and Adler 2001; Nave 2003; Goring-Morris et al 2009:210). Skeletal remains are found in the tower, and storage facilities are found nearby (Kenyon and Holland 1981). In the site of Çayönü, an open space suggests a special function such as a plaza as described by Özdoğan and Özdoğan (1989).

PPNA burials

A few hundred human burials are known from this period both primary and secondary. Kuijt (1996:319) suggests that, compared to the Natufian, the PPNA burials systems are relatively standardized; a differentiation between adults and children is a dominant feature (and see Hershkovitz and Gopher 1990). Kuijt (1996:314) notes that similarities in mortuary rituals between the Natufian and PPNA are more pronounced than previously recognised. He suggests that secondary mortuary practices involve:

“...an element of communal ancestor worship as part of a collective social memory and identity.” (1996:317)

The collecting of generalized ancestors and the development of highly standardized rules he claims, contribute to the articulation of a shared identity (1996:317).
Burial in relation to structures and the fills between them continues to be the case as in the Natufian.

The deposition of skeletons in the tower at Jericho may relate to the idea of a location chosen for accessing the celestial world. The tower could preserve perhaps an element of the original ritual idea of tree burials. ‘Tree burials’ are known from ethnographic sources in for example Bali, Australia Aboriginal groups, North American Indian groups and the Naga people of India.

Most burials are single and contain very rare grave goods of shell parure, ochre or flint items. Some multiple burials continue to appear in this period. Skulls are interred singly or in caches.

While differential treatment of adults and children is an innovative feature of the PPNA, the elaboration of children in mortuary practices continues to appear as in the Natufian. In the PPNA most infants and children are buried intact but in a few rare cases the cranium is removed from an infant (Bar-Yosef 1991; Belfer-Cohen et al. 1990; Hershkovitz and Gopher 1990). In a few cases multiple skulls of infants are collectively cached in a single location. In Jericho, for example, a cache of 4 or 5 infant skeletons, intact and articulated, is placed underneath the original clay floor of a PPNA structure (Kurth and Röhrer-Ertl 1981) and a cache of 5 infant skulls is placed below a plastered basin (Kenyon 1981:49-50); in some cases at Jericho infants are buried under post-holes in the centre of structures (Kuijt 1996:319, fig.3). Kurth and Röhrer-Ertl (1981) point out that adult burials from Jericho are almost always associated with architecture, both intra and extramural; in Netiv Hagdud, adult burials are found usually in open spaces or yards or in the fill of abandoned houses (Bar-Yosef et al. 1991:412).

The focus on human skulls, noted in the Natufian, appears to be intensified in the PPNA. The removal of adult crania leaving the lower jaw in place is a common pattern. Isolated adult skulls and caches of skulls, sometimes arranged in multiples of three, are an innovation of the PPNA (Kenyon and Holland 1981:52). At Jericho, there are suggestions of skull modification (Kurth and Röhrer-Ertl 1981) and teeth coloration (Kenyon and Holland 1981:287). Kuijt (1996) discusses the role of mortuary rituals, in particular of socially sanctioned removal of all or parts of the deceased as a “powerful means of social integration during periods of social, economic or environmental change” (1996:313). He sees the role of such powerful communal acts as symbolically and physically linking communities, and limiting the perception or reality of social differentiation to ‘downplay’ social and economic differences between individuals and kin-groups in the face of considerable economic and social change from ~11,000 to 9,300 years ago (1996:319).

Burial positions are varied: flexed, supine, and sitting or crouching with varied hand and arm positions. Adult burials show mostly males though this observation may suffer from identification problems. Partial bone packets are deposited, of skulls and post-cranial parts. Some (e.g. Goring-Morris 2000:129; Kenyon and Holland 1981:48; Kenyon 1981:305) note the deposition of infant skeletons in walls and hint that they may be foundation sacrifices.

**Elaborated skulls**

A phenomenon of detached human skulls coloured red, painted, or modelled with plaster and slipped and burnished is found from the Natufian through to the PN period. Skulls may show remains of red colour all over, or sometimes red stripes, bands or spots.

It is difficult to make any quantitative assessment of whether these represent male or female skulls, for a number of reasons. Different kinds of colour have differential preservation, and the ability to assign sex on the basis of skull alone has been refined by recent research. May et al. (2010), examining the potential of hyperostosis frontalis interna (HFI) as a criterion for determining sex and age, suggest that this is a valid, reliable and easy method for sex and age identification of skulls. HFI is a condition recognisable as a thickening in certain areas of the skull. It is a sex and age dependent phenomenon: females manifest significantly higher prevalence of HFI compared to males and as age increases, HFI prevalence and severity increase.

Previous studies have reported HFI to be independent of geographical origin which strengthens the relevance of the method for different populations. The application of this method to the sexing of coloured skulls may reveal an even greater prevalence of elaborated female skulls.

As far as can be ascertained from the record as it stands, out of a total of 41 sexed skulls with red pigment, nearly 2:1 were females:

**PPNA imagery**

Some 28 schematic items are regarded as the first human images to appear in Neolithic cultures in the area. Noy (1986) describes these as female deities:

“Their seated posture may represent the moment of giving birth – the Mother goddess – or a combination of this and a goddess enthroned.” (1986:64)
They are found in pits and in relation to walls of structures. Their sizes range from about 40-70 mm. though one larger item Fig.28.4 measures 360 mm. Carved in soft limestone or moulded from clay, they can be classified loosely as human, isolated human body parts and animated cylindrical items.

A small group of limestone and baked clay figurines e.g. Fig.28:1-4, Fig.29 are said to depict seated or standing women e.g Fig.30:1 (Noy 1986; Bar-Yosef 1980). Fig.30.2 is described as a highly schematic standing? woman. They are found whole or in fragments. Some bear signs of pigment. A number have a segmented bifurcated base, sometimes with a hint of a vulva. Some see the lower part of the body with foreshortened legs as two legs in kneeling position (Bar-Yosef 1980:195). One item Fig.29 has a stylized upper body with breasts and widely spread legs. A 'head' fragment Fig. 30:3 has a flat, square extremity, is animated with eyes and has an incised motif on the top of the head.

Rare naturalistic portrayals of female humans Fig.31:1-4 have breasts; Fig.31:1 shows an image with arms bent and cradling the breasts, the earliest appearance of this gesture. Fig.31:2 has a faint indication of a pubic triangle.

Phallic images continue to appear in the PPNA; realistic stone carved phalli, as seen in the Natufian, are reported e.g. Fig.32:1 and (from ‘Ain Darat, Gopher pers. comm.; Gopher 1995b); Fig.33 is of a phallic shape emerging from a rectangular block. Figs.34:1-3 are phallic-shaped pestles (Fig.34:1 is from a PPN context).

Pestles with bird-like heads appear in this period e.g. Fig.35:1-2 and have male and female genital aspects.

Incised stone pebbles have schematic human features. Fig.36:1 bears incised horizontal lines and a hint of facial features; Fig.36:2 a pear-shaped pebble, has incised ‘vulva’ lines at the base. Fig.36:3 has an incision along the length of the item; Fig.36:4 has the same incision on one side and an incised cross-hatched motif on the other. Fig.36:5 appears to be a bifurcated base fragment.

Clay head fragments Fig.37:1-3 are animated with eyes; Fig.37:2 has pointed animal like ears. Figs.37:4-5 and Fig.38:1 are free-standing items, the former with owl-like eyes and bifurcations at the base. Fig.38:2 has animal facial features and is incised with crescent shapes.

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Innovations of this period are the appearance of schematic and naturalistic clay human figurines; the motif of females cradling their breasts, which appears in this period, will continue to appear for many thousands of years in the Near East. A focus on heads and phallic imagery and mixed human/animal shapes shows continuity from the Natufian. The retrieval of small quantities of possibly domesticated faunal and botanical remains in this period (Bar-Yosef and Belfer-Cohen 1989a:92; Bar-Yosef 1995; Rosenberg et al 1995; Rosenberg and Redding 2000; Simmons 2007), suggest a step in the direction of food production. In the desertic areas, however, a foraging way of life is believed to have continued.

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**Red Coloured skulls**

<table>
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<th>Period</th>
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<th>Male</th>
<th>Reference</th>
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<td>1</td>
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</tr>
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<td>1</td>
<td>Rollefson 1986</td>
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<td>PN</td>
<td>Köşk Höyük</td>
<td>3</td>
<td>4</td>
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<td>12</td>
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</table>

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Red Coloured skulls
Archaeological Background to the End of the Natufian
5.2 Pre-Pottery Neolithic B and Pre-Pottery Neolithic C

~9,500-7,600 years ago

Both settlement sizes and the number of sites showed an increase over those of the PPNA (Bar-Yosef and Belfer-Cohen 1989a:62; Rollefson et al 1992: 123).

Reasonably good climatic conditions continued throughout most of the period. A Mediterranean climatic regime prevails with only slightly less precipitation than in PPNA. Large settlements are established within the fertile Levantine Corridor. Similar cultural remains from the Taurus Mountains of Anatolia as far south as the Sinai Peninsula are given the name the ‘Levantine PPNB Interaction sphere’ (Bar-Yosef and Belfer-Cohen 1989a: 59; 1989b:448; Bar-Yosef 1995). The main sites mentioned in the text appear in the map above.

In the southern Levant, mega-sites established in the middle of the period flourish and fail, are depopulated and are abandoned. This is thought possibly to be a result of warming and drying trends or, as some suggest, of environmental degradation (Kohler-Rollefson 1988; Köhler-Rollefson and Rollefson 1990). Researchers suggest that some sites may have a specialist function such as ‘funerary cult precinct’ (Goring-Morris 2000, 2005, 2008) or a death cult center (Schmidt 2006).

PPNB burials

Burials are mostly of single individuals but some group burials are found (e.g. Gebel and Hermansen 2000; Goring-Morris 2000; Hershkovitz et al 1994). Lime plaster surfaces sometimes seal burials, and sometimes skeletons are wrapped in cloth coated with plaster. Interred skeletons are buried in what seems to have become standardized positions and are mostly placed flexed on their sides. Burial contexts are below the floors of houses, or of courtyards, or sometimes in pits containing concentrations of different artifacts, called rubbish or trash deposits (Rollefson et al 1992:463). In this period too, some (Kenyon and Holland 1981:48; 305 pl 170b; Goring-Morris 2000:129) suggest that deposited remains of infants might be foundation sacrifices. There is evidence of skull deformation (Meikeljohn et al 1992) in the PPN and later in the PN (Molleson and Campbell 1995). The phenomenon of isolated skulls coloured red (see above), painted, or modelled with plaster and slipped and burnished, found from the Natufian through to the PN period, is especially prevalent in the PPNB.

As was the case in the Natufian, animal bones found in graves are a distinctive feature of PPNB mortuary ritual. The removal and treatment of skulls was almost universal for adult burials in PPNB, while most children and infants are found intact. Many examples of a clear association between human and animal remains were exposed at Kfar HaHoresh (Goring-Morris 2000, 2005; Goring-Morris and Kolska Horwitz 2007; Kuijt 2000; Kuijt and Goring-Morris 2002). Animal parts are found in graves of all ages of buried individuals. Childrens’ graves have been found with fox mandibles and articulated fox remains, and fox mandibles have also been found in association with adult burials. At least two and perhaps four examples of burials being accompanied by almost complete carcasses of wild animals are documented at Kfar HaHoresh (Goring-Morris 2000:121 figs. 9.5, 9.7).

The “Bos Pit” (Goring-Morris 2000, 2005; Goring-Morris and Horwitz 2007) is the name given to a complex burial at Kfar HaHoresh. The remains of a young adult male were placed on top of a limestone slab which sealed a pit containing eight semi-articulated aurochs. Seven of the aurochs were adults; at least one of them was a bull, and all were lacking crania. This assemblage is interpreted as one of the largest and clearest indications of Neolithic feasting as a mortuary ritual. The size and number of the individuals is considered sufficient food for a feast, and it is suggested that much more than a single household was likely to eat (Twiss 2008). The removal of crania in these animals is related to the practice of cranial removal seen in Anatolian bucra; this has also been linked to possible feasting (Goring-Morris and Kolska Horwitz 2007; Twiss 2007).

The possible image of an animal silhouette made up of a mix of human and animal bones in the uppermost part of the grave complex has been the subject of a debate by various scholars (Goring-Morris et al 1998; Horvitz and Goring-Morris 2004; Goring-Morris 2005; Garfinkel 2006a; Goring-Morris and Kolska Horwitz 2007). While Garfinkel’s (2006a:113) reservations question the function of what he suggests seems to be an ineffective method of public display or ritual, Goring-Morris states that

“it seems most parsimonious that the ‘depiction’ in the uppermost part of the grave complex is not simply a fortuitous arrangement of disturbed burials.” (Goring-Morris 2005:95)

Another skeletal arrangement at Kfar HaHoresh include is an instance of a group of human long bones found in an oval around a group of mandibles and two articulated burials. The total grouping provides a MNI of fifteen individuals (Goring-Morris and Kolska Horwitz 2007).

Human burials at Kfar HaHoresh (totalling c. 70 individuals) display an unusual demographic profile compared to other PPNB populations, with high representation of young adult males (Eshed et al 2008; Goring-Morris 2000:130).
Archaeological Background to the End of the Natufian

Architecture

Structures in southern Levantine PPNB sites are rectangular or square shaped indicating a shift from earlier rounded structures. Some exposed whole structures are rectangular with a semi-circle at one end. This may be compared to the apsidal shape of some churches in historical periods which combine a rectangle with a semicircular recess (apse) at one end. Structures are of different sizes, some with internal sub-divisions and entrances, and some with various floor installations (Banning and Byrd 1984); terrace walls and structures, sometimes built up to three stories in stone, are preserved. Caches of human statues were uncovered in large rectangular structures, public buildings or ‘temples’. The large variety of artifacts of a symbolic nature suggests that ritual and ceremonial activities proliferated especially during the Middle PPNB (Rollefson 1986, 2000). Some forms of cult practice were common to several settlements. Curvilinear shaped structures continue to appear in the arid zones.

During the PPNB increasing quantities of the bones of domesticated sheep and goat appear on sites while amounts of wild animal bones decrease particularly in the central and southern Levant. Smaller animals exploited include hare and water fowl (Bar-Yosef 1995: 201).

PPNB imagery

The assemblage from this period includes small human figurines and human body parts; animated cylindrical items and incised pebbles. Figurines are made of clay, limestone or bone. Small items are found in soil fills, in relation to structures, or buried in pits in caches or in mixed concentrations of artifacts.

In addition, the assemblage includes new kinds of almost life-size human images buried in caches, large statues, masks and altered human skulls. Human images are found in different media on incised on plaques and on monumental architecture.

Numbers of whole items and fragments can vary in different sites ranging from a few to some hundred. The largest assemblages in the southern Levant come from three sites, Munhata and Nahal Hemar in Israel, and ‘Ain Ghazal in Jordan, and many of the artifacts presented here are from these sites. The assemblages include both anthropomorphic and zoomorphic types. The record is mainly a collection of fragmented parts, often of unknown items. Whole items are rare or reconstructed. Figurines may be in naturalistic or schematic mode or a mixture of the two. Some of these items have thin cross-sections, for example the lime plaster statuary.

(a) Human images

Some examples of this diverse collection of images are listed below:

Fig.39:1 Has three incised lines at the back of the neck and some traces of ochre (not shown).

Fig.39:2 Is a naturalistic headless female body incised with “string impressions”.

Fig.39:3 A free-standing cylindrical shaped figure with male genitals.

Fig.40 A snail-like image with lunate, circular and triangular incisions.

Fig.41 A unique carved relief on a limestone basin depicts swollen-bellied humans and a tortoise or frog-like animal, one with a pointed head. All have raised arms and wide spread legs. This is an early example of a two-dimensional relief of human images on a vessel in the area.

Fig.42 A red coloured sitting figure with thick elongated neck/head? has open legs, and one? arm gesturing to the lower abdomen (phallus?). De Contenson (2000:190) suggests that elongated necks supported the ochre coloured skulls with which they were found (see also de Contenson 1971:281; Moore 1978:1,92).

Fig.43 A phallic-headed image with a rectangular body and slightly bifurcated legs has converging linear incision on the back facet.

Fig.44 An oval shaped figure has an oval head with facial features. Arms are bent up to shoulders.

Figs.45:1-3 Square angular figures with arms bent to abdomen or phallus. Two have v-shaped incisions on the chest and below the neck.

Fig.46 Figure with the same gesture of arms bent to area of genitals; in relief form on three sides of a pillar.

(b) Schematic abstract figures in trihedral shape

Items shaped as conical tetrahedrons with a split base or bifurcated legs come in different forms. Rudimentary examples from ‘Ain Ghazal incorporate these features of open legs and torso rising to peak e.g. Figs.47:1-3. Broman Morales (1990 Plate 16:p-s) describes similar rudimentary shapes with central vertical slit indicating a vulva. An item of the same group Fig.48:1 has naturalistic breasts, belly and thighs, which blend with schematic shapes. A number of these items
appear in a basic rounded triform shape created by open legs and elliptical extension. For example, Fig.48:2 is a minute carved limestone item; Fig.48:3 has the same triform cluster motif; on Fig.48:4 three incised lines hang from a horizontal line below the apex; Fig.49:1 has added breasts. Fig.49:3 and Fig.49:4 are schematic trihedral figures with ‘breast’ attachments. Fig.49:2 is a highly stylized item.

(c) Human/animal mixtures

In a number of cases human and animal features are mixed. The snail-like item with elliptical stalks Fig.40:1 has human male genital elements. Fig.50 a carved stone item, is described by Hermansen (1997:333) as a ram’s head/phallus pendant. Different orientations show human male genitals or a stylized ram’s head. Moulded eyes shaped like transected ovals are located on what appear to be testicles. The curly horns of Fig.50 could refer to the tendency for domesticated horns to twist or curl, a feature which may have made a very limited appearance in the Neolithic (Davis 1987:135; Clutton Brock 1987:61); the human torso of Fig.51:1 has human breasts and animal eyes; the snout-like head and eyes of Fig.51:4 combine with a human torso. Fig.52:1 appears to be an elliptical fragment with birdlike facial features. Fig.52:2 is a stone fragment portraying an animal snout and has a deep horizontal incision around the ‘neck’; a similar incision appears too on the animal image Fig.52:3.

(d) Lime plaster statuary

The items in this group of about 40 statues are much larger than the figurines and reach up to 1000 mm in height with very little depth. They appear mostly in caches of multiple examples (Rollefson and Simmons 1985:48-50, 1987:95-96; Tubb and Grissom 1995:443-47; Rollefson and Simmons; Grissom 1996; for summary see Schmandt-Besserat 1998a). They are made from an elaborate construction of plaster materials built around a reed armature. White plaster materials, requiring pyrotechnical knowledge and costly investment in time and resources, appear in very rare instances in the PPNA and increasingly in the PPNB (Frierman 1971; Garfinkel 1988; Gourdin and Kingery 1975; Kingery et al 1988; Rollefson 1990). They are also used to cover the walls and floors of structures and to treat some skulls.

Statues appear as full figures e.g. Fig.53; Fig.54; Fig.55; as busts e.g. Fig.56; and two-headed images Fig.57:1-2; head fragments Fig.58:1-3.

Petrographic analysis of fragments of lime plaster figurines in the Nahal Hemar Cave (Goren et al 1993) reveals that they come from different places, some from as far away as the shores of the Mediterranean. Apparently these are from different statues imported into the cave in a fragmentary state.

Reconstructed statues from caches have disproportionately large heads and large eyes set far apart. Fig.53 has breasts. On Fig.54 an oval shaped item with a central incision, lies in the anatomical location of a vulva. The figure is of a headless person, clearly female, with arms cradling the breasts. The location of this motif supports an analogy of this motif with a vulva. The same motif appears on the head fragment Fig.59. The transected oval-shaped eyes will become dominant in the following Pottery Neolithic period. Statues are decorated with a range of ochre colours. Eyes show signs of decoration from bitumen and green crystalline pigment. Pupils are circular and trapeze shaped e.g. Fig.58:4. In the ‘Ain Ghazal and Jericho statues with varying numbers of fingers and toes can be observed; the foot of a plaster statue shows six toes and the hand of another has seven fingers.

In sum these statues are largely naturalistic, the very few indications of sex suggest that some are clearly female. Their more naturalistic anatomical parts represent a departure from the schematic style of the earlier small figurines.

These statues have been regarded as ancestors (Kenyon 1957) or ghosts (Schuster 1995). Their significance, according to Schmandt-Besserat (1998a:1) lies in their identification of what were to be archetype deity figures in the Near East, such as the two-headed busts or females holding their breasts, and support her suggestion that a pantheon existed in the Near East at this period.

(e) Body parts

Oval, grooved items e.g. Fig.60:1-2 continue to appear in this period. Fig.60:3-4 are models of phalli with horizontal incisions; Fig.60:4 was placed in the wall of a precinct and described by Goring-Morris and Birkenfeld (2008) as a fertility symbol. Schematic images of phalli are knapped from flint Fig.61:1-2. Fig.62 is a human-like image in phallic shape; a monumental phallus statue Fig.63 has relief animal figures on the shaft.

(f) Heads

Fragments of head and neck images made of bone Figs.64:1-2 have facial features; those of Fig.64:2 are bird-like.

(g) Skulls

In my data period, the preservation of skulls in a variety of forms starts in the PPNA (e.g. Biennert 1991, Cauvin 1972,1978;
Mellaart 1967). By the PPNB, a widespread skull cult is known all over the Levant. In the middle and late PPNB, some tens of human skulls remodelled in plaster are known from different places in the Central and southern Levant (Bienert 1991, Goren 1995; Goren et al. 2001; Arensburg and Hershkovitz 1989).

Skulls are found singly or in caches both in and in relation to structures, beneath plaster floors, on plaster benches and in pits. In some instances plaster faces are found detached from skulls e.g. Fig.65:1. Skulls of a specific morphological type – short and wide – seem to have been selected for plastering (Arensburg and Hershkovitz 1989). The modelling sometimes imitates the natural proportions of the human skull, and sometimes distorts them resulting in an unrealistic, foreshortened brachycephalic appearance e.g. Fig.66:2. Inset shells of different orientations or shallow grooves or slits in the platter represent eyes and create different effects, some eyes appear open e.g. Fig.65:3; Fig.66:1,3,4 and some closed e.g. Fig.66:2.

The surface plaster of all skulls is coated with a pink or brownish red pigment, which is sometimes partially burnished. There is no consensus on the sex of the skulls. Some skulls have teeth removed, either ante or post-mortem (Ferembach and Lechevallier 1973:224, fig. 3 pl. 1, 2; and see Bonogofsky 2002). A number of skulls (Arensburg and Hershkovitz 1989:118) have a coating of asphalt on the occiput area; grooved parallel longitudinal lines or rolled cords of collagen e.g. Fig.67 are applied in grids of lozenge shapes.

(h) Masks

A few masks of stone with human faces are related to the Middle PPNB period in the southern Levant e.g. Figs.68:1-3. Some were found in excavated contexts and others were obtained from the antiquities markets and assigned to PPNB on stylistic grounds. The masks have hollow backs and small holes on their perimeters. Eye sockets are round showing eyes wide open; mouths are open or closed. Not all have teeth, but where they do, just a few are carved on the upper and lower gums. Radial decoration is painted on one of the masks e.g. Fig.68:2; traces of paint and stains of asphalt can be observed around the eye sockets.

(i) Geometric items

A fragment of a thin polished trapeze or ‘axe-shaped’ greenstone item Fig.69:1 is animated with short symmetrical incised lines interpreted as eyes, giving a human air to an inanimate object (Gopher and Orrelle 1995a Fig.40:9). Garfinkel (2010:320) rejects the classification of anthropomorphic imagery of this artifact on the grounds that “the two horizontal incisions on the item are so shallow and feint that they probably represent use wear” (2010:320).

Gopher and Orrelle assign this item to level 4/3 at Munhata, a PPNB level. The location of these incised lines on the axe shaped item, and its iconography, seem, however, fortuitously to mimic the location and iconography of horizontal ‘eyes’ incised on pebble figurines in the following PN Yarmukian level (e.g. Garfinkel 2010 Fig.10:6:M6. M7. M9 and M12). I return to this subject in chapter six.

(j) Monuments images

In this period, human images begin to appear on a larger scale and artifacts on different media. A large orthostat stone of pure white limestone that appears to depict a stylized human being (Rollefson 1998) was inserted into one of the walls of a building in the Late PPNB period in ‘Ain Ghazal.

At the periphery of the fertile areas in Anatolia human imagery is represented over the millennia of PPNA and B. In some sites large T-shaped pillars depict stylized phalli. These monoliths are decorated with carved reliefs of animals and of abstract pictograms e.g. Fig.63. They form part of huge complexes of circular or oval structures.

A large standing stone Fig.73 has an anthropomorphic/phallic appearance. It stands in the forecourt of the laboratory of Atlit Yam (E. Orrelle personal observation). A pointed ‘head’ is demarcated by the familiar horizontal incision at the ‘neck’ and there is a hint of a bifurcation at the base. As with data from an underwater site the chronological assignment is problematic and so a general PPN chronology is assigned to this item.

The imagery assemblage of the PPNB represents the greatest variety of types of images, sizes and materials used in portraying humans in the data period. The variety can be understood as both new and old imagery forms appearing together. Materials include stone, clay, bone and plaster products. Surviving colours are red, black and green.

Plastered skulls represent actual human cranial matter elaborated with a high investment material, imported exotic shells and red pigment to create highly symbolic cultural icons. The focus on heads and phalli is a continuation from earlier periods as are mixed human and animal images. Perhaps because of improved preservation there are more instances of surviving pigments. Figurine iconography includes gestures, and sex characteristics appear occasionally.
Pre-Pottery Neolithic C

This last phase of the PPN, whose dating is problematic, is known from sites which survived extreme climatic conditions and is characterized by new cultural traits and economic adaptations.

Very few imagery items have been retrieved. A unique headless female figure of pink veined limestone Fig.71, not freestanding, bears the remains of red pigment.

Segmented ovals are rare, though items Fig.60:2 and Fig.70:2 were retrieved from the underwater site of Atlit. Their chronology however is insecure.

PPNC burials

Some PPNC burials are known from ‘Ain Ghazal in Jordan and considerably more were found in Atlit Yam, an underwater site on the Mediterranean coast (Gailili et al 2005).

Rollefson, Simmons and Kafafi (1992); Rollefson and Kohler-Rollefson (1989) summarize the differences between the PPNB and PPNC mortuary ritual at ‘Ain Ghazal, noting that the custom of skull removal and treatment such as modelling and deformation known in the PPNB is almost non-existent in the PPNC. Burials under lime-plaster surfaces are no longer found and group burials in the PPNC are limited to 3 individuals at most. Differential burial for newborn children and adults is no longer evident. ‘Grave offerings’ are compared between the two main PPNC sites: at ‘Ain Ghazal these include mainly pig bones and pig skulls; at Atlit Yam, (Gailili et al 2005:17) grave goods found in 15 burials include cattle horn-cores flint axes and ground stone tools; they seem to have been gender-oriented e.g. some males were buried with stone axes (for a detailed discussion on relationship between stone axes and male symbolism, see Barkai 2001, 2005) and a grinding stone was found in the grave of a female. A preference for different animal inclusions seems to have operated too.

At Atlit Yam most burials are located near or within structures (mainly stone-built walls) concentrated in one section of the site; most are in flexed or semi-flexed positions with no clear pattern in orientation. Skulls are usually intact, but there are occurrences of skeletons with no skull and single separated skull burials.

5.3 The Pottery Neolithic Period

~7,500 – 6,300 years ago

During this period, pottery-bearing sites are found spread over a very large area, from north of the Fertile Crescent, to south of Egypt. Three cultures represent the resettlement after the PPNC in the southern Levant. Features common to large-scale socio-political entities in the Fertile Crescent and Greater Mesopotamia (Gopher 1995a) are present in their material culture. Selected Pottery Neolithic period sites are shown in the map following. The Yarmukian and Wadi Raba are large cultural configurations recorded geographically mainly over the Mediterranean zone of the southern Levant and have together a chronological span of some 1200 years. The third – the short Lodian period – has almost no human imagery.

The Yarmukian culture ~7,500-6,900 years ago

The Yarmukian is described as a cultural entity in Israel (Stekelis 1951, 1972; Perrot 1968; Garfinkel 1993; Gopher and Gophna 1993) and in Jordan (Kafafi 1987, 1993; Muheisen et al 1988; Rollefson et al 1992; Simmons 2007).

Its occupation area is defined (Garfinkel 1992; Gopher and Gophna 1993; Gopher 1995a; Kafafi 1987, 1993) as restricted to a specific area of ~10,000 sq. km of the southern Levant with an estimated time-span of some 600 years. Small amounts of artifacts with similar features have been found in Lebanon and Syria. Recognition of the Yarmukian culture relies mainly on its distinct assemblages of imagery and pottery (Stekelis 1972; Garfinkel 1992, 1993).

Yarmukian pottery consists largely of bowls and jars; most are plain, some plain with burnish and a small percentage have a distinctive decoration of bands of zigzags incised with nested Vs on a red background resulting in a series of red triangles with alternating orientations around the vessel e.g. Fig.120:1-3.

Yarmukian architecture includes both circular and rectilinear buildings.

Its economy is thought to represent a form of a settled agriculture with animal exploitation (e.g. Rollefson and Kohler Rollefson 1989; Simmons et al 1988 and for general summaries see Garfinkel 1993; Gopher 1995a; Gopher and Gophna 1993; Davis 2012). Faunal assemblages, mostly of domesticated species, show a dominance of oviscaprines, some pigs and the first evidence of a few domesticated bovids. Remains of dog are present, in one case representing 13% of the faunal assemblage (Davis 2012:1259; Rosen 2012:1339). Only a very small element of hunted animals (mainly gazelle) is still found. In the Northern Levant, horn cores of bovids decorate structures, and are curated in graves. It is suggested that the domestication of cattle was behind the new large political units (Orrelle and Gopher 2000; Cauvin 2000b). Cultivated botanical resources are mainly cereals, pulses, fruit and flax (Muheisen et al 1988; Simmons et al 1988; Kohler-Rollefson...

Yarmukian burials

The Yarmukian is contrasted with the earlier PPN period by the dearth of burial remains. Burials are sporadic and varied, both intact and headless. Cairn-like graves, tumuli and stone burial cells – ‘dwellings for the dead’ – have been documented by the archaeologist Uzi Avner (1990, 1993, 2002) in desertic regions of the southern Levant, over extremely long periods, overlapping the Pottery Neolithic period.

Yarmukian imagery assemblage

Some hundreds of human-like small figurines made of clay and stone, mostly fragmentary, can be roughly classified into types such as anthropomorphic figurines, human body parts, triangular tripartite-shaped items (trihedral), elliptical-shaped items named ‘cylindrical’ or ‘pillar’ figurines, and a large assemblage of incised stone pebbles. Classifications are made by appearance, analogies to human shape, and by material, shape or other criteria. All these types share common elements of iconography. They are found in almost every site excavated. The large statues present in the PPN are absent.

Large concentrations of these artifacts were exposed at two sites in the Middle Jordan Valley – Shaar Hagolan (e.g. Garfinkel 2002, 2004, 2010; Garfinkel et al 2002.), and Munhata II b stratum (Garfinkel 1995; Gopher and Orrelle 1995a) and a sizeable assemblage from Nahal Zehora II (Gopher and Eyal 2012:1170-1244). Small amounts with similar characteristics are also found in Jordan (Kafafi 1987), North Lebanon and Syria. Excavation reports from Shaar Hagolan (Garfinkel 2010; Ben-Shlomo and Garfinkel 2002:212) provide contexts for figurines and fragments in open areas and courtyards, lying in ‘debris’ and concentrated near the room entrances, mostly from one complex. The excavators propose ritually associated functions for these disposal patterns. Contexts reported from Nahal Zahora II include ‘special features’ floor or buildings and fill (Gopher and Eyal 2012:1176-7).

(a) ‘Broad seated goddesses’

Different names are assigned to a group of Yarmukian clay figurines Figs.74-84 found in many but not all sites containing Yarmukian assemblages. These are also known in different variations from a wide area of the Fertile Crescent (see Garfinkel 2004:194, 2010 chapter 9 for examples). Following Garfinkel et al 2002 and Noy (1986) I call them ‘Broad seated goddesses’. They have been described in detail by Yizraeli-Noy (1999) and Garfinkel (1992, 1995; Garfinkel et al 2002, Garfinkel 2004, 2010), with a different interpretation offered by Gopher and Orrelle (1996). The ‘broad’ and ‘sitting’ figurines or ‘goddesses’ have an overall anthropomorphic shape with anatomical parts, are mostly portly, seated, with common features of an elongated head and applied diagonal, incised eyes. Most are up to 150 mm. in height with some single larger examples. Most show signs of red pigment. Heads are elongated, triangular, wide at the base, and rise from the shoulders with no neck, are usually pointed at the top and arch slightly backwards e.g. Figs.74:1-3, Figs.75:1-2; Fig.76; Fig.78; Fig.79; Figs.80:1-2; Fig.81:1-2. A large elongated bulge of clay is modelled at the back of the heads of some e.g. Fig.78; Fig.81:1. On the heads, eyes, cheeks, ears and probably earrings were separately attached. Eyes are dominant, made of long strips of clay with a central groove, and appear on most examples of this type. Some figurines have no eyes e.g. Fig.81:1-2 or lack the central incision e.g. Fig.74:3 (reconstructed). Only a few have mouths e.g. Fig.79 made in the same way as the eyes. Garfinkel (2010 chapter 9) has compiled an extensive catalogue of figurines with this kind of eyes from the Levant and surrounding and other areas stressing the range and longevity of this iconographic feature.

The legs, not designed for free standing, are closed at the thighs and separated below the knee to varying degrees. Some ‘feet’ or extremities of the legs are pointed Fig.81:2; Fig.83 and others Fig.74:2-3; Fig.82:2; have a square shape. On some, the belly and breasts are clearly represented e.g. Figs.74:2-3; Figs.75:1-2. Arms are thin, commonly with the left arm and hand placed below one or two breasts e.g. Fig.74:3; Fig.75:2; Fig.76. The right arm, when present, sometimes lies along the body with the hand, incised with four or five fingers, placed on the right thigh e.g. Figs.74:2-3 and Fig.83. This is a departure from the earlier gesture of two arms to the breasts. Shaped clay strips over parts of the body have been interpreted as garments e.g. Figs.74:1-2; Fig.75:1; Fig.76.

The bodies are characterized by deep incisions, below the ‘head’, and deep V-shaped incisions emphasize the pubic triangle, and the arm and leg attachments. A motif of nested Vs is incised on the arm and leg of Fig.81:2. Preserved red pigment on the figurines may be overall e.g. Fig.75:2, in bands in the genital and upper thigh area e.g. Fig.84, at the lower part of the ‘head’ e.g. Fig.78 and along the legs e.g. Figs.82:1-2. The figurines are smoothed and polished.

There are two examples of figurines with a hint of male genitals both of which bear red pigment. Fig.75:1 has both breasts and male genitalia. In Fig.77 the arms lie across the belly over genitalia. The torso fragment Fig.85 may be the same type. On the area below the nose, above the deep incision of the head, two schematic horned animals with raised tails are incised. An artifact which appears to incorporate the same
Archaeological Background to the End of the Natufian

gesture comes from Nahal Zehora II (Gopher and Eyal 2012: Fig. 29.2 pp1178-9).

(b) Cylindrical figurines

Very few of these delicate items were retrieved. Slender clay cylinder cores Figs.86:1-2 and Figs.87:1-2 are animated by additions of naturalistic male genitalia. No matching heads have been found. The clearly delineated phalli appear to be either erect Fig.86:1 and Fig.87:1 or flaccid Fig.86:2 and Fig.87:2. Figs.86:1-2 have prominent ledge buttocks while those of Fig.87:2 are rounded; the legs of Fig.86:1 are closed, of Fig.86:2 apart. A different version of this type from Nahal Zehora II combines buttocks with a slit in the genital area (Gopher and Eyal 2012 Fig.29.3.1 pp 1180-1181).

Other small free-standing, elliptical clay shapes, smoothed and fired, called ‘pillar’ figurines by Garfinkel et al 2002:201, are indented and pinched to form facial features in the tradition of previous periods e.g. Fig.88:1-2; Figs.89:1-3; Figs.90:1-2. Eyes can be transected oval-shaped additions e.g. Figs.89:1-3; or incisions Fig.90:2. Some have bead-like facial features Fig.88:2 and Figs.89:1-3.

(c) Incised stone pebbles Hundreds of incised stone pebble figurines, known from earlier periods, both oval and elliptical with simple linear incisions reappear in this period, especially in the sites of Munhata and Shaar Hagolan (Stekelis 1972; Garfinkel 2010,1992; Gopher and Orrelle 1995a) e.g. Figs.90:3-4 Figs.92:1-2; Fig.93; Figs.94:1-4; Figs.95:1-5; Fig.96; Figs.97:1-3. Minute quantities of these are designated as tools at Nahal Zehora II (Gopher 2012:1068-9). Sizes range between sixty and over 300 mm. Some are narrow elongated pebble, incised with single or double, horizontal or diagonal lines at one end which appear like eyes e.g. Figs.94:1-4; Figs.95:1-5 and some like Fig.97:2 for example have a vertical ‘nose’ and a drilled central hole ‘mouth’. Many rounded or oval pebbles incised with a single vertical line from the period such as Figs.90:3-4 bear red paint marks or polish (Stekelis 1972). They were interpreted by Stekelis (1972) as female genitalia or art items. Gopher and Orrelle (1996) and Edwards (2007) assign these to the assemblage of anthropomorphic imagery. Garfinkel (2010:324 M5) notes traces of red colour on an elliptical pebble incised with ‘eyes’ from Munhata. Some larger, more rounded pebbles e.g. Fig.96, like the clay items, bear a deep horizontal incision below the apex; other incisions indicate body parts regarded by some as possibly garments e.g. Fig.96; Figs.97:3 (Garfinkel et al 2002:195). Images can be located on one or both faces of the pebble. Garfinkel (2010:134) links pebble figurines with eyes on both sides e.g. C115-119 to double headed gods. Some items have a vertical incision along the length of one facet e.g. Fig.96. Garfinkel 2010, records several other examples of this phenomenon; in one example (C36) the vertical incision is particularly deep and grooved leading Garfinkel to suggest that this indicates the ‘reuse’ of this figurine as a sharpener. I suggest that both tool and figurine function can be assigned to such items and I discuss this further in chapter six.

Elliptical shaped pebbles with a horizontal incision near the top of one end e.g. Fig.91:2, are interpreted by Stekelis (1972:34) as schematic phalli. A similar item reported from the Palaeolithic Gravettian dated 28,000 years ago (Conrad and Malina 2005) is regarded as both a phallic image and a tool, a hammerstone used for knapping.

A number of unique items are carved of limestone. Fig.98 is a stylized trihedral image, made on a triangular principle and seems to continue the tradition from the PPN of bifurcated base, central slit and elongated apex. The body markings are similar to those of the ‘broad seated goddesses’; there is a cross motif at the base.

Fig.99 has an elliptical head, incised eyes and the typical horizontal incision below the facial area beneath which a large triangle with central slit is incised. It is damaged at the base and no bifurcation is seen at the front, though a slit appears at the back.

Fig.100 seems to have multiple animal legs and a horizontal incision. Fig.101 has several different facets and orientations making a single description difficult. It has a Palaeolithic air about it showing similarities with the grooved scoria pebble from the Acheulian site of Bereket Ram (Goren-Inbar 1986); it shows too a remarkable similarity to the Palaeolithic Grimaldi Venus pendant or the Gravettian Lespugue Venus statue (Duhard 1991). Garfinkel (2010:231) summarizes the various interpretations of this figure as having emphasized buttocks or breasts. Karageorghis (1986) notes that similar items from Cyprus display both female and male characteristics.

(d) Elliptical stone items

A distinct group of artifacts in the Yarmukian assemblage is a collection of smooth polished elliptical items, some black-coloured e.g. Figs.102:1-3. These are made from clay or stone and mostly found broken. They have flat or pointed extremities; one whole item Fig.102:1 was found to have points at both ends. One pointed fragment Fig.102:3 has a deep incision running vertically along the length of both faces. These were originally interpreted by Stekelis (1972:34) as phalli; I also include them in the anthropomorphic imagery assemblage.

And finally, another unique item Fig.103 is a realistic clay figurine of a tightly flexed human sitting, with its head bent over the knees and the arms grasping the knees, reminiscent of a Weeping Buddha position.
zones of the southern Levant. Years and its sites are located over much of the Mediterranean (Kaplan 1958a, 1958b; 1969). It lasted for some hundreds of the defining elements of the material remains were found Gophna 1993) neighbouring on an original core area where is described as a cluster of regional variants (Gopher and Eyal 2012). A prototype of a churn from the late Wadi Raba layer at Nahal Zehora I (Orrelle and Gopher 2000:297) may indicate the preparation of milk products; cereal cultivation is attested by phytoliths (Arlene Rosen, personal communication) and collected seeds. Galili et al (1989, 1997) have provided evidence for the intensive use of olives in this period from submerged sites off the coastal plain. Lithic assemblages are almost devoid of arrowheads but have an abundance of sickle blades. Rectangular structures have field stone foundations and possibly adobe mud or brick walls; some are large with internal subdivisions and floors of trodden earth.

The Wadi Raba culture ~6,900-6,300 years ago

The largest Pottery Neolithic cultural unit – Wadi Raba – is described as a cluster of regional variants (Gopher and Gophna 1993) neighbouring on an original core area where the defining elements of the material remains were found (Kaplan 1958a, 1958b; 1969). It lasted for some hundreds of years and its sites are located over much of the Mediterranean zones of the southern Levant.

(e) Trihedral

These triangular-shaped figures known from early periods are recognized in this period too. Fig. 104:2 has the familiar bifurcation topped with elongated ‘head’ an incised V at the groin and on the ‘chest’. Legs are stumps, widely splayed and the elongated continuation of the torso is broken off. There is a horizontal incision on the side view of the thigh.

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The Yarmukian assemblage of human images has both elements which show continuity and those which are innovative. Stone and clay are the main raw materials and there is some preservation of pigments. As with the PPNC assemblage, red seems to be the most frequently used colour. The distribution of the Yarmukian shows extreme variations between the highly concentrated distribution in a small area of Munhata and Shaar Hagolan where most of the human imagery was found, and sporadic appearances of pottery and occasional figurines in other sites.

The Lodian (Jericho IX) culture

The Lodian culture (previously called Jericho IX according to a stratum of Jericho) is a relatively unknown late Neolithic period cultural unit lasting a few hundred years, but it is known to overlap with the Yarmukian in some areas; its dates are uncertain. Small-scale sites or mere find spots, cover a period and an area, which more or less corresponds to that of the Yarmukian (see Gopher and Gophna 1993:317-326). The name Lodian was coined after the excavation of the site of Lod (Blockman 1997; Gopher et al. 2019:210). Circular sunken structures and ‘trash’ pits were exposed at the site of Lod. The culture is mainly identified by its pottery whose main features are the decoration of geometric motifs painted and burnished on a plain background, and the vessel shapes. Its technology is also specific to the culture (Goren 1991). A few burials were exposed but no botanical remains were retrieved and almost no art objects or figurines were found. The very rare finds of imagery items display a certain overlap with the Yarmukian (Gopher and Eyal 2012:1238).

The Wadi Raba culture ~6,900-6,300 years ago

Faunal assemblages published to date reveal a dominance of domestic sheep and goats, followed by cattle and pigs (Simon Davis 2012, Haber and Dayan 2004). Spindle whorls, loom weights and other spinning and weaving equipment suggest the intensive use of botanical fibers and animal hair. Evidence for domesticated flax and heavy stone spindle whorls suggest that linen was woven (Orrelle 1993; Orrelle et al 2012). A prototype of a churn from the late Wadi Raba layer at Nahal Zehora I (Orrelle and Gopher 2000:297) may indicate the preparation of milk products; cereal cultivation is attested by phytoliths (Arlene Rosen, personal communication) and collected seeds. Galili et al (1989, 1997) have provided evidence for the intensive use of olives in this period from submerged sites off the coastal plain. Lithic assemblages are almost devoid of arrowheads but have an abundance of sickle blades. Rectangular structures have field stone foundations and possibly adobe mud or brick walls; some are large with internal subdivisions and floors of trodden earth.

The Wadi Raba pottery assemblage (Orrelle 1993) includes a variety of bowls; a typical Wadi Raba jar with characteristic bow-shaped rim; holemouth jars and pithoi. A vessel characteristic of the Wadi Raba assemblage is an almost entirely fired carinated bowl usually slipped and burnished in a deep glossy black or red. Brown, red and orange hues appear on Wadi Raba some matte and some deeply lustrous from applied burnish – this ware is usually referred to as dark-faced burnished ware after Braidwood and Braidwood (1960).

The highly decorated element is small. Surface treatments include primary plain, smoothed, slipped, slipped and burnished, and various incised, impressed, combed, painted or applied plastic motifs. A red band around the inside and outside of vessel rims is a common feature (see Gopher and Gophna 1993). A very small element of plastic decoration of raised rope type will continue in the later Chalcolithic period.

Wadi Raba burials The few adult burials from Wadi Raba sites are located in relation to structures. They are primary single burials in supine or contracted positions, some decapitated some intact. No grave goods accompany the dead. Isolated skeletal remains of humans of all ages were exposed at Nahal Zehora II (Gopher and Eshed 2012:1398-9); other skeletal remains of the Wadi Raba and related cultures are of babies or foetuses (Gopher and Orrelle 1995b; Orrelle 2008b). Young children and foetuses are sometimes found buried in jars (Orrelle 2008b) in Israel and in the Neolithique Ancien period at Byblos in Lebanon of similar date.

Imagery from the Pottery Neolithic period and Wadi Raba sites

Few examples of human imagery have been published from sites of this period. Common features and regional differences
can be recognized from variants of the Wadi Raba culture. Most of the human figurines are made of stone and clay, bone is very rare. As in previous cultures, basic genital shapes, the elliptical and triangular, are incorporated into the figurines and are joined by a number of new shapes, raw material and iconography of body parts. A few figurines are open-legged and this posture appears too in different media. Other items appear in this period with closed legs.

An innovation of the period is the schematic depiction of human images in thin tabular limestone e.g. Figs. 105:1, 3 and Figs.106:1-2. Yizraeli-Noy (1999) notes parallels of this phenomenon in neighbouring regions. In fact this continues the tradition of the shallow depth of the plaster statuary from PPnb. Some of these artifacts have rectangular shapes e.g. Figs.106:1-2.

Lozenge/trapeze shaped torsos which appear first in PPnb e.g. Fig.69:2 continue to appear in the PN e.g. Fig.108. Fig. 105:1 depicts a closed-legged female body enclosed in a lozenge-shaped torso. A downward pointing triangle depicts female genitalia. Vulva triangles appear on rectangular torsos e.g. Figs.106:1-2. These vulvae can be prominent, often taking up the whole of the lower half of the torso e.g. Figs.105:1-2 – a characteristic assigned to the Sumarian goddess Lilith. In some e.g. Fig.105:1 a large V groin has a central slit, a motif which is the Sumerian symbol for woman. Such items appear in Nahal Zehora II (Gopher and Eyal 2012: Fig.29.18a:1-2). Sometimes the old and new join in hybrid combinations.

Fig.92:2 combines a pubic triangle in anatomical position, characteristic of late PN iconography, incised on an elliptical pebble, a common material in Yarmukian assemblages. Parallels of this appear too in neighbouring regions e.g. Fig.92:1. In another example of hybrid mixtures, Yarmukian-type incised eyes appear together with the large vulva triangle incised on a thin rectangular plaque in Fig.106:1. Triangles can appear below the neck Fig.104:1. A unique carved green stone item Fig.107:2 has closed legs.

A changed iconography may be seen in the figurine ‘heads’ – the earlier striking Yarmukian triangular heads are absent. Small pointed ‘heads’ appear on trapeze shaped torsos e.g. Fig.108.

Fig.109 is a naturalistic modelled head with a definite neck; the frontal view of the face is face is rounded, while the side view shows a pointed elliptical shape like the broad seated goddess type of the Yarmukian. Yarmukian-like eyes are barely seen, moulded into the face, not attached. Thus Yarmukian elements are subtly incorporated into a naturalistic modelled head.

A very large vulva triangle appears on Fig.105:2; parallel horizontal incisions known from the Yarmukian Fig.80 appear as a waist below indications of breasts and the unusual crescent-shaped head. This artifact from Syria seems to represent a local style.

Cylindrical items with added human features continue to appear in the PN. Fig.88:2 is a rolled clay cylinder with pinched animal ears and snout standing upright on a base covered with red paint (colour not shown here). It resembles what Hamilton (1996:222) describes as a ‘humanoid’ type. Fig.110 is made by the same method of rolled and pinched clay. It has a rounded apex, horizontal folds on the neck and a clearly delineated Y shape below the ‘head’. A cross/star is incised on the reverse.

As in the PPnb, human imagery comes in a span of sizes from minute to monumental. ‘Masseboth’ – vast natural standing stones with anthropomorphic features – are found in particular in cult sites and cemeteries in the Southern Negev and Sinai deserts (Avner 1984). These sites span several periods some from the Pottery Neolithic period (Avner 1984:117). A ‘masseba’ from the Paran desert has Yarmukian-type eyes (Anati Har Karkom Gallery of Images 6). A stone pillar with engraved linear Yarmukian eyes comes from a ‘private shrine’ on the plateau of Har Karkom (Anati 1993:Fig.12) Another, (Anati 1993:50) is engraved with a possible transected oval and simple grid motif. This compares with a menhir from Neolithic Portugal Fig.114 incised with similar motifs and transected ovals (Gomes 1983 in Avner 1996: 87). Avner describes the motifs as female fertility symbols.

Humans with animal heads

Anthropomorphic images with animal features appear as in earlier periods, but in new two-dimensional form on vessels or on walls of structures. Fig.111:1-3, a rare anthropomorphic image from the normative Wadi Raba culture, is a relief of an ithyphallic human male with four toes and a ram’s head. The figure has a wide open-legged stance and arms aloft. This relief image appears twice, one on either side of a large red burnished ceramic vessel in slightly different form on either side. A spread-legged ‘female’ image Fig.112 from the PPnb is carved in two-dimensional form on a stone slab of a cultic structure. The image has large floppy ears at either side of the head and leaves no doubt that the genitals are being displayed.

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The Wadi Raba and Pottery Neolithic cultures in the southern Levant seem to have become peripheral to the vast cultural entities in northern regions from which many innovations seem to have diffused. Human images from the Pottery Neolithic period and from the Wadi Raba complex of regions are few, but include many variations, and earlier traditions are incorporated or ‘nested’ in new combinations of ‘hybrid’ mixtures of iconography.
This review of Levantine Neolithic archaeological material has demonstrated the rich variation of counter-intuitive imagery. It seems clear that the realistic portrayal of humans is not intended, and only very few naturalistic examples exist. Over some six thousand years certain features persist, and their strangeness is daunting, almost defying definition. The simultaneous similarity and variation in figurine types confuse researchers. Very few have inquired why the human image is manipulated to present these counter-intuitive features. In the next chapter, I will attempt to interpret this iconography, to explain persistent features and understand the ‘un-natural’ way that humans were portrayed.
CHAPTER SIX
Interpretation

What are we to make of this collection of artifacts? In this chapter I look at the iconographic features of the images and ask if they meet the predictions of the FCC model as presented in chapter three, and whether a ‘grammar’ of counter-reality and liminality rooted in gender ritual can be identified. Abnormal anatomical features such as the treatment of necks, the frequent lack of sex indicators and the schematic nature of the representations are clearly counter-intuitive. Can we recognize in them the WRONG signals that the model predicts will characterize portrayals of the first gods?

‘WRONG species’ – the therianthropic iconography – is not difficult to recognize: animal snouts, ears and claws on human-like figures are immediately identifiable as animal. Red pigment, the WRONG TIME signal is preserved on some of the artifacts. The third signal, ‘WRONG sex’, arguably the most counter-intuitive of all, seems at first to be absent. Only a single artifact, Fig.113, clearly shows both male and female sexual characteristics.

Although different signals can appear in different periods and contexts, the expectation is that if two of the WRONG signals are present, the third, the dominant signal of the FCC must also be present and the challenge of interpretation is to search for signs of it. If these signals are recognized in the data, do they appear in their original language of WRONG signals or have they undergone transition or inversion?

How is WRONG sex, an impossible union between the sexes connoting ‘gender of power’, expressed, and what sense can we make of bodies and genitalia? Can oppositions such as ‘signal ON’ and ‘signal OFF’, after Knight et al (1995:91 and Watts 2009), that conform to the FCC time-resistant syntax for ritual power, be inferred in the data? In addition to looking for expressions of these WRONG signals, I enquire whether concepts from at least three other belief systems can be identified in the data: the muelos belief, the Evil Eye belief and the beliefs surrounding twins. I will be asking whether the data conform more to the predictions of symbolic origins theory of Lévi-Strauss that ritual focuses on human male coalitions and marital relations or to that of the FCC which envisages ritual elaborations of communal constructs, of red-coloured gods which were not quite human and not quite animal.

A prediction of this book is that in the transition to agriculture, the ritual potency of females which underpinned the socio-economic structures of hunter-gatherers would be appropriated by males. In this chapter I look for evidence of whether a process of male appropriation of female ritual forms can be identified.

The illustrations are presented in Part II in roughly chronological order. The drawings are artists’ renderings of original illustrations. These pay attention to iconography, but are not drawn to scale. Where excavation reports describe remnants of pigment, these are mostly shown on artifacts shaded grey according to published descriptions with some license by the artists.

Occasional comments on the chronological sequence of motifs are made, but these are incidental to the main focus of this work, the iconographic analysis of features of the data in the period of the book.

Most figurine studies concur that there is a continuity of iconography between the Palaeolithic and the Neolithic. The earliest items in the Near East are roughly contemporary with the latest statuettes of the European Palaeolithic (Crawford 1991[1957]; Gimbutas 1989; Knight 1991:366; Cauvin 1994; Goring-Morris 1998). Goring-Morris and Belfer-Cohen (2002:69) establish iconographic chains between different regions through time. Hansen (2001) describes a continuity of gender-ambiguous figurines from the Palaeolithic to the Near Eastern Neolithic. In the British Neolithic, Sims (2006) shows how continuity in cosmology between the Palaeolithic and the Neolithic was negotiated by monumental structures and their alignments; these devices he suggests were chosen to introduce changed cosmologies by conflating the symbolism of both the earlier Palaeolithic dark moon and later Neolithic solar disk ideologies.

Others depart from the contextual archaeological approach, tracing chains over widely distant continents (e.g. Lewis-Williams 1997; Marshack 1997 and the anthropologist Power 2004).

Bar-Yosef (1997:161; 2002), Goring-Morris and Belfer-Cohen (2002:69) and Mithen (1999:148,152) ask why there is such a contrast between the sporadic finds in the Upper Palaeolithic and early Epipalaeolithic periods and their increasing abundance during the late Epipalaeolithic Natufian culture. Some (e.g. Amiran 1962; Margalit 1984; Bar-Yosef 1997:180, 2002; Schmandt- Besserat 1998a; Ziffer, 2008) draw on historical texts to identify similar features of deities in figurine iconography, their posture and gestures suggesting that they are a direct expression of a Neolithic cosmology.
6.1 Sexual imagery

Gimbutas (1974: 37, 135,152; 1991) identifies a link between counter-intuitive sexual imagery and the supernatural, regarding the fusion of sexual characteristics in the abstracted form of female figurines with disproportionately long and massive phallic necks as emblematic of the divine. Other archaeologists recognize sexual imagery in figurines (e.g. Bar-Yosef 1980; Townsend 1990:193; Kehoe 1991; Boyd and Cook 1993; Avner and Avner 1999; Voigt 2000:289-290; Meskell and Nakamura 2003; Kuijt and Chesson 2005; Mithen et al 2005) but do not link this to the supernatural.

The ambiguity of items with mixed sexual characteristics creates confusion amongst researchers.

An example of this confusion is found in the debate over the interpretation of the Natufian twin pendants Fig.14 and their parallel from Palaeolithic Dolni Vestonice Fig.9. Conflicting interpretations have been offered. Power (2004:93) for example recognizes that the pendants could be interpreted either as male or female; Soffer (1997:240) regards the pendant from Dolni Vestonice as nonfigurative. She sees Fig.9 and Fig.10 as most likely a synecdoche for the female body. Others offer different interpretations. Marshack (1991b) regards the pendants as breasts with a rod-like neck. Kehoe (1991:121) and Viallott (1996) interpret them as a scrotum with penis. McDermott (1996:666) and Soffer (1997) point out the similar bilobate shapes of breasts or testicles while Hansen (2001:39) draws attention to the bifurcation indicating a pubic triangle.

The large element of images in the record which cannot be assigned to male or female precludes a fertility cult explanation and challenges researchers who acknowledge the presence of indeterminate gender (e.g. Bar-Yosef 1985; McDermott 1996a:113; Hamilton 2000:22; Voigt 2000 289-290; Hansen 2001; Verhoeven 2001; Meskell and Nakamura 2003; Bailey 2005; Kuijt and Chesson 2005; Turkcan 2007:260; Croucher 2008; Daems 2008:101; Gopher and Eyal 2012).

Animal features are often added to the mixtures of genitalia. A common phenomenon characterizing supernatural images is an unnatural number of fingers or toes such as ‘hands’ with three or four fingers. Cauvin (2000a:112-3) notes that this anatomical trait figures in pre-classical sacred art from the Middle East to the western Mediterranean and as far away as Ireland as a mark of transcendence. It characterizes divinities or deified biblical heroes (Barnett 1986/7). Gimbutas (1989:244-5) links three fingered hands found in her data with the supernatural and birds. Mixtures indicate, as Mithen (1999:155-6) suggests, that the therianthropic images are likely to be supernatural beings.

6.2 ‘Gender of power’

I suggest that the unsexed or dual-sexed images in human form incorporate ‘gender of power’ (Power and Watts 1999) as the expression of ritual potency in early human-like images. These earliest forms of communal constructs, these ‘gods’, are characterized by their fused male and female sex attributes. This elaborate use of counter-intuitive anatomy, signalling that these bodies are not designed to portray ordinary human beings, supports the suggestion that they are gods. In particular, the impossible unity of sexes, fused human and animal images, and the application of red pigment are signals of supernatural potency which intentionally create beings set apart from ordinary human appearance. It is in this iconography that their potency lies.

Since I am looking for WRONG sex signals, naturally my attention focuses on abnormal combinations of sex indicators. According to Boyer (2001) such counter-intuitive features would be very salient; any modern human would recognize them from a portrayal of mixed genitals. Since images of actual humans with both male and female anatomical sexual characteristics are almost never found, it seems that fused sex must have been signalled in another way.

This dual sex signal is buried, I suggest, in scrambled genital forms. The data appears to be full of abstract shapes which can be classified as anatomical genital shapes of males and females and combinations of the two. It is in these shapes that I suggest WRONG sex and fused genital images are to be found. While Leroi-Gourhan 1971[1965] or Hayden (1985) provided lists of signs or metaphors indicating male or female (see chapter two), they do not relate the genital shapes present in their categories to a wider structural application of genital shapes in the iconography of figurines. I present below descriptions of these genital shapes and show ways in which they were combined to signal ‘gender of power’ in figurines.

6.3 Genital shapes

Basic genital shapes may appear as detached items, as marks on human-like bodies or as the dominant shape of the whole item. Through ingenious manipulations they express the supernatural fusion of male and female that signals ‘gender of power’. ‘Detached’ genitals – vulvae and phalli – are present throughout almost all the period of the data, but human images with genital signs indicating solely male or solely female are extremely rare. Examples of those with exclusive female attributes are Fig.39:2, Fig.53 and Fig.54. Sometimes animal features are mixed with genital shapes. The range of devices of shapes, patterns and motifs are used jointly and ambiguously to present all human-like beings as androgynous, and/or half-animal. On some of them remains of red pigment can be seen.
**Female shapes**

Schematic shapes identified as 'female' are transected ovals e.g. Figs.22:1-7; Figs.23:1-2; Fig.36:4; Fig.60:1-2; Figs.90:3-4. Oval shapes with a medial line along their length are recognized as vulvae by Stekelis (1972: Pl 56-58), Gimbutas (1991:223) and Marshack (1991b:297). This motif may also be found with two or more parallel lines. These transected ovals appear all through the data period mostly as individual items and on one rare occasion on a human body.

**Triangles**

A second common shape for a vulva is a downward pointing triangle or V shape. This appears mostly in anatomical pubic position e.g. Figs.92:1-2; Figs.97:1, 3; Fig.98; Fig.104:2; Figs.105:1-3; Fig.116.

These basic genital shapes are anatomically recognisable, but their use in this iconography is metaphorical. They may appear in many variations and in different locations on the body.

**Male shapes**

Schematic shapes identified as male are elliptical shapes with or without a horizontal line circling the circumference near the apex e.g. Figs.21:2-3; Figs.60:3-4; Figs.91:2. These resemble an erect phallus. The horizontal line appears either straight or curved in different artifacts – singly e.g. Fig.20:3; Fig.24:2; Fig.25; Fig.28:1; Fig.30:2; Fig.43; Fig.48:4; Fig.50; Figs.52:2-3; Fig.73; Figs.74:1-3; Figs.75:1-2; Fig.76; Fig.77; Fig.78; Figs.80:1; Fig.81:2; Fig.85; Figs.91:2-3; Fig.96; Fig.99; Fig.101; Fig.108; Fig.114 or in multiple parallel lines e.g. Fig.80:2; Fig.81:1; Fig.98 and Figs.105:2. Such phallic shapes used metaphorically in figurines are recognized by Bar-Yosef (1980), Boyd and Cook (1993), Gopher and Orrelle (1996), Verhoeven (2001), Daems (2004:20), Mithen et al (2005) and Goring-Morris and Birkenfeld (2008). White (2007:291) regards the horizontal mark as rainurage for the suspension of objects. No doubt this feature was sometimes a suspension device, but its frequent reoccurrence in a variety of contexts, belies this purely technical function.

Another male genital shape is that of two near-spherical shapes arranged vertically one on top of the other resembling, I suggest, a flaccid phallus e.g. Figs.21:4-5; Figs.32:2-3; Figs.70:1-2; Fig.72:1-2. These appear in every period of the data.

A schematic male parallel of the female genital V shape is the shape produced by two testicles topped by a phallus, an upward pointing triangle. This motif rarely appears in Near Eastern figurine data in the anatomical position of a phallus. An upward pointing triangle can appear as the head of a figurine e.g. Fig.69:2; Figs.74:2-3; Fig.75:2; Fig.76; Fig.77; Fig.78; Fig.79; Fig.80:1; Fig.81:1; Fig.108 or as the shape of a burial e.g. Fig.115. Upward pointing triangles in the location of the genitals appear in some images from different places and periods e.g. Fig.13:3; Figs.45:1, 3. Naturalistic images of phalli also appear e.g. Fig.21:1; Fig.32:1; Fig.91:1.

Triangles are related to the symbolism of the number three, regarded by some as a male symbol e.g. Glenn (1965, 1983), Freud (1959 [1916-1917]) and Abraham (1913) who base their interpretations largely on the triple configuration of the penis and testicles. In Indo-European tradition the *phallus cum testiculis* is perceived as a triform cluster (Dundes 1968, 1992:281). The derivation of the Arabic numeral 3 is said to be from a male genital configuration (Spitz 1924). An upward pointing triangle is the body shape of the image of the goddess Tanit to whom sacrifices of young lambs and young children and birds were offered in the Punic sacrificial burial grounds. The Tanit motif is one of the most dominant motives to appear on the steles in the tophets (Brown 1991:43). Dundes (1968:420n.1) relates the phallus to a third eye or leg in accord with the phallicism of the number three. In view of the phallic shaped extremities of what have been described as legs e.g. Fig.82:1; Fig.91:3. I suggest that this assimilation of legs and phalli operated in my data.

**Ambiguous shapes and combined shapes**

A bilobate shape, e.g. two adjacent spherical or oval shapes lying horizontally is a recurring theme e.g. Fig.9; Fig.10; Fig.14; Fig.53. The basic anatomical symmetry characteristic of both breasts and testicles is used ambiguously in these artifacts to suggest both male and female at the same time. This device is present in both the European Upper Palaeolithic and Neolithic periods.

**Combinations**

The V shape, an abbreviated version of a triangle, is used in many ways. Single V shapes or triangles and attributes of the triangle such as diagonal sides can indicate male or female depending on their orientation or position on the body.

I have been influenced by Gimbutas (1989:6) who shows a progression from a simple denotative V indicating a pubic triangle to more complex combinations of the motifs. She interprets these as essentially female regenerative symbols of the supernatural Bird goddess.

I suggest that combinations of open or enclosed zigzag patterns are an expression of alternating upward and downward pointing...
triangles, are a compact expression of fused male and female sex e.g. Fig.26. Zigzags are common pottery decorations e.g. Fig.120:1-3; Fig.121:6. Unidirectional nested Vs which form a ‘hydra’ motif can indicate male or female depending on orientation e.g. Figs.13:2-3; Fig.40:2; Fig.81:2.

Other combinations of joined male and female triangles create different compact expressions of the fusion of two sexes. A pair of opposing triangles joined at the base forms a lozenge or diamond shape, a trapeze or a rectangle. These motifs are incorporated into figurines in various ways – as the dominant shape of the whole figurine, as the shape of the head, torso of other body parts, or as markings incised or painted on the body.

Lozenge shapes are incorporated in Fig.13:2-3; Fig.46; Fig.51:2; Fig.53; Fig.116; Figs.117; Figs.118:1-2. The carinated Wadi Raba vessel Fig.111 is lozenge shaped. Torsos of figurines may be trapeze/axe shaped e.g. Fig.51: 4; Fig.69:1-2; Fig.100; Fig.105:1 Fig.108 or square or rectangular e.g. Fig.33; Fig.43; Figs.51:3; Fig.57:1-2; Figs.106:1-2. Joined apex to apex, two opposing triangles form double axes or butterfly shaped images. These are incorporated into the body torsos e.g. Fig.121:7. The cross-hatched or net motif appears incised on artifacts e.g. Fig.5; Fig.12; Figs.23:3-4; Fig.36:4; Fig.67 and the cross sign e.g. Fig.98; Fig.110 are multiples of these composites. Lozenges, opposing triangles and cross-hatching are prominent motifs on a collection of stamp seals retrieved from a PN level at Hagoshrim e.g. Fig.124:3,4,6,7.

Lozenge shapes on the belly and thighs of figures are known from Palaeolithic and Neolithic sources and are a recurring theme in Near Eastern iconography. Leroi-Gourhan (1968:90) suggests that some of Upper Palaeolithic Venus figurines are formed essentially around two shapes – an elliptical rod, at the center of which is suspended a “lozenge” encasing female breast, womb and vulva. Schmandt-Besserat (1998b) notes in Fig.71 how with a skilful use of symmetry, triangles and lozenges are arranged to suggest a pregnant female.

Thus it appears that the elusive WRONG sex or ‘gender of power’ is hidden in a welter of anatomical shapes and complex motifs combining oval and elliptical shapes and geometric elaborations of the simple triangle. These are displayed schematically and naturalistically in ambiguous combinations on human body shapes in a sophisticated form of body art.

**Fusions of vulvae and phalli**

Fusions of female images and phalli take many different forms. The shape of one of the earliest human images in my data, Figs.28: 3 when inverted’, was shown by Bar-Yosef (1980:195) to portray a female and phallus at the same time. Its slightly parted legs become the extremity of a phallic image identified by a circumferential horizontal line. In one orientation two phallic heads seem to be visible.

Two phallic heads suggest can act as a metaphorical portrayal of male twins. These earliest images of gods thus combine twins and vulva display in ambiguous foreshortened images. They recall Fig.25, attributed to the Natufian period. A sculpted pebble appears to show two humans closely joined, in a tightly flexed position. Neuville (1993) interprets it as a human couple in coitus and Boyd and Cook (1993) regards it as

“…being also phallic both in its profiles and when viewed from above or below… a sculpture which is sexual in every aspect ingeniously depicting intercourse in association with the male sexual organ.” (1993:401)

Hansen (2001:39) suggests that this artifact can both be read as a female statuette and as a phallus.

In my view the two ‘heads’ of the closely flexed images and the phallic appearance should be interpreted as male twin foetuses and not a sexual union. An abbreviated metaphorical symbol of twins may be inferred, too, from Fig.21:2, in the same period, where two schematic phalli are portrayed on one item. Elliptical phallic-shaped items with one or two pointed extremities e.g. Fig.102:1-2 are included in a category of schematic phalli by Gopher and Orrelle (1996:260 Fig. 4:8-9). Miller (2002:227) taking exception to this classification notes that it is “a strange way to depict a phallus”. If one were looking for anatomical accuracy rather than understanding the metaphorical nature of the image, this would indeed be strange. In Egyptian mythology statues of the god Bes and other deities are also sometimes depicted with two or more phalli. Twins were often subjects of creation myths. Schmandt-Besserat (1998a:11) describes the double headed figures Figs.57:1-2 as twin gods or goddesses, familiar in traditional Near Eastern pantheons.

**Parure assemblage – shell beads**

Androgynous signalling on human images is very rare in the imagery of the Natufian period.

I look to another assemblage, the parure – jewellery assemblage, of shell beads and other beads for evidence of WRONG sex. The antiquity of shells as ornaments in the archaeological record is well-established (e.g. Biggs 1969; Claassen1998; Henshilwood et al 2004; d’Errico and Vanhaeren 2009).

During the Late Palaeolithic and Early Neolithic period the shells of a limited number of inedible species were imported to the Southern Levant from long distances (Bar-Yosef 1989). Research on shells has focused on sociocultural aspects such as provenance and trade, individual prestige, social stratification
and group identity. Wright (1978) suggests that dentalium shells in Natufian burials symbolize a particular status position – a suggestion rejected by Belfer-Cohen (1995:15) on grounds that their abundance and ease of preparation preclude special luxury significance. Biggs (1963:127) and Valla (1999:237) however, draw attention to the iconography of shells noting the resemblance of *Columella* (cowry) shells to female external genitalia and of *Dentalium* to phalli. Bar-Yosef Mayer (2008:108) claims that evidence for dentalia’s apparent spiritual value is not their resemblance to male genitalia, but the costly procurement effort, a long use history, and occasional association with ochre.

I accept the suggestion of Biggs and Valla that these shells are selected for their natural shapes which recall genitalia. I suggest that the recurring selection for gastropods and bivalves in the prehistoric record seems to have been made for reasons of the co-appearance of features which greatly resemble vulvae and phalli both singly and in fused sex images.

The two kinds of shells used for the earliest shell beads from the Middle Palaeolithic in the Near East are different kinds of gastropods e.g. Figs. 2 and 3 and bivalves e.g. Fig. 1 *Glycemeris*. These two kinds of shells continue to appear in the Upper Palaeolithic. They are joined by elongated narrow tube-like shells *Dentalia* Fig. 6 and gastropod types which are more elongated than the globular *Nassarius* such as, for example, *Mitrella scripta* Fig. 7:1 in the Upper Palaeolithic and *Anachis miser* Fig. 7:2 in the Epipalaeolithic. These have more pronounced and extended spires; the *Dentalia* shells and bivalves appear in both smooth and ribbed types. A selection for increasingly phallic shaped shells seems to be operating. The shell of a different kind of marine gastropod, the cowry from the *Cypreaeidae* family, Fig. 27:1-3, whose provenance is the Red Sea, appears in the Natufian record in the El-Wad and Hayonim caves (Bar-Yosef 1987). These shell types continue to appear too in later periods.

Eliade (1991[1965]:125) suggests that the likeness of cowry shells to the vulva was related to their magical potency. Their symbolism is associated with the appearance of their underside: the lengthwise opening which resembles a vulva or an eye Fig. 27:1. Meanings of both vulva and eye are assimilated to the cowry (Murray 1939; Singer 1940; Hildburgh 1942:178; Eliade 1991[1965]:125). Dentalia have a basically phallic shape.

**Dual sex imagery of shells**

However, both cowries and dentalia, and in fact all gastropods and bivalves in the record display features of dual sex imagery. This is suggested by attributes both of the living animal and of its shell. Dentalia have a large orifice at one extremity which resembles a female orifice and the other extremity narrows to a point like a phallus, lending them a dual-sexed appearance. The large end is red-coloured in some species. Dentalia are mentioned in myths from the New World and New Guinea in relation to secret male menstruation rituals stolen by males from females (Buckley 1988; MacKenzie 1991:167).

Both gastropods and bivalves live and burrow buried in sediment. They have a siphon, a tube-like structure in which water flows for locomotion, feeding, respiration, and reproduction. In the animal of gastropods, the phallic like siphon emerges and withdraws from the vulva like aperture as a flap that is rolled into the shape of a tube. Thus both vulva and phallus like shapes appear together in one animal.

The structure of the shell is modified to accommodate the siphon. The siphonal canal or siphonal notch, situated at the most anterior part of the aperture of the shell, is a bony extension through which the siphon is extended when the animal is active. In shells which have a siphonal canal, the columella runs from the apex of the shell to the midpoint of the undersurface of the shell, or the tip of the siphonal canal. Thus the bisexual appearance of the anatomy of the living animal is recorded in the structure of the shell. Selection for shells with such features implies knowledge of the anatomy of the living animal.

The large vulva-like apertures of shells of gastropods found from the Middle Palaeolithic (Bar-Yosef 2005), such as *Nassarius* gastropods, for example, are surrounded by labia resembling female genitalia, and have a siphonal notch at the anterior edge of the aperture e.g. Figs. 2-3 which indicates that the animal has a siphon. The gastropod *Columella rustica* Fig. 4 has a large elongated denticulated aperture extending into a phallic conical extension and a siphonal notch.

The cowry shell Fig. 27:1-3 is egg-shaped and rather flat on the underside with a denticulated long narrow vulva-like aperture and a siphonal notch.

Cowries are thought to have supernatural powers and can serve as a prophylactic against the *Evil Eye* (Dundes 1992:264). The cowry can appear with its back removed Fig. 27:3, which exposes the columella. This practice is known from the Upper Palaeolithic (Bar-Yosef and Heller 1987:133).

In a form of divination practiced by the Yoruba in Africa and by populations in the New World, sixteen cowries, with their backs removed are thrown on a tray and various predictions and sacrifices are made on the basis of the number of shells that fall face up (Bascom 1980).

The *Glycemeris* bivalves in the data e.g. Fig. 1 are circular, some with a natural perforation on the umbo. In the live animal Glycemeris bivalves, two spherical shells join to enclose the animal Fig. 1:2. When observed from the angle
of the hinge line a vulva-like image is evident. In the living animal a siphon appears from between the two shells. Bivalves are always found singly in my data, and it is only in the live animal when the two shells are joined that vulva-like and phallic-like features can be observed.

Selection for gastropods and bivalves continues through PPN (e.g. Bar-Yosef and Heller 1987) to the Pottery Neolithic Period (Bar-Yosef Mayer 2005).

Context

The dual sex features of gastropods have been preserved in snail-like figurines e.g. Fig.40:1 and shell beads appear in a number of contexts where dual sex might be indicated. For example vulva-like cowry shells were placed in the eye sockets of plastered skulls e.g. Fig.66:4. In the PN Yarmukian period, cowry shaped ‘vulva eyes’ appear on male shaped heads. The dual sex aspects of these contexts are discussed below.

In the Natufian jewellery found on skeletons, dentalia are arranged in triangular fan shapes e.g. Fig.16; Fig.17; (Garrod and Bate 1937:17, 19; Perrot et al 1988:37; Nadel 1992:69) or in bands of parallel lines on the skull Fig. 15.

Some parure items seem to have been intentionally carved to imitate the poten iconography of shells further suggesting that selection for appearance motivated the choice of shells. Bar-Yosef Mayer and Porat (2008) note that oval green stone pendants seem to imitate cowry shells (2008:Fig.1:10).

Other beads, made from animal teeth or bone, seem to have been selected for their appearance. Bifurcations which appear naturally at the roots of animal teeth resemble ‘open legs’. These were exploited for symbolic elaboration in the Palaeolithic e.g. Fig.12 and in the Natufian, roots of gazelle phalanges with removed distal extremities resulted in a bifurcated shape – the shorthand for open legs ‘signal on’ (see below in this chapter for a full description of this). These were perforated and made into beads (Marchal 1991:594). Perforated fox canines from the Natufian may have been selected for their lunate crescent shapes.

Conventions for male and female

Basic shapes, elliptical for male and spherical for female are traditional sex indicators in prehistory and history. For example, large natural rocks in desert sanctuaries were regarded as deities (Avner 1984, 1990, 1996). Avner suggested that the tall elliptical shapes were male and the shorter rounder stones, female. In another cultural convention, asymmetry is thought to exist between left and right. Positive qualities are usually ascribed to the male right side, and negative ones to the female left side among some peoples e.g. Hertz (1989:98), Lattas (1989:456) and Gonda (1980:60).

By juggling and mixing these conventions another expression of indeterminate gender is signalled. For example, “pear” shaped pebbles with a wide female base and narrower apex are natural fused sex symbols. This idea was exploited in Fig 36:2 and Fig.93 both of which include a vulva slit at the broad female end. The simple unincised shape of Fig.30:4 combines a broad female (and lozenge) base with an elliptical male square ended extension. Fig.36:1 an elliptical (phallic) shaped pebble has a bird face and two medial (vulva?) incisions signaling male, female and bird.

Assimilation of genitals and eyes

In my data genital shapes were assimilated with other body parts: the vulva shape appeared in the position of eyes; the phallic shape took the place of the head, and the right thigh had characteristics of a phallus. These counter-intuitive locations of vulvae and phalli can be seen as devices to show fusions of male and female.

The female genital shape assimilated with eyes appears as a transected oval attached or moulded in plastic form and an abbreviated linear form. Garfinkel (1995:32; 2010) drawing on Oates (1966:150, footnote 19) appropriately calls Yarmukian figurines with these eyes ‘Cowrie-eye figurines.’ These female genital eyes also appear in an abbreviated linear form of single or multiple parallel line incisions. Fused sex is signalled by the placement of these female genital symbols on heads with phallic shapes, and on semen-rich skulls. These vulva-shaped eyes are located on the elongated heads of figurines (with male triangular shapes) in the position of eyes and also on plastered skulls for example in the PPNB; which according to the ‘mue los’ theory (below) are a rich source of semen.

Examples of transected oval female shapes in eye locations are found in: Fig.50; Fig.59; Fig.66:2; Fig.74:1-2; Fig.75:1-2; Fig.76; Fig.77; Fig.78; Fig.79; Fig.80; Fig.85; Fig.89:1-3 and Fig.113. Sometimes cowry shells are used to indicate the eyes e.g. Fig.66:4. Goren (1995) noted on the plastered skulls, the play between open eyes Fig.66:1 (bivalve shells) and closed eyes Fig.66:4 (cowries). In view of the nature of cowry divination mentioned above, which rests on open or closed views of cowry shells, this may suggest an oracular function for plastered skulls.

The abbreviated form of incised linear marks appears most frequently incised at one end of a pebble figurine e.g. Fig.94-97 to indicate eyes.

An understanding of the assimilation of genitals and eyes is assisted by the knowledge of two belief systems. They are
the ‘muelos’ belief and the ‘Evil Eye’ belief. Both of these relate to fluids and bodily substances.

The muelos belief

The ancient muelos belief regards bodily substances of brain, bone-marrow and semen as essentially the same substance, stored in greatest quantities in the head, spine, thighs and gentalia of human males (La Barre 1984; O’Flaherty 1980:45-6; Orrelle 2008a). La Barre (1985:4) claims that this belief can be traced from Palaeolithic times. Historical sources show that this life matter was considered precious and jealously preserved; for example sexual abstinence is a fundamental rule of the hunter, and implicit in the Hindu and Christian rationale of “continence” in which immortality is attained through non-expenditure of the soul-stuff of life, in sexual orgasm. In some religions, vows of sexual abstinence are mandatory for leaders. The loss of muelos in a divine king was identified with the loss of power of growth and his bodily power of making rain, food, milk and children. This is why he was ritually strangled or buried alive when he fell gravely ill (De Heusch 2005:27).

Evidence of this belief, in archaeological remains anticipates ritualization of those body parts that contained quantities of the substance, the head, spine and phallus, but in particular of the source of the greatest stores of muelos, the skull. This can explain the ritual focus attached to skulls in cults known since the Palaeolithic. The muelos belief may be considered as one of the ideas behind bone cults, explaining rituals such as headhunting, decapitation, skull treatments, and cannibalism.

One kind of head deformation transforms the skull to create an elongated shape. Identified in the skeletal remains and material imagery of the Near East and other places, these deformations seem to convey the symbolic idea of the ‘phallic head’.

A different ritualization of the skull is seen in the link between royalty or the supernatural and animal horns growing from the human head, or used in crowns (Keel and Uehlinger 1998:195). Horns, the secondary sexual characteristics of animals were fitting crowns to place on the muelos rich divine heads. Sumerian goddesses for examples are differentiated from mortal women by their divine horned headaddresses (Westenholz 1998: 66; fig 22, 67). In this case animal characteristics fused with human heads indicate the supernatural or royalty. Hair too is believed to be located on the jaw, or pubes as a result of their proximity to these muelos rich places (Onians 1985:125, 130, 229, 231-3 235 n.4.). This symbolic elaboration of male vital substance may have originated as a male strategy in early sexual contests.

The Evil Eye

The Evil Eye belief is based on the idea that an individual has the power to cause harm to another individual or to that individual’s property by simply looking at or praising it. The oldest written mention of the Evil Eye is found in Sumerian Babylonian and Assyrian cuneiform clay tablets; the Sumerian texts date from about five thousand years ago (Dundes 1992:276). It is likely that this belief was prevalent in the millennia preceding writing.

The striking similarity of evil eye reports from different cultures strongly suggests the rationale behind it is likely to be cross-culturally valid. Dundes (1992) undertook to identify the underlying theoretical principle or principles behind the reports to explain the whole range of phenomena believed to be caused by the Evil eye.

He suggests that the complex depends upon a number of interrelated folk ideas in Indo-European and Semitic worldviews (1999:266). In particular, drawing on Onians 1951, he focuses on the idea that life depends upon liquid while loss of liquid means death. “Wet and Dry” as an oppositional pair means life and death. Dundes suggests that the underlying structural thought behind the Evil Eye complex is the centrality of the dependency of life upon the precious body fluid of which there is a limited amount. The potent gaze of an Evil Eye could cause a drying up process (Dundes 1992:274).

Protection is required against the envious “Evil Eye” of others which threatens life (Dundes 1992:264; Bowie 2000). Amulets with phallic shapes are among apotropaic measures against the Evil Eye; and males often touched their genitals upon seeing a priest or other individual thought to have the Evil Eye could cause a drying up process (Dundes 1992:274).

How can genitals protect against the Evil Eye? Dundes (1992:276) suggests that all these amulets or gestures signify the production of some form of liquid. Whether the liquid is semen or saliva, it provides proof that the victim’s supply of life force is undiminished. Spitting involves the projection of liquid for all to see – saliva can also be symbolically equivalent to semen (cf Onians 1951:233, n5).

The belief equates bodily apertures – the eye and the vulva. Both are wet and surrounded by hair (Dundes 1992; Reitler 1913 :160). Tourney and Plazak (1954) note the similarity “with the pupil representing the vagina, the lids, the labia, and the lashes the pubic hair” (1954:489). The famous Sheela na gig hug images Fig.122 found in Britain and Ireland (Clancy 2006) who expose their vulvae are said to “look” with the genitals.

In my data genital shapes form the eyes of the gods and I suggest that an explanation for this originates in the Evil Eye.
belief – the god’s eyes/genitals are capable of producing fluids which counter the drying effect of the Evil Eye. O’Flaherty too (1980:100; 1973:247-50) notes the assimilation of eye and genitalia citing a link between blinding and castration in Indian mythology.

Dundes (279) notes that the verb ‘to ejaculate’ is found in several contexts to express the spitting action of the apotropaic eye.

He suggests that the equivalence of eye and phallus, probably originated in ancient Egyptian beliefs: the sun was the primary creator using his eye, the “eye of Horus” to transmit solar virtues to the gods to the through a magical fluid. The fluid, Sa was emitted by a process termed satpou a verb used to describe the shooting form of water, flames and arrows and the ejaculation of semen (refs in Dundes 1992:279). The protective benefits of the fluids of both vulva and phallus may explain the presence of genital shapes in the place of the eyes of god images in my data.

The ejaculating sun or eye or phallus explanation helps us to understand the changes in eye shapes during the course of my data (see chapter 7).

Beliefs related to twins

Another belief system surrounds the birth of twins and this too is related to fluids and bodily substances. Mythic themes of twins exist in most cultures. Twins are sometimes regarded as the result of an excess of semen and bodily substance. A widespread belief that twin children possess magical powers over nature, especially over rain and the weather is found in North America and Africa (Barley 1994:106; Frazer 1992:66-7). In Africa, for some, twins have special powers; twins, like miscarriage, threaten the country with drought. There must be constant applications of water to the mother of twins and to the graves of such children. They are referred to as ‘sons of the sky’ and are dangerously involved with celestial fire and excessive heat. Rainmakers use the body of a miscarried child, preferably the bodies of miscarried twins as a ‘powerful’ ingredient mixed into their rain medicine (Schapera 1971). Legends on the birth of twins show many similarities such as associations with animals – being saved by a she-wolf and a woodpecker; they include elements of rivalry, power, succession and fratricide.

This association of twins with disruption and harmful influences is accompanied by the fear of the birth of twin infants. This precipitates the killing of one or both of a pair of twins. Ritual killings of twins is widely recorded ethnographically and in myth. Tales of heroic twins in which one kills the other abound in myth and folklore. A tale of heroic twins may be started by the killing and dismemberment of a demiurgic fish (Cardigos 1996:59; Frazer 1992:66). Twins are established as heroes, linked with a primordial sacrificial dismemberment and the killing of the twin, a theme which Cardigos suggests stems from a far more ancient necessity that connects dismemberment with twins (Cardigos 1996:58).

A common pattern of cosmogonic myth relates the creation of the world from the dismembered body of the first man. This creation mythology is traditional among Proto-Indo-European people (Lincoln 1986). In some versions, the mythical androgynous being is replaced by a pair of twins or the body of the first bovine (Eliade 1965; O’Flaherty 1980:80). The role of twins in Western creation myth resembles prototypes in Egyptian, Proto-Indo-European (Lincoln 1986:10) and Vedic texts. This primordial creation motif exists too in certain West African tribes (Bonnefoy 1993).

Even today, cultural responses to twins range from the belief that twins are exceedingly auspicious and bringing good fortune, to viewing the birth of twins as a great misfortune. ‘Twin infanticide’, the killing of one or both of a pair of twin infants because they are twins, is still practiced. Myths in Graeco-Roman antiquity attribute twins to a double paternity, human and divine – often the mother is a virgin seduced by a god. Twinship is often associated with notions of impurity, blemish and related to adultery and illegitimacy; the result of superfecundity. Twins are not laid on ashes and shown to the moon like other children after their birth (Barley 1994:106).

Aspects of these three belief systems find expression in the interpretation of the data. A clear focus on muelos-rich body parts is noted. Indirect references to the Evil Eye belief are made and recurring images of double phalli seem to indicate that male twins were ritualized and elaborated in the data.

These beliefs relate to possible concerns in areas of uncertain precipitation. They focus on bodily fluids and their influence on fertility, rainfall and the weather. The symbolism of fluid preservation behind these ideas may be related to the need to provide solutions for unpredictable rainfall in marginal regions of the data, in particular in the early stages of cultivation.
CHAPTER SEVEN
Interpretation – Male Gods

7.1 Elaboration of phallus, thigh and skull

It is a prediction of this work that by the Neolithic period, there would be evidence of male appropriation of the ritual power of female coalitions. It can be predicted that male body parts rich in muelos such as phallus, thigh and skulls would be ritualized and become dominant images in the portrayal of a god. One of the signs of this is the assimilation of the phallus to the head – both semen-rich locations in the body according to the muelos belief. Through all periods of the data there are heads of human images which incorporate features or shapes that portray them as male and phallic. It can be anticipated that members of elite groups would practice cranial deformation to acquire phallic shaped heads. Cranial deformation is identified too in the skeletal assemblage.

Cranial deformation

The practice of skull modification or cranial deformation is summarized by Gerszten and Gerszten (1995); Meikeljohn et al (1992) and Croucher (2008). The association of elongated culturally altered skulls, with elite groups is suggested by different researchers. Molleson and Campbell (1995:49) for example, identified genetic based dental characteristics in at least two-thirds of a sample of modified skulls examined from Arpachiya in Mesopotamia from eight to seven thousand years ago. Individuals both with and without cranial deformation had this condition. This suggested to them an apparently inbred lineage relationship in the populations, a hereditary group or class. The same congenital dental pattern was noted in my data for the Natufian period in chapter four. No evidence for elongated skulls was reported from the Natufian, but this was identified in PPN Jericho (Meikeljohn et al 1992:83; Fletcher et al 2008). Fletcher et al regard this as a ritual practice significant during life, supporting an elite interpretation rather than that of ancestor cult for this phenomenon in the Southern Levant.

Croucher (2008:31) points out that at some sites the practice appears to have been restricted to females, but Meikeljohn et al’s (1992:93), survey of four Iranian/Syrian sites, does not reveal obvious sex correlations. At Arpachiyah both males and females are found (Molleson and Campbell 1995). Molleson and Campbell note the depiction of humans with elongated skulls on ceramic vessels and figurines (1995:51; Figs.9.3-4) and relate elongated skulls depicted on images at Yarim Tepe and Ur to cranial deformation. In my data, the pointed heads of the PN “broad seated goddesses”, Figs.74-81, for example are elongated and particularly large in relation to the body.

There appears to be evidence of another kind of cranial deformation. The heads of the plaster statuary in the PPNB display indented bands and parietal bulges which look like hairstyles e.g. Fig.56; Fig.57:1; Figs.58:2-4.

I suggest that they are evidence of cranial deformations aimed as portraying the horizontal circumferential incision characteristic of phallic imagery.

Examples of this deformation are evident too in PN contexts e.g. Fig.117 and Fig.119:1. In the Natufian, dentalia form a similar band on the skull of Fig.15.

These ‘bands’ are evident too on human skulls. Meiklejohn et al (1992 and Lorentz (2009) review of cranial deformation in the Near East, Eastern Mediterranean and up to the Later Bronze age in Cyprus. In their review, Meikeljohn et al note that the most common type of deformation resembles a modern head-band and is called “occipital grooving”, a deformation that results in a depression or concavity running across the posterior of the occipital at right angles to the sagittal plane. They suggest that morphological changes in the crania were probably achieved by the use of bandages (1992:90,92 Fig.2, and Plates 1and 2). This is consistent with finds of Özbek (2001). Meikeljohn et al (1992:95) regard this as “patterns of head-gear”; Lorentz (2009) concludes that head-shaping signified status.

I suggest that the evidence for two kinds of skull deformations to produce phallic-like shapes and congenital evidence for inbred lineages confirm the suggestion that cranial deformation to imitate phallic shapes was a cultural practice reserved for a particular group. It appears that the intention seems to have been to mark an elite status group selected for this treatment with the signal of the erect muelos-rich phallus, the ritually potent male ON signal. The presence of figurines with these features could suggest that the elite group and the gods shared the same image.

The image of the phallic head is a common ancient theme expressed in myth and imagery (Ross 1996). The equation of head with phallus is supported in Indian texts indicating that a severed head is an act of castration (O’Flaherty 1980:84). Frequent references to Indo-European sources may hint at an early Indo-European presence in the Near East (e.g. Adams and Otte 1999:73).
**Dominant head shapes**

The shapes of the outsize heads of Yarmukian clay “broad seated goddess” types, are all upward pointing male triangles e.g. Figs.74-81. Most are coloured red.

Some of these items have breasts, others do not and all are red coloured. All have prominent male shaped triangular heads many bearing female vulva shaped eyes. These signal mixed male and female symbols.

A unique item Fig.77 has male genitalia, is painted red, and has a prominent male head. The genitala, the red colour signal of ritual potency; and the minor female ‘vulva’ eyes suggest that this type represents a transformation of the ‘broad seated goddess’ type into a predominantly male version. Fig.75:1 too has a hint of male genitals is red coloured, but has breasts and prominent ‘vulva’ eyes.

Face masks e.g. Figs.68:1-3 are different artifacts elaborating the head. Fig.68:2 bears the symbolism of a solar deity (see below).

**Thighs**

Thighs are a rich location of bone marrow and according to the muels belief, this would also indicate a rich source of semen. Thighs of the “broad seated god/goddess” type are generally substantial with fat folds. Artifacts described by Garfinkel (1995:100102) as leg fragments of these figurines have distal extremities in the shape of phalli Figs.82:1-2; Fig.84.

Fig.91:3 is a trihedral arrangement of open legs and phallic neck/head. All three branches of the triform have phallic ends – a fused sex image has become an image of three phalli; open female legs signaling Wrong time have become part of an all-male image.

**Erect and flaccid phalli**

The anticipated ritual focus on semen/marrow-rich locations includes a particular focus on phalli. Phalli appear in the data in erect and flaccid states, portrayed naturalistically or schematically. Erect and flaccid phalli appear separately or together on one artifact.

**Erect phallus**

The erect phallus is a signal based on the male physiological substance of semen, and represents a male equivalent to female signals based on female physiological menstrual substance.

In WRONG species/sex terms menstruation is the emblem of power for women, as expressed in shorthand by ‘spread leg figures’ to display a natural body metaphor for cosmic periodic death and renewal. Similarly the erect phallus, rich in semen, represents a ritual ON signal or sex-strike for men. For example, in a ritually potent scene regarded as a girl’s first menstruation rites depicted in south African rock art (Power 2004; Solomon 1992; Lewis-Williams 1981), male figures have erect phalli signaling ON; the phalli are barred – a male signal of a ritual sex strike, of sexual abstinence.

**Flaccid phallus**

Weinstein-Evron and Belfer-Cohen (1993:104), following Garrod and Bate (1937:114f; Belfer-Cohen, 1991), Edwards (1991) and Turville Petre (1932), interpret artifacts such as Fig.21:5 as phalli. They suggested that the central circumferential incision of some of these resembles the distal end of a penis with a fold or thickening along the longer axes and a drilled hole. Their assignment of these items to phalli is, however, hesitant and includes other possible interpretations of waisted female, vulva or human face. Marshack (1997:82) classified these as female, rounded bodies with belts. I agree with the assignment of these artifacts to phalli, but qualify that they are flaccid, not erect phalli.

Images which I suggest represent flaccid phalli can appear singly, or together with erect phalli, on one artifact. The combined erect and flaccid phallic images appear from the PPnb through to the PN period. This double imagery is achieved by presenting different images on the broad and narrow facets of an artifact e.g. Fig.43; Figs.61:1-2; Figs.70:1; Fig.72:2; Fig.99. The opposition of these two images of the erect and flaccid phallus suggests that some kind of logic related to ON/OFF ritual state signalling is being used. The erect phallus signaling ON ritual state and the flaccid ritual OFF state.

These alternating signals can be displayed through an ingenious exploitation of different characteristics of raw material. For example, the flint nodules on which the single flaccid phalli were portrayed Fig. 21:5 have rounded contours and folds, features which seem to have been exploited to show the rounded aspect of flaccid phalli. Another kind of raw material, tabular cut stone or thin pebbles, seems to have been chosen for its ability to display two facets, one frontal view on the broad facet and a narrow one on the thin section. Phallic images are shown on both facets of Fig.61:1-2. A flaccid phallus is shown on the broad side of the object Fig.70:1 – a “signal OFF” – while the erect phallus on the narrow elliptical section signals ON ritual state. Limestone pebbles are used for the same effect in Fig.72:2.
In Fig.99 the broad frontal face carved on a limestone pebble has an overall (flaccid) phallic shape, an OFF signal combined with an incised slit/triangle vulva; the narrow section shows an erect phallus, the ON signal.

In another example, the natural qualities of stone are exploited used to express fused sexes. On item Fig.44 the head is an oval/lozenge shape with a central groove which indicates vulva; at the other extremity the natural colour of the flint is exploited, the change in the colour of the stone delineates the horizontal circumferential phallic line.

Another device was used on facets of a monumental-sized item Fig.46 where an image was only revealed when both broad sides and one side facet were seen together. Here, again the erect phallus, the male signal ON appears on the narrow section.

An artifact with a circular domed shape, which is both a flaccid phallus and a tool Fig.26, was decorated with a meander, or zig-zag of alternating male and female triangles. Goring-Morris (1998) describes this as ‘mobiliary art’ and notes that the meander pattern (1998:85) was described in much later contexts as associated with water and life. This artifact, appearing early in the sequence of my data shows a male ritual OFF signal with a ‘gender of power’ zigzag symbol in a tool of production.

Yates (1993) interprets images of opposed phallic and non-phallic males in Scandinavian Bronze Age rock art figurines as informative about sexual identity in prehistory. I suggest that these oppositions may rather suggest that ‘signal ON’ and ‘signal OFF’ are operating in his data.

**Dominant phallic imagery**

Since female coalitions are the originators of ritual power, according to the FCC model we must ask what the significance of the appearance of artifacts of essentially phallic shape signalling both OFF and ON ritual states might be. Cosmic periodicity of female menstruation revolves around binary monthly lunar cycles alternating between ritual OFF and ON states. These artifacts which show on one face a signal OFF (flaccid phallus), and on another a narrow erect phallus signal ON, appear to me to be expressing a male physiological adaptation of female lunar cosmology expressed in male images; an appropriated lunar symbolism conflated with phallic images.

This corresponds with suggestions by Knight (1987: chapter 10) that the “language of menstruation” permeated male rituals using female anatomical processes.

In my data, dark moon crescent motifs signaling ON are present on figurines with animal/phallic features from the Natufian and PPNB e.g. Fig.38:2 and Fig.40:1.

The increasingly dominant phallic shapes artifacts appear in various forms. Mostly a hint of a ‘gender of power’ signal appears in a minor way combined with a dominant phallic shape. Examples of images in my data in which overall phallic shapes are prominent are: Fig.14; Fig.21:1-5; Fig.33; Fig.40:1; Fig.43; Fig.50; Figs. 52:2-3; Figs.57:1-2; Fig.62; Fig.63; Fig.73; Fig.85; Figs.91:1-3; Fig.98; Fig.99; Fig.107:1; Fig.108; Fig.110; Figs.111:1-3; Fig.114.

In these examples, while the phallic element dominates, a ‘gender of power’ element persists. An example of this is Fig.43. Ronen (1995:194) notes an almost complete absence of indication of sex on Aceramic Cypriot figurines in contrast to the Near East mainland. While he correctly states there is no indication of one biological sex, an examination of Fig.43 from his data shows an animated phallic head (male ritual signal) with a side view of an erect phallus signal ON phallus, bifurcated legs (female ritual signal) and a rectangular body (‘gender of power’ signal). While there is fusion of male and female ritual elements the frontal and side views produce an overwhelming impression of male use of an alternating pattern of ON/OFF lunar symbolism.

Rare examples of male figures without any female genital metaphors at all are Figs.45:1-3, although the rectangular shape, which is in fact a combined image of two counterpoised triangles, persists.

**Different shaped phallic extremities**

Extremities of phalli are different shapes, pointed, square or round e.g. pointed examples are Fig.33; Fig.40; Fig.69:2; Fig.73; Fig.102:1; Fig.108; Fig.114; square e.g. Fig.21:2; Fig.29; Fig.30:1-2; Fig.31:4; Fig.48:4; Fig.102:2; or rounded e.g. Fig.21:3; Fig.50; Figs.60:3-4; Figs.61:1-2; Fig.63; Fig.70:1; Figs.72:1-3; Fig.85; Figs.91:2-3; Fig.101. In some phallic images the apex is shaped as a horizontal oval animal head atop an elliptical shaft e.g. Fig.62; Fig.63. Fig.21:2 has two square heads, and in Fig.24:2 an animal head combines with a rounded phallic head.

The different shaped heads may reveal intact or ritually mutilated phalli. Some suggested that phallic images show that they were circumcised e.g. Gimbutas (1974: 153), Bar-Yosef (1980:195). The circumcised phallus has a round end. Bar-Yosef (1980:1950) suggested that when inverted, the lower part of Fig.28:3 resembles a circumcised phallus. A model of a naturalistic phallus which appears to have been circumcised was reported from the PPNA site Ain Dhарат in the Judean Desert (personal comm. A. Gopher; Gopher...
In anatomy, the foreskin of the flaccid phallus covers the glans; the loose skin results in a square shaped head.

Circumcision of both males and females is regarded as a costly signal of commitment to an alliance. Gopher and Orrelle (1996:267) suggest that incisions on “vulva stones” may indicate female genital mutilation. Religious beliefs may require that the male foreskin be removed as an outward display of faith and membership in the group and until today this genital mutilation is regarded as a costly signal of belonging for men of the Jewish faith. An essential feature of Jewish circumcision is a show of blood.

In parts of the world where men seek a monopoly of ritual power, secret male rites aim to appropriate female ritual power such as their ability to bleed at the genitals. The male ritual of penile bleeding or subincision is described by Knight (1991:429-31).

Thigh-like objects in the data e.g. Figs. 82:1-2, with phallic characteristics, bear red pigment painted in lines. Fig. 55 from the PPNB also has parallel red lines painted on a thigh. The pigment suggests trickling genital blood from such rituals. Knight (1988:249) quotes a graphic description of male penis incisure at initiation rites in western South Australia: “the blood was sprinkled on the thighs of the men, either by holding the penis at each side and letting it drip, or by moving so that the bleeding penis flopped from side to side, or upwards and downwards, the blood touching the lower buttocks and loins”. (Berndt and Berndt 1945:278).

In Fig. 84 the red pigment remains are in a band across the top of the thigh. No red pigment remains were found on naturalistic phalli.

### 7.2 Axe gods and Solar gods

A number of deities which were later regarded as male such as axe gods and solar gods were identified.

#### Axe gods

I refer first to the polished greenstone axe artifact Fig. 69:1. This greenstone fragment has converging sides and a flat summit, indicating a trapeze shape. Following the iconographic logic set out in this work, this is an upward pointing triangle (male) identified by the position of the eyes on the narrowing extremity of the trapeze. The triangle has been “decapitated” and the point removed leaving a flat apex. The two horizontal incisions indicating eyes suggest an animated axe image.

#### Axes in the Archaeological record – Southern Levant

Trapeze shapes, together with triangular and elliptical shapes dominate an assemblage of bifacial tools in the southern Levant described by Barkai (2005). These are typologically described as “axes”, “adzes” and “chisels” and Barkai regards these ‘axes’ as cultural makers in Holocene tool industries in the Southern Levant. A process can be observed in Barkai’s data of movements between trapezoidal shapes, elongated trapeze shapes and elliptical shapes.

#### Miniature votive axes

The fragment Fig. 69:1 belongs to the special group of miniature axes, shorter than 5 cms, known from Neolithic and Chalcolithic sites both in the southern Levant and in Europe (Barkai 2005:39). These are typically made of special or exotic materials such as green stone, jade, serpentine, basalt and other materials.

Miniature axes are found in the southern Levant in the PPNA (Gopher 1997 Fig. 23-24); PPNB (Lechevallier 1978 pl 32:6). Barkai (2005:40) reports that these were observed at Atlit Yam (Galili, personal information) and he observed them too at PPNB Kfar Hahoresh, and PN Nahal Zehora II where a green stone polished axe bears traces of sawing (Gopher 2012:1076). Very large tools and miniature tools are not regarded as working tools. In spite of their votive characteristics, Barkai (2005:364) regards them as symbols of status, stance, power or domination.

The artifact Fig. 69.1 is animated with horizontal linear eyes such as appear on ‘pebble figurines’ of the following Yarmukian period. Horizontal lines, almost meeting at the extremity of an elliptical or trapeze shape, may also be seen to mimic the horizontal incised line, indicating the elemental phallic shape referred to above. While this is a unique example of an animated axe shaped god, the axe, adze and chisel shapes are common in other assemblages of the data.

#### Axe – male/phallic symbol

The axe is regarded as a male symbol as demonstrated by Barkai; this association of axes with males is confirmed by Patton (1993:30-32,) who suggests that the axe symbolizes production and is analogous to the phallus, symbol of reproduction, and axes can have sexual relationships (Patton 1991:69-70). Ethnographic evidence links sexual connections between axes and men in many places (e.g. references from Barkai 2005:69; in Melanesia: Battaglia 1990:78, 133-4; in Papua New Guinea: Steensberg 1980:4; and in Australian Aboriginal culture: Taçon 1991:204-5). Barkai (2005:69) notes...
Interpretation – Male Gods

the striking connection between axes and men in Melanesia where the axes are also called by a name which means “phallus” and the “right hand”:

“The axe’s blade represents the potential of Man’s reproduction, symbolizing the male reproduction energy. The axe represents male semen – the semen that has reached the womb and results in fertilization.” (Battaglia 1990:78, 133-4)

Hoards of these artifacts in burials in Europe too show a distinct affiliation between bifacial tools and males (Barkai 2005:60). However, by virtue of their common trapezoidal and triangular shapes, while axes have dominant male phallic aspects, they retain a fused sex signal in their shape.

Sexual imagery is evident too in the hafting of axes. In Melanesia, the wood used to haft the male axes is associated with females (Barkai 2005:69). Similarly Patton (1991:69), for example, describes at Gavrinis a carved triangular axe blade which incorporates an oval feature, interpreted as a haft, at the butt end of the axe, and two spherical protuberances at the blade end. The male triangular axe blade is hafted into the oval shape carrying a similar suggestion of coitus.

The mythology of the Dani suggests that axes, despite their male association, were amongst tools stolen from women by men (Heider 1970:273; Pétrequin and Pétrequin 1993:362).

Butterfly – double axe gods

Anthropomorphic images Fig. 121:2-7 are described by Garfinkel (2005) as ‘dancing diamonds’. I suggest that these are a different form of animated ‘axe gods’ whose body shapes are rich in ‘gender of power’ symbols incorporating lozenges, split lozenges, triangles and butterfly double axes – opposing triangles meeting at the apex.

Symbolic contexts of axes in the Southern Levant

Special depositions of polished axes in hoards are described at PPNA Gilgal I where two polished stone axes were found covering a stone figurine (Noy 1989), and at Hatoula, polished axes were deposited in hoards (Lechevallier and Ronen 1994:168,224). Such depositions were found in the PPNB (e.g. Gebel and Hermansen 2000) and in burial contexts in the PPNB and PN.

At Nahal Zehora II bifacial tools seem to have been deliberately separated from other items (Nave 1999; Nave and Gopher 2012), and polished bifacial tools were found in relation to child burials. In Nahal Zehora II and Atlit Yam miniature bifacial tools were found adjacent to phallic images (Barkai 2005:40).

Mc Adam (1997) describes anthropomorphic axe shapes and male genitalia from PPNB ‘Ain Ghazal. Both carry signs of cord impressions and ochre. Barkai (2005:22) claims that cord impressions on a polished limestone axe in the burnt house in PPNA Netiv Hagdud demonstrate a kind of hafting for display purposes; this supports the view that some of the axes in the PPNA had only symbolic use and were not used as working tools.

Evidence for Axe gods from history and ethnography

Axe gods are described for prehistoric and later historic contexts e.g. Stein (1996) and Maringer 2002[1956]. They are often made in nephrite, jade and different variations of greenstone. Polished raw materials have a gloss which is considered strong powerful and dangerous and is sometimes associated with ancestral powers (Taçon 1991:198, 1999). Green stone axes are frequently associated with magic powers that can heal, protect or bestow power. Animated axes were referred to as living beings, sometimes associated with supernatural power or with their owner’s vitality.

Axe gods are known the world over either as weapons of deities, or substituting for the image of a deity. Montelius (1910) points out that the axe is the symbol of the thunder or sun god. Such deities are related to thunder, lightening and the sun and all seem in some way to have the power to control the weather. The axe’s reappearance in the Neolithic record suggests that phallic sun gods are part of the pantheon.

Thus the assignment of Fig. 69:1 to an axe god is supported by many features such as its animated eyes, phallic/fused sex shape, its size and material traditionally used to portray axe gods. This axe god, an inverted, decapitated female symbol, can express in essence the changing focus of ritual power.

Solar Deities

The sun god occupies a central position in both Sumerian and Akkadian religion and is one of the most popular deities among the Indo-European peoples. Although some mythologists, such as Branston (1955) and McCrickard (1987) contend that sun goddesses are more common worldwide than their male counterparts, the sun was a major aspect of Egyptian symbols and hieroglyphs and all the solar deities of that pantheon were male.

Examples of the assimilation of genitals and eyes presented in chapter 6 refer to female genitalia – vulvae – in eye locations.
The equivalence of an eye with male genitals is seen as acting against the effects of the Evil Eye. Dundes suggests that the emission of the rays of the sun were creative substances. The sun’s rays, according to Jones (1951:303), are often regarded as a symbol of the phallus as well as of semen – the sun is both phallus and eye.

Dundes (1992[1981]:280) identifies the motif by which ‘phallus eyes’ can be recognized. He suggests that a frontal view of the glans of a penis can appear as an eye with the urinary meatus serving as a surrogate pupil. Thus motifs by which the solar deity is recognised are: a circular pupil surrounded by concentric circles or arcs, or a circular eye surrounded by radiating lines. Solar deity symbols, based on a circular disk with radiating lines are traced to Neolithic symbolism by Golan (1991:e.g.24-26, 31). The radiating lines, thought by some to be eyelashes, represent I suggest the ejaculating effect of the phallic eyes, protecting against the Evil eye.

Radiating facial lines and round eyes are evident on Fig.68:2, a mask from PPNB Nahal Hemar. Circular eyes are evident too on Fig. 44, Fig. 45:2, Fig.53, and Fig.107:2 and the heavily demarcated round eyes characteristic of a solar god can be seen on plaster figurines from ‘Ain Ghazal e.g. Fig.56. Fig.124:1 has circular eyes surrounded by multiple nested arcs and Fig.122 from another time and place has deeply carved eyes with semi-circular surrounds.

Compelling evidence for the solar god is found in the PN Wadi Raba layers of the site of Hagoshrim in northern Israel (Getzov 2011). A unique incised bone Fig.123:1 incorporates an image of a woman with large concentric circle eyes, surrounded by nested arc (lunate) shapes and radiating lines. A large vulva and a caprid feeding from leaves of a date palm tree suggest a combined motif of the sun and moon deities (see Golan 1991; Keel 1998). The association of caprids and date palms as a goddess symbol is well known in Near Eastern iconography (e.g. Keel 1998:20). Getzov compares the artifact with a cult stela from about 5000 years ago found in a temple in Mari, Syria dedicated to the Sumerian goddess Ninhursag Fig.123:2 (Fortin 1999:284). The iconography of Fig.123:1 incorporates both dual sex, geometric zig zag motifs, a large vulva and “sun god eyes” surrounded by nested arc (lunate) shapes and radiating lines. 22 seals uncovered in the same stratum of Hagoshrim are incised with lozenges, cross-hatched motifs e.g. Figs.124:3-4, 6-7 and radiating sun god motifs e.g. Figs.124:2-3, a mixture of both ‘gender of power’ and solar god symbols.

Fig. 124:1 from Kabri has round eyes framed in nested arcs, another example suggesting that Sumerian goddesses were worshiped in the Northern sites of Israel in the Pottery Neolithic period.

These examples, incorporating the iconography of eyes of both solar and lunar deities, suggest a change in focus from the long tradition of vulva eyes in my data.

**Genital metaphor in tools**

A characteristic of sexual reversal in ritual performance/drama in African initiation ceremonies has been described by Power and Watts (1997:542-6). In some of these ritual performances during initiation, the link between dual sex and the supernatural state of transition is expressed with females carrying male tools and males wearing female jewelery (Power 2001: chapter six).

In my data, genital imagery is present on utilitarian items and I suggest here that there is no reversal, but that these tools may compare with sexual imagery in tools active in modern African cultures.

**Phallic pestles and axes**

From the Natufian period onwards pestles are a recognized stone tool type. Pestles are essentially phallic in appearance (Mithen et al 2005) and they form a graphic sexual metaphor with the female cup mortar. The explicit phallic appearance of some pestles was noted by some researchers (e.g. Turville Petre 1932:276; Garrod and Bate 1937; Cauvin 1977; Belfer-Cohen 1991; Edwards 1991; Weinstein Evron and Belfer-Cohen 1993; Gopher and Orrelle 1996; Meskell 1998:5; Mithen et al 2005).

Others consider them simply as tools (e.g. Eirikh-Rose 2004; Garfinkel 2002:185). Mithen et al (2005) point out that the sexual symbolism of groundstone pre-dates the domestication of plants, attaching these items from the agricultural revolution. Pestles with explicit phallic shape and decoration e.g. Figs.34:1-3 were fully functional artifacts as confirmed by use wear observation.

**Vulva shaft-straighteners**

Oval transected groundstone items e.g. Figs.22:1-7; Figs.60:1-2; Figs.90:3-4 are thought to be arrow shaft-straighteners or sharpener/wetstones (Wright 1992,73; Dorrell 1983:512; Noy 1991; Gopher and Orrelle 1996). The shaft-straightener interpretation was first applied by Cosner (1951:147).

Shaft straighteners are imbued with sexual metaphor as Mithen et al 2005 suggested for pestles. Shaft straighteners whose shape is that of a vulva acts as a tool paired with a male hunting tool – an arrow. The shapes and actions of this paired tool kit signal sexual symbolism, rather than dual sex. The
sexual metaphor of shaft straightener and whetstone has been preserved in English etymology. The definition of whetstone in the Collins dictionary is “Whet (hwet, wet): to sharpen by rubbing against a whetstone – to stimulate, arouse, to whet one’s appetite”. A number of synonyms (slang) for female genitals reflect the connection with arrows or sharpening such as ‘quiver’, ‘sharp-and blunt’, ‘grindstone’ and ‘whetting-corn(e)’ (Ash and Highton 1987) (see Gopher and Orrelle 1996 Note2). Similarly, phallic-shaped pestles active in traditionally female pounding activity could suggest sexual symbolism in the realm of the division of labour. In Papua New Guinea, among the Dani, the axe is considered a masculine tool, and polishing it in a grooved stone is analogous to sexual intercourse between a man and a woman (Barkai 2005:20; Pétrequin and Pétrequin 1993:368).

African gender metaphor

The use of sexual metaphor in tools of food processing is common in Africa. In many African societies, the social and symbolic manipulation of gender, as the basis for reproduction and continuity, links human sexuality and euphemisms for sexual intercourse to the transformation of foodstuffs and the management of modes of livelihood (Moore 1991:21): “...to pound flour, to grind flour, to make fire are all euphemisms for the sexual act” (Beidelman 1993:39-40).

The complementary contributions to the reproduction of children and household are further concretized in the associations established between certain objects, practical activities and parts of the human body. In the case of the Kaguru, for example, objects necessary for food production and preparation, and parts of the body, are paired to symbolize coitus and the complementary contributions of women and men to the maintenance of the household, family and kinship (Beidelman 1993). Metaphors for the penis include a stone pestle and a vagina is a stone mortar (1993:39-40). In Isanzu cosmology female/male productivity and foodstuffs are male or female coded. The firesticks used to light the ritual fire are male and female and firemaking is used as a metaphor for sexual intercourse (Sanders 1999:70). This linkage between tools of production and sexual signals in the Neolithic may belong to this kind of signifying suggesting that such structures relating to division of labour were operating.

Genital analogy

This study relies on an analogy between simple shapes and human genitalia used metaphorically to express a fusion of male and female. Wylie (2002:137) regards analogical inference as indispensable in an archaeological debate which pursues anthropological goals and reconstructive inferences. It requires the establishment of a degree of similarity that can be a relevant basis for inferring further similarities. The genital analogy has the advantage that these body parts are familiar to our species – the human body is probably the analogy which humans most use and with which they are most familiar (e.g. Mithen et al 2005; Lakoff and Johnson 1999).

Why was this particular imagery used to express the supernatural?

This linkage lies at the core of the FCC hypothesis which it argues, against a background of conflicting reproductive strategies between the sexes, female reproductive strategies in the domain of sexual or signal selection drove the earliest symbolic behaviour and art (Power and Aiello 1997:155, see chapter three).

Sexual selection, one of the most powerful, inventive and pervasive forces in nature (Miller 1999) can account for the use of genital imagery in symbolic behaviour. According to the FCC model, the supernatural was first envisaged in female ritual performance celebrating women’s right to withhold sexual relations. I predict that their signals, broadcasting that they were of the WRONG sex and species and that it was the WRONG time to mate, would have included some form of dual sex imagery, perhaps in the form of a ‘gender of power’ symbol – a lozenge?

Lozenges

Blombos Cave

A piece of ochre (~ 7x3 cms) incised with a cross-hatched design of lozenges Fig.5 (d’Errico et al 2005; Bouzouggar et al 2007; Henshilwood et al 2002; Watts 2009) was found at MSA Blombos Cave and dated to ~75ka. The lozenge incisions on this artifact can provide support for the relation of this motif to the FCC hypothesis.

The hypothesis of the FCC (chapter three) suggests that gender was created in “ritual performance of compulsory non-heterosexuality” (Power and Watts 1999:102). A lozenge, combining male and female symbols in one shape to symbolize heterosexuality, may well have been prominent in that performance.

First form of art

Watts (2009:65) draws attention to a little known proposition of Durkheim(1961 [1912]:159-161) that the first form of art would invariably be non-figurative comprising of geometrically arranged lines or shapes (see references in Watts 2009 e.g. Spencer and Gillen 1899; Teit 1927-8; Drury 1935:102; Marshall 1976:276; Lewis 2002, Plate 9.4, 9.5; Fiore 2002).
Such designs would be executed in red ochre, and would be painted on sacred objects and on the bodies of ritual performers (1961[1912]:149 fn.150, see also pp 148, 264-5, 417). The ochre piece from Blombos might be one such sacred object, and these motifs might be part of collective ritual bodily displays (Durkheim 1961[1912]:264-5). I will show below that lozenge motifs continue to appear on figurines from later periods suggesting the preservation of an original depiction on the bodies of ritual performers as Durkheim suggests.

The remains of the ochre industry in the Blombos cave assemblage provides indirect evidence to suggest that designs used in such ritual bodily displays incorporated red-coloured lozenges. Hundreds of pieces of ochre ground into crayons with honed points were found. Watts (2009:86) suggests that such crayons were employed for design purposes. The ochre remains indicate a preference for saturated red earth pigments and suggest multiple episodes of use and curation (Watts 2009:86, 90).

The tiny amounts of saturated red pigment powder produced by the predominant form of use-wear on ochre pieces – grinding – were probably inconsistent with anything other than making linear designs on the face, body, or some other organic surface (Watts 2009:88). The ochre residues on shell beads in Blombos were possibly transferred from the body of the wearer. Evidence for use wear and ochre residues on shell beads from other places suggest that shell ornamentation was worn on ochre decorated bodies (e.g. d’Errico and Vanhaeren 2009:28; Bar-Yosef Mayer et al 2009:311).

Watts (2009:80-82) suggests that the data permits the inference of habitual collective ritual with application of red pigments to the body playing an integral part in ritual displays:

“It is almost inconceivable that the MSA occupants of Blombos were engraving such designs onto pieces of ochre while not doing similar things with ground ochre powder on their bodies …”(Watts 2009:82).

The cross-hatched lozenge Fig.5 provides a hint of what the motif signalling non-heterosexuality painted on bodies might have been.

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The idea of signalling the supernatural with a genital metaphor is awkward for our society, where naked “private” parts belong to the private realm and not to the ideological. A practice of gesturing with genital shapes, however, survives in our lewd hand gestures such as the double finger V sign amongst some people, and the single ‘finger’ and fica gesture in the Mediterranean. The word fica is derived from the Italian word for vulva and the gesture imitating sexual intercourse was originally a symbolic way to ward off the Evil Eye. Through the years it has become an obscene and offending gesture.

The clearly counter-intuitive nature of the data confirms that anatomical realistic portrayals are not the intention and that metaphorical analogies were intended. What ‘proof’ can be brought to support metaphorical use of genital shapes?

Firstly, the identification of genital metaphor is made on look-alike evidence with which all are familiar. There is a ‘degree of similarity’ between the shapes used in the data and anatomical accuracy of the outside appearance of male and female genitalia.

The basic shapes appear in different variations in this data used metaphorically, and this variation has given rise to scepticism. It seems that the different shapes of genitals may have been used to express elements active in the syntax of the hypothesis. For example, the anatomical shape of a vulva seen between open legs is oval-shaped, while a triangular pubic triangle is seen when legs are closed. While I predict that open legs signal menstrual unavailability, by the same token, closed legs may signal that ritual potency is no longer displayed by the vulva.

Phalli in the data are portrayed realistically and schematically. To support the description of a pestle as ‘phallic’ Fig.34:3 Mithen et al (2005) claims that the presence of ‘at least one explicit phallus’ Fig.32:1 in the same site suggests that this visual resemblance may have also been apparent to the PPNA people who used these items. The presence of a transected oval shape ‘in situ’ in a natural anatomical position for a vulva on a clearly female figurine in Fig.54 offers the same support in my data for an analogy of this shape with a schematic vulva.

There is a certain asymmetry in the archaeological debate on genital analogies, between acceptance of phallic and vulva imagery. The simple symbolism expressing phallus is accepted almost without debate e.g. Goring-Morris and Birkenfeld (2008); Conrad and Malina (2005). The reason for this may be that the male organ is external and has clear iconographic shape; its depiction and its metaphorical use is familiar to patriarchal societies. Garfinkel (1999b) does not accept metaphorical images of the phallus; nor does Miller (2002:227) understand the metaphorical nature of double phalli (see Gopher and Orrelle 1999).

Acceptance of vulva imagery has had a far more difficult passage. The suggestion that certain incised Neolithic artifacts were metaphorical vulva has resulted in debate (see Stekelis 1972; Gopher and Orrelle 1996; Garfinkel 1999b; Gopher and Orrelle 1999). Some accept the vulva analogy (e.g. Edwards 2007) but others such as Eirikh-Rose (2004) assign them only functional roles. Bahn (1986) in particular attacks the vulva analogy suggested for images found on Upper Palaeolithic
cave walls as “...based on erroneous reasoning as well as on wishful thinking...” (1986:99). Perhaps the difficulty in accepting vulva imagery is because biologically and culturally, female organs, internal by nature, are hidden, and their portals fiercely guarded. Jung (1990 [1956]: Note 10 pp 146-7) notes in general that protruding parts of the body can be given masculine significance and all its concavities a feminine significance.

Much of the debate occurs around the problems of identification and interpretation – identifying anatomically correct vulvae and interpreting schematic metaphorical vulvae. Clottes (1986) stresses the importance of not confusing between the two. Bahn (1986:191,104) seems to pursue anatomical accuracy recognizing “definite vulvae” when found in context (1986:101) but rejecting many different variations. Clottes (1986:107) relates to the different varieties of the ‘vulva’ motif appearing side by side and more or less contemporaneously; he suggests that they represent a transition from realistic vulvae to unidentifiable but related signs.

In the end however, all identification rests on visual similarity. Some recognize génital shape embedded in the subconscious and others do not. Everyone, however, must recognize that what is depicted in the iconography is intentionally counter-intuitive to human minds. The intention is not to show anatomically accurate humans, but ritual counter-intuitive beings not requiring biological accuracy, but rather an intentional abuse of it. Recognisable human anatomy is used in a distorted way to send signals. We will find godliness and the supernatural in this abuse.

A certain sarcasm has crept into the complex analysis of symbols. Lorblanchet (1977) describes it as “playing with forms”; Marshack coined the phrase ‘visual punning’ (1992:332); Daems (2008) implies that social or biological oddities were portrayed. Hayden (1985) declares:

“The few instances of visual double meanings can be accounted for in terms of artistic play and nothing more just as such visual tricks appear to psychology students, sculptors and joke shop clientele today.” (1985:23).

I reject the implications of playfulness or games in this imagery and claim that these are serious devices to ritually express an ideal. I predict that ambiguity in this iconography was designed to portray the original gender, a fusion of two sexes. The intention of punning was not to hide or confuse, but rather to overcome the enormously difficult challenge of expressing androgyny in material form.

Incised and painted shapes and marks – body art

A characteristic noted in the data present in every period is the marking of figurines with various motifs. Motifs were found incised or painted on different body parts – on the top of the head, along legs and on the torso.

Incised shapes include crescent shapes e.g. Figs.38:2; Fig.40:1; cross-hatching e.g. Fig.12; Figs.23:3-4; Fig.36:4. Nested Vs (hydra) motifs appear on Fig.40:2 and Fig.81:2. A motif of a central line with offshoots appears on female oval shapes Figs.23:1-2; Fig.30:3 and recalls the motifs of various combinations of incised horizontal and vertical lines on schematic vulvae from Munhata described as possible parturition or mutilation scars (Gopher and Orrelle 1996:267 Fig.3:9-12). The incised nested arc shapes on Figs.20:1-2 are said to represent facial features; these appear too on the faces of Fig.122 and Fig.123:1. Fig. 39:1 is incised with three vertical lines. Painted motifs which survive on plastered artifacts e.g. Fig.55 Fig.56; Fig.58:2; Figs.82:1-2; are parallel lines. Suriving red pigment remains found on other figurines shows patches, bands, or simply small remaining areas, and rarely all-over application.

The practice of marking human bodies with motifs recalls an original practice of painting motifs on bodies mentioned earlier. Watts (2009:82) points out the universality of body-marking in hunter gatherer society. Both paint and scarification must be considered costly signals of allegiance to female alliances – demonstrating the degree of commitment of members. Cosmetic manipulation, described by Power (2001) and Power and Watts (1999), is a signal of commitment, and represents the cost of entering an alliance network. Cosmetic body painting or scarifications have different levels of permanence. While body paint represents a costly but temporary body marking, Power (2001) notes that the more costly and permanent scarification would represent a response to the degree of pressure on a group:

“Permanent body marking, such as tattooing or scarification, distinguishes ‘insiders’ from ‘outsiders’, protecting the alliance. It can prevent an individual identified as a member of one group from moving into another, blocking off the avenues for would-be free-riders through particular rites where candidates demonstrate costly signals of commitment to a generalised alliance network.” (2001:286)

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A bitumen coated skull with a diagonal cross-hatched lozenge pattern of black collagen Fig. 67 represents a unique kind of skull treatment.
Classical authors (e.g. Tacitus Histories V 6; Josephus War IV:479f.) note a link between bitumen and menstrual blood. The skull (Fig.67) was found in a cave, near to where rich sources of bitumen still ooze today. Some of the skulls in the cave were coated with bitumen. The lozenge shapes of collaged applied to the semen-rich skull mirror those of a "netted headdress", a hood of knotted cordage found in the same site (Schick 1988). Saidel (1993:Fig.6) regards the headdress as 'cultic headgear and suggests (1993:90) that the fragments of plaster figures found in the cave (see chapter four, Goren et al 1993) are perhaps meant to represent images of emerging male deities. While the fragments of plaster statues are not specifically male, the bitumen (female symbol) on a skull rich in semen (male) indicates dual sex symbolism as do the lozenge shapes. In this example, the predominantly male body part is the dominant image; it is decorated with bitumen and lozenge shapes, suggesting here too a conflation of potent male and female symbols.

**Biehl motif study**

What is one to make of Fig.102:3, a phallic shape incised along both its lengths? At first sight it may indicate a phallus with marks left by subincision, a ritual cut along the urethra for penile bleeding, a form of male menstruation (Knight 1988:2478). However, incisions would not be on both sides of the phallus; such subincision is made only on the underside of the phallic shaft. A possible clue to its meaning may be found in Fig.125:2, a motif described from the data of Peter Biehl (1996).

The subject of Biehl’s study (1996:156) is the location of motifs incised on schematic bodies from different settlements in the Neolithic and Chalcolithic periods of South-Eastern Europe. Biehl finds that most of the 24 main design motifs including lozenges, were regularly placed between the mid section and genital area of the body (1996 Fig. 5:59; 6:160). In his data some figurines had indications of sex; some had both breasts and penises (Biehl 1996:158,162). In particular running through the lozenge has become an erect phallus – a male appropriation of this motif. Yet another variation of the ‘arrow design’ motif appears in my data. In Fig.85 the upright tails of two horned animals incorporate elements of Biehl’s “dm12” motif; they appear above the horizontal incision indicating phallus.

Prehistoric art is full of shorthand and abbreviated signs and these recurring elements built into human imagery, represent I suggest yet another an abbreviated dual sex signal.

**Pottery decorations**

The earliest pottery assemblage in the data, that of the PN Yarmukian culture, is rich in ‘gender of power’ motifs. These are expressed in particular in various combinations of zigzags and nested V motifs e.g. Fig.120:1-3. The lozenge motif appears in some sites in the following Chalcolithic period. The painted motifs on ‘Fine Ware’ pottery from the site of Ktaret es-Samra in the Jordan Valley (Leonard 1989), for example Figs.120:4-5, is rich in red lozenge motifs on white slip and includes variations on framed diagonal cross-hatched (latticed) bands e.g. Fig.120:4 and solid lozenge-chains e.g. Fig.120:5. Similar motifs appear too for example at Tell Abu Habil (Leonard 1989:Fig.5:2). At Tel Tsaf (Gophna and Sadeh 1988/1989) e.g. Figs.120:6-7, fine ceramic ware is decorated with motifs of lattice-filled lozenge chains in red and black.
enclosed in latticed bands on a white or pink background e.g. Figs.120:6-8.

7.3 Therianthropic images

As predicted, WRONG species signals are present in the data.
I describe below some interpretations of mixtures between human and animal features.

The choice of classification between animal or human is sometimes difficult. In my data, therianthropic images were created by a combination of animal elements of birds such as eyes, beaks, claws and features of other unidentified animals, human heads and phalli. Animated phallic heads, dual sex elements and animals can all appear in one item. For example, Fig.20:3 is usually described as a human head but the animal-like eyes and horizontal phallic incision suggest that it is a mixture of human/animal/phallus. Figs.52:2-3 are classified as animal but here too the horizontal line below the head can also suggest a phallus.

Fig.24:3 and Fig.51:4 have snout-like faces and Fig.24:2 combines an animal head with cross-hatched eyes and a round-ended phallus. Fig.31:3 has a phallic head with possible beak, and naturalistic breasts thus bird/woman/man, while Fig.51:2 has a lozenge-shaped torso, round animal eyes, and natural breasts – thus woman/animal/fused sex. The cylindrical items Figs.89:1-3 have dominant noses flanked by long vulva eyes arranged in female pubic orientation forming the V, with median line motif.

The cylindrical items Figs.37:4-5 have large owl or bird-like eyes, and are trihedral, fused sex open legs types. These owl images may relate to the Sumerian goddess Lilith – who is symbolically linked to owls (Johnson 1994:82-3). Two therianthropic items with splayed legs posture Fig.111 and Fig.112 appear in two-dimensional form. Fig.111 shows a relief human figure with male genitals on a lozenge shaped jar. The two versions of the figure on the jar have animal heads. One version, Fig.111:1 has animal ears and the other Fig.111:2 has four toes on the right leg. Overall this artifact seems to blend male and animal. Both images on either side of the jar, have phalli – one is square ended and the other pointed. They seem to be in flaccid mode. The pottery vessel is slipped and burnished with bright red pigment. The red colour suggests the signal ON ritual state as do the mixed human/animal figure, the lozenge (carinated) shape of the jar and the female open-legged ritual stance. Kaplan (1969:16) sees in this image similarities with Egyptian fertility rituals.

This figure is perhaps related to another ram/phallus deity Fig.50 from the earlier PPnb period which Hermansen (1997:334) suggests seems to represent the head of a ram and foreshadows the iconography of the Egyptian god Amun.

This figurine, whose dominant shape is of male genitalia, also has ‘vulva eyes’, a female element, albeit a minor one. Since the Middle Kingdom of Egypt, this god was represented as an ithyphallic figure (Lange and Hirmer 1955) or as a man with a ram’s head (Lepsius in Hermansen 1997:334).

A two-dimensional image shows fat-bellied open-legged beings on an incised relief Fig.41 among them a turtle-like figure with a lozenge shaped head. Another ‘display’ posture which appears in two dimensional form is Fig.112. This female image has breasts, splayed legs, displays a vulva with pronounced labia, large floppy animal ears on a human head and four fingers can be seen on one hand. Her divinity is signalled by her posture and therianthropic features – thus a woman/animal/god. The well known open legged relief figurines on the walls of a shrine in Çatal Höyük were regarded by Mellart (1962: 61-67) as human females and hence the Mother Goddess in a birth position. They have no breasts and were interpreted by Gimbutas as figures in frog or turtle postures (Gimbutas 1974:176) on account of their upturned arms and feet. In a later interpretation, Turcan (2007:260); and Russell and Meece (2006:215) challenge these assumptions and suggest rather that they are therianthropic images of bears, identified on a seal from the site with open legs and upturned feet Fig.118:2. The ‘bear’ on the seal has a lozenge on the belly.

7.4 Posture and gesture – body art

Deities can be identified too in the data by traditional postures. These include the splayed open leg position which I call the ‘display position’, a hands-to-breasts gesture, a hands-on-phallus gesture and that of one hand on thigh and one on the breast. Sometimes the posture and gestures of whole figurines can be interpreted as incorporating shapes in another form of body art – the subtle use of limbs and torso manipulated to display the combination symbols of the ‘gender of power’.

Open legs – display position

A ‘display’ position, characterized by a certain separation of the legs, sometimes showing the vulva, is a ritual posture with an extremely long history (e.g. Frankfurt 1939; 1943; Fraser 1966; Mellart 1967; Tiwari 1985; Jelinek 1989:492; Hays-Gilpin 2004:27). The Egyptian goddess Hathor (Simpson, 1972:112) the Sumerian goddess Inana (Wolkstein and Gilpin 2004:27) and the European Sheela na gig creatures Fig.122. This open legged or splayed legs position has been related to fertility
cults (Noy 1986:66; Cauvin 1994, 2000a), sexual receptivity (Solomon 1992) or birth positions (e.g. Gimbutas 1974:166; 1991:255; Noy 1986; Peltenburg 1989:113; Kokkinidou and Nikolaidou 1997:92; Goring-Morris and Belfer-Cohen 2002:67). While parturition is the most common biological function and not per se a subject for ritual elaboration, later interpretations for this position relate it to the metaphorical birth-giving of a goddess:

“Regions were born of her with the legs spread open.”
(Tiwari 1985:186, Rig Veda (X.72.3-4)

The figurine data in this study suggests that this signal ON display position is present in the supernatural iconography of anthropomorphic gods in the Near East as early as the PPNA. Vulvae with red colour indicating menstruation signal non-availability (Watts 1994; Knight et al 1995). This signal which seems to have been preserved in the spread legs posture which became shorthand for the empowering WRONG time ‘signal ON’. Red pigment associated with human ‘vulvae’ is known from European Palaeolithic cave contexts; traces of ochre were found for example on the large vulvae of Gravettian figurines from Grimaldi (e.g. Bisson and Bolduc 1994:462) and on schematic vulva discs from Brno Czechoslovakia (Marshack 1991b:295).

Shaffrey (2007: 351) reported a human image with a deposit of red ochre between the legs from the PPNA period in my study area (unfortunately no image of this is available). Red pigment is reported on ‘vulva’ stones from the Yarmukian culture (Stekelis 1972; Gopher and Orrelle 1996). It is possible that these detached red coloured vulvae are a notational form of a WRONG time signal, a female ritual ‘ON’ emblem of power. However, the variable preservation of pigment on these artifacts is problematic.

While ‘open legs’ appear in various examples in the Pottery Neolithic of the Levant, e.g. Fig.111; Fig.118:1-2, other items have legs that are not longer bifurcated e.g. Figs.105:1-3; Fig.107:2. On schematic female figurines with the pubic triangle clearly indicated, incised lines indicate the groin and closed legs e.g. Figs.105:1, 3. The torso of Fig.105:1 is lozenge shaped and the motif of the V pubic triangle with median line is retained; a feint line demarcates a waist.

Trihedral

In chapter five I described a type of image with open bifurcated legs often combined with an elliptical body in the form of a phallic extension; thus combining male and female signals forming a ‘gender of power’ motif in figurines belonging to what I call a ‘trihedral’ type. The glans body-as-phallus is a very old visual trope in Indo-European iconography, serving as an image of deities, in particular in the Hindu religion. Animal elements are sometimes included with these.

This type has an essential trichotomic shape – an upward pointing triangular quality and appears in many variations. Examples of Palaeolithic versions of this idea are shown in Fig.11 and Fig.13:1. This motif is also schematically shown in Fig.9 and as beads in Fig.14. One of the earliest examples of a human form in my data is Fig.29 a figurine showing a wide spread-legs position, an erect phallic-like torso/neck with breasts and a flat head animated with eyes but no indication of vulva. Fig.31:4 is a mixture of schematic and naturalistic body parts with a square phallic head, naturalistic breasts and open legs. Fig.49:3 with the same position has a rounded phallic head and a naturalistic appearance.

Some trihedral items can take the form of clusters of globular and oval shapes mimicking male genitalia. The “phallus cum testiculis” is perceived as a triform cluster (Dundes 1968:420 n.1). This sometime resembles a seated female torso with breasts e.g. Figs.48:1,3; Fig.49:1. This same clustered image is presented in very rudimentary form in Fig.72:3 which can almost be thought to portray male testicles and flaccid phallus. Fig.30:1 is a unique example of a standing closed legs image with the extended phallic/neck retained. In a therianthropic version Fig.50 when seen reversed, the curled around rams horns may double either as open legs of testicles. Other schematic examples are Figs.30:2 and Fig.98.

Each body posture or position may be expressed in a basic overall shape.

A matchstick depiction of certain versions of the spread-legged ‘display’ posture where the legs are bent to each side of the torso is an M sign. Gimbutas (1974:176-77) identified the letter M as shorthand for parted legs and pubic triangle – the ideogram of the Great Goddess. This is in fact alternating up and down male and female V motifs. A continuous M sign, or zigzag appears, for example, on Fig.26 the meander design incised on a groundstone tool.

The overall shape of the trihedral image is an upward pointing triangle. When reversed, the trihedral shape shows a Y shape which appears for example on the legs and groin of Figs.105:1, 3 and on the ‘fold’ of a pillar figurine Fig.110. These ‘letters’ also appear in different Palaeolithic proto-literate symbolic scripts and are found painted in red ochre on ‘Azilian pebbles’ from about 13,000 years ago (Maringer 2000[1956]; Bahn and Vertut 1988).
Arm gestures – body art

Certain gestures made by the arms and hands of figurines of both male and female bodies can, in my data, be interpreted as making shapes.

A traditional gesture attributed to a female deity is one where the arms gesture towards or cradle the breasts. This gesture is known from Palaeolithic sources (Conrad and Malina 2005) and is also a traditional pose of later Near Eastern deities (e.g. Kenyon 1957:59; Gimbutas 1974:152; Schmandt-Besserat 1998a; Cauvin 2000a:25; Ornan 2005:31). This gesture was described (Bar-Yosef and Meadow 1995:80) as ‘a potent symbol fostering a new ideology’; by Schmandt-Besserat (1998a) as that of a nurturing god. I suggest that the data shows that this traditional arm gesture acts to create ritually potent shapes in another form of body art. There are several variations of the gesture.

The curved arms of Fig.31:1; Fig.42; Fig.54; Fig.71 and Fig.113 create transected oval Palaeolithic ‘vulva signs’. The oval vulva shape appears when viewed between open legs. An open ended oval is also an omega womb symbol recognised from later historical periods (Keel and Uelinger 1998:26). The more angular bent arms create a lozenge shape as for example in Fig.187; Fig.62; and Fig.119:1. In Fig.77 the folded arms form the base of a male upward pointing triangle making this a dominantly male shaped image. In Figs.117 and Fig.125:1 the hands are deliberately pulling the breasts apart, framing an angle of a lozenge nested between them. The breasts of Fig.118:1 fall to the sides framing a lozenge shape with belly folds towards the public triangle. In Fig.53 the hand gesture emphasizes an ambiguity of breasts/testicles.

Another gesture well known throughout the Near East (Frankfurt 1939, 1943; Mellink and Filip 1985; Muller-Neuhof 2006) and attributed to men is one where flexed arms connect at the abdomen, on or above male genitalia. Muller-Neuhof (2006:37) following Strehle (1954) relates the gesture to subordination or provocation. It appears on sitting images e.g. Fig.113; and on standing images e.g. Figs.45:1-3; Fig.46; Fig.55; Fig.62. On an item from Nahal Zehora II, this gesture seems to be present but the protrusion on which the hand lies may be either breasts or testicles, presenting a certain ambiguity to the gesture (Gopher and Eyal 2012 Fig.29.2.1). The opposing elbows may create lozenge shapes; this is visible particularly in Fig.46, when this gesture was portrayed on three sides of a monumental block. In this image, the lower arms form a female downward pointing pubic triangle. In Figs.45:2-3 downward pointing V shapes, possibly necklaces? are incised below the neck, and in Figs.45:1,3 an upward pointing triangle is created by the lower arms, a phallic symbol.

Gestures of grasping the phallus belong, I suggest to the kind of male rituals in which female birth giving powers are appropriated by men or male gods to express male creation. Knight (1987) describes how male rituals of pseudo “menstruation” and “childbirth” have gender-specific differential effects. The rituals:

“...Conjoin men with one another in “menstruation”, whilst disjoining women;

Disjoin women from their own offspring (male) while conjoining the male community with these same children;

Conjoin men with one another in “childbirth”, whilst disjoining women.

In these three related respects, the combined structures of ritual and avoidance suppress genuine solidarity and power “at the point of reproduction” and transfer this same power – its logical structure and symbols preserved intact – to the community of men.” (Knight 1987:273)

Hare (1999:22) relates this gesture to male Egyptian gods Atum, Min and Tafnut who are represented in statues grasping their phalli. In the Heliopolitan creation myth Atum masturbated to bring forth the first gods:

“...He took his phallus in his fist and made sweet ejaculation from it and the twins Shu and Tefnut were born.” (Pyramid Texts 124a-d)

His hands are regarded symbolically as those of his female consort the goddess Ne. Thus, with some female help, the male god generates the cosmos through masturbatory efforts, and the unilateral male creation of the gods is achieved. In Fig.46 a phallic-shaped figure seems to express this idea. The hands, which continue from the female shaped triangle on two sides of a 3m high stone block, meet at the erect phallus only visible on the narrow section, to help with the creative act. Again an example of signal ON is represented by an erect phallus on the narrow section of an artifact.

Fig.62 follows the same format as Fig.46. A figure whose prominent shape is of a phallus with a prominent phallic/animal head appears on two sides of the image. The broad view is male/animal; the position of the arms of this image is visible on the broad aspect. Both the front and back of the narrow side view show an erect phallus – a signal ON image. On one side there are a number of features. The arms, when seen together on one plane, form a lozenge and meet on the narrow plane, the hands gripping a large protuberance; below this a curious smaller image and a hole have puzzled researchers. Hauptmann (2000) interprets the narrow facet as an image of a man holding his navel, and the smaller image as a large penis with two thin legs. Verhoeven (2001) describes the features of this facet as expressing a composite ambiguous
and perhaps bisexual image with two figures arranged as in a totem pole. He sees a penis of the upper person, which might be also be the head of the lower person (a woman) and the hole at the base a possible vagina. He suggested that this was an important symbol related to fertility rituals.

I predict that the same act of masturbating to give birth to gods as suggested above for “hand on phallus” figures is taking place in Fig.62. The erect signal ON phallus/animal is giving birth from a phallus perhaps with the assistance of a female vagina? The dominant shape of all four facets is signal ON male erect phallus; the ‘gender of power’ element is preserved in the lozenge shape created by the arms. The rounded arms of the lower figure resemble the womb symbol like that formed, for example, by the curved arms of Fig.71.

Fig.71 is a figure made of pink marble and retains traces of red pigment; it has a general female shape, but no genitalia or breasts. Curved arms and parallel fat folds lie diagonally downwards framing the lower abdomen in the characteristic pose of cradling a pregnant belly (Schmandt-Besserat 1998b:114). This is perhaps a female equivalent gesture to the male one above.

In other figurines, contrary to the two earlier hand/arm gestures, the arms of some images combine two different gestures, the right hand (male) on right thigh and left (female) hand touches a breast. These gestures appear on sitting figurines with separated legs e.g. Figs.74:1-3; Fig.75:2, Fig.76 most of which have breasts. Literary sources reveal the assimilation of the right thigh to the phallus. This idea is found in Vedic symbolic thought (see also Gonda 1980), and in Mesopotamian myth (Follansbee 1988:80). O’Flaherty (1980:28-9) suggests that the assimilation of the right thigh to the phallus could refer to the act of male unilateral creation when the “thigh” of the male is churned (manth) a verb also applied to the production of butter from milk or the kindling of fire from the two fire sticks (O’Flaherty 1976, pp334-5; cf Jung 1967[1956] pp145-6). Fig.86:1 has male genitalia, but the arm gestures are reversed. The right (male) hand gestures to the breast position, and the left (female) to the phallus. Here the reversal of right and left may indicate androgynous symbolism.

In this posture, both hands are gesturing to creative fluids, milk and semen which are implicated in apparent acts of unilateral creation by male alone or by female alone. The gesturing to milk and semen could hint too at an Evil Eye symbolism – perhaps as apotropaic acts.

This study proposes that the FCC hypothesis provides an explanation for the counter-intuitive nature of anthropomorphic imagery found in my data. In the next chapter I summarise some of the alternate theories offered.
CHAPTER EIGHT
Other Theories

In this chapter I describe a number of other theories about the evolutionary origins of symbolic behaviour and consider whether they match my data.

This work relies on archaeological context and the iconography of human imagery to propose that the FCC hypothesis explains the use of counter-intuitive imagery for human figures. While distorted anatomy could indicate other gender theories, testing them would require a fine-grained reconstruction of social relations for which prehistorians have no tools.

A central theme of the FCC model is the relation of red pigment to menstrual blood. Some gender theories from other ethnographic accounts present different meanings of blood and I describe some of these here.

Another area in which a different theory has been offered is that surrounding the recurring geometric motifs in prehistoric art. These are regarded by some as entoptic images experienced cross-culturally in altered states of consciousness. I present a summary of this theory and discuss its claims.

8.1 Evolutionary origin theories

In its original presentation, Knight (1987) describes his model as a reconsideration of Lévi-Strauss’s work on symbolism and myth. Outlining an implicit model of symbolic origins drawn from Lévi-Strauss’s origins of human culture model (Knight 1987:43; Lévi-Strauss 1969[1949]:3-25) Knight shows that Lévi-Strauss’s theory, unlike his, does not predict WRONG signals of female resistance, but presumes a form of human solidarity: the sexual solidarity of men. For Lévi-Strauss (1969[1949]:113), the starting point of culture was not mixed human social groups, but specifically groups of men. As summarized by Knight (1987). Lévi-Strauss claims:

“Groups of men stood together, formed partnerships and exchanged their women between one another as groups. As each group renounced the sexual enjoyment of its own women, as groups of males ‘gave’ its females to a second, trusting that the recipients would reciprocate in kind, the ‘incest taboo’ was born and the cultural realm established.” (1987:43)

A theory of cultural origins should prove testable in the light of symbolic levels of the archaeological, ethnographic and other evidence available (Knight 1987:146). A potentially falsifiable prediction of Lévi-Strauss’s model is that human kinship systems should be systems of male-regulated sexual exchange. One might expect therefore, according to his model, evidence that ritual focuses on marital alliance, sister/wife oppositions and no special menstrual lunar connections. Cultural communal constructions should comprise of male and female couples and groups of men.

In his seminal work on the subject of evolutionary cognition, like the FCC model, Terrence Deacon (1997) presents an evolutionary model. He regards the selection pressures forcing the need for abstract reference to be social and connected to the organization of sexual access in complex multimale, multifemale evolving groups Access to mates, vital for establishing cooperative provisioning as a stable strategy in human evolution would, he claims, be organized on a reciprocal altruistic basis (Deacon 1997:398). Like Lévi-Strauss, Deacon prioritizes marriage, an intangible construct and the original social contract (1997:400). Unlike Lévi-Strauss he does not explicitly relate to men exchanging women. The study of human behaviour within the framework of new Darwinism includes approaches of evolutionary anthropology, which involve the application of theories and methods from Darwinian behavioural ecology to living and historical human social groups, and the ‘evolutionary psychology’ tradition which focuses on the cognitive mechanisms believed to underpin behaviour.

Some evolutionary psychologists (e.g. Boyer 1994) have claimed that a knowledge of human cognitive architecture may allow us to grasp the ‘naturalness’ of religious ideas and that their counter-intuitive nature enhances their chances of being replicated in human minds.

Boyer’s cognitive framework was developed to account for the recurrent properties of religious concepts and norms in different cultures (1994, 1996, 2000). He proposes that explanations for religious beliefs and behaviours can be found in our better and more precise understanding of the mind-brain, its evolution, its structure and its specific dispositions. The properties of minds, their standard cognitive architectures, are, he claims, hard-wired to expect perceptions to match an intuitive understanding of the world, and religious concepts and norms can be explained as parasitic upon such standard cognitive architecture, thus triggering increased attentiveness.

Boyer describes a selective transmission of ideas which violate our intuitive models of the world and links counter-intuitive imagery with the supernatural; this offers hints as to how the preliterate supernatural was represented visually.
The archaeologist Steven Mithen (1998, 1999, 2004b) draws on Boyer’s theories with its focus on cognitive architecture to the exclusion of social context and sexual conflict. He argues (1999: 148) that material artifacts function as anchors for these ideas in the mind.

The approaches of both Lévi-Strauss and Deacon are concerned with decisions about mate choice, parental investment and other forms of behaviour. However, as Knight Dunbar and Power (1999:2) state, neither Darwinian anthropology, nor evolutionary psychology, have addressed the question of how or why, over evolutionary time, humans have established, elaborated and diversified their symbolic systems, languages, rituals, gender ideologies and magico-religious myths. Nor do they specify the concrete selection pressures which, uniquely in the case of human evolution, led to such bizarre functions being entertained by human minds in the first place (Knight, Dunbar and Power 1999:2).

Deacon’s focus on the need to secure social contracts or collective agreements about sexual access implies an initial condition of collectively agreed ‘No access’. But this, as Power (2001:44) points out, is a completely novel notion in primate societies, a notion which the strategies of female coalitional display are designed precisely to establish. The FCC model offers solution to this problem, located in a specific time and place:

“The logical outcome of these processes yields an array of phenomena familiar from hunter-gatherer ethnography: bridelservice, taboos on sexual access including incest taboos and prescriptive marriage rules, menstrual taboos and aligned hunting taboos. The emergent intangibles are anthropomorphic.” (Knight 1991)

The FCC model provides an explanation for much of the range of magico-ritual phenomena which accompany religious thought, many of which originate in a female deceptive signalling strategy.

Boyer’s model of the counter-intuitive nature of supernatural beings provides a model closest to the FCC. While this explains the counterintuitive aspects of religious representations, Boyer’s model is timeless, and does not offer a specific set of testable predictions. In contrast, the predictions of the FCC, contextually located in time and place, are testable – thus providing the most parsimonious model with falsifiable predictions.

Both Lévi-Strauss and Deacon would have to address why marriage appears particularly unstable in immediate return hunter-gatherers, and is hardly elaborated (e.g. Collier and Rosaldo1981; Hurtado and Hill 1996). Amongst the Hadza for example (Marlowe 2010:170-171), marriage involves no ceremony, hardly any gift exchange, and if his mother-in-law thinks a man is not bringing in enough meat, she may advise her daughter to look for someone else (2010:170).

In this study of early god constructs I conclude that such communal constructs of male dominated social structure or binary marital pair bonds, suggested by Lévi-Strauss to be at the origin of culture, cannot be identified in the iconography of the data, at least in its earliest form. Rather, the iconography, rich with fused sex symbolism, is consistent with an origin in female-driven strategies that suggest that women were not ‘exchanged’ but exhibit gender solidarity and exchanged services between men and women (Knight 1991:126). Knight’s model suggests women themselves had a role to play in determining whether they were sexually available.

I propose that the evidence of cross-culturally known divine imagery shows overwhelmingly that the dominant structuring feature of early human anthropomorphic iconography is not an absence of sex but the image of the androgynne (fused sex). Androgyny is a structuring feature of ideology, not of ‘society’. Hamilton (2000) suggests that the absence of sex may be a structuring feature of society. The authors of the FCC theory claim that it was not the absence of sex, but a first gender which broadcast ‘wrong sex’ – a counter- intuitive ritual state in which males and females, humans and animals are fused. That is the signal which depicts beings as supernatural. The evidence in my data meets the predictions of the FCC model, about the nature of communal constructs – the early gods – and suggests that it is the most parsimonious explanation.

Perhaps the most convincing defence of the theory is a rejection of the idea that religious ideology is epi-phenomenal.

Knight, Dunbar and Power (1999:5) describe social contracts underlying the biologically unprecedented phenomenon of human symbolic culture, and ask what selection pressures drove such morally compulsive intangibles; how did they become invented, believed in and held up for respect?

They approach the fundamental question of whether religious ideology is a ‘spandrel’ – a mere epiphenomenon. Did it emerge as part of an evolutionarily stable strategy linked directly with problems of subsistence and reproduction? Or was an evolved psychology, a gullible human mind (Dawkins 1993) and a consequent development of cognitive fluidity (Mithen 1999b) behind this phenomenon?

Barnard, Chase, Knight and Watts (in Dunbar et al 1999) suggest that the primary focus of linguistic, religious and other symbolic representational activity is to be found in the contractual foundations of any human cooperative group. Power (1999) and Miller (1999) suggest an alternative Darwinian approach using models of sexual selection to explain the evolutionary emergence of a capacity for manipulating shared fictions.
The FCC hypothesis claims that symbolic behaviour arises from problems of human groups in a certain time and place. This contextual grounding in behavioural and sexual selection pressures supports the contention that human symbolic culture is not epi-phenomenal, as Dawkins and Mithen suggest. Religious ideology is not a spandrel but is part of a social contract symbolically formulated with taboos laid down for ritual observance, often on pain of ‘supernatural’ punishment. Promises, constructs, taboos, supernatural sanctions – these are all social constructs. The hypothesis suggests that such morally compulsive intangible become invented, believed in and held up for respect. They are said to originate in cooperation (Key and Aiello 1999) and in sexual selection pressures (Miller 1999).

8.2 Blood meanings

A dominant theme in mating strategies is the elaboration or ritualization/promotion of bodily substances. The life substances most frequently elaborated are female blood and male semen, substances which play different roles in the magico-religious structure of different societies. A central theme of this book is the assumption that the elaboration of red pigment refers to menstrual blood.

Other meanings of the roles of blood are sometimes found in the ritual thought of communities and I describe here a number of examples.

A phenomenon, well documented ethnographically, is that of male, artificially induced bleeding, known as male menstruation. This is described in matriarchy myths.

Matriarchy myths

Matriarchy myths are ideological constructs which postulate an ‘original’ period of ‘women’s rule’. Such narratives – which are known in many parts of the world – are particularly prominent in those areas in which men seek a monopoly of ritual power through secret male initiation rites (Knight 1991:421). Such areas include much of tropical South America, Africa, Melanesia and Australia. Anthropologists seek explanations for the parallel logic, myths and symbols used in these rites in widely separated regions of the globe (Allen 1967; Bachofen 1967[1861]:69-201; Bamberger 1974; Dundes 1976; Hugh-Jones, C. 1979; Hugh-Jones S. 1979).

Bamberger (1974) points out that matriarchy myths are just patriarchal ideological constructs. They have no historical value, and in particular convey no information as to womankind’s actual past, present or future in any culture (1974:249). Their function is to justify male dominance ‘through the evocation of a catastrophic alternative – a society dominated by women’.

In these myths (1974:290) womankind ‘represents chaos and misrule through unbridled sexuality’. Women are accused of being unable to restrain their sexual appetites. This attitude to women is evident in male initiation rites of some people. The myth of matriarchy in its countless versions legitimizes a male sexual-political counter-revolution in pseudo-historical terms (Knight 1991:435).

Initiation rites

This male response to a breakdown of the female ritual system has produced different explanations for blood and semen. Such explanations can be found in initiation rites which teach ideological constructs to young people.

Differences have been observed between hunter-gatherers who focus mainly on female initiation rites, as is generally the case among the San and some other African groups, and hunter-gatherers in much of Australia where the major emphasis is placed on male initiation rites (Knight 1991:40-41). These two social models are characterized by differences in attitudes to women; in the African examples, mythico-religious structures were not necessarily oppressive of women. The first menstrual flow of a young woman was regarded as potentially beneficial, immensely powerful and intimately connected with male hunting success (Lewis-Williams 1981).

The Australian situation, where male initiation is stressed, is characterized by gender segregation and mutual gender antipathy. Herdt (1987) and Hogbin (1970:95) describe the notion that women pollute men, common throughout New Guinea, and also offer some examples of men polluting women.

Male – female antipathy

Hogbin (1970:82-5) describes the characteristic of all Pacific Island societies that make a distinction between “things that are purely secular and the things set apart by reason of their supernatural association...things to be approached with caution...”

Their religion classifies differences between the ritually clean and unclean. Most of these categories are built around fears of pollution through female blood. The main method for treating the unclean is through bleeding.

Females are said to be able to avoid contamination from association with males by the normal physiological process of menstruation while males, on the other hand, may only regain their purity by periodic artificial menstruation (1970:88).
Hogbin (1970:96) draws on Douglas (2002[1966]) who argued that the dogma of ritual contamination by females may be expected where males find that their authority can be challenged, and suggests that such pollution theories provide a solution to create a balance of power between men and women.

Thus male blood letting appears to be prevalent in societies where men seek to dominate women, to acquire meanings supportive of promoting male values, the cultural construction of a kind of aggressive masculinity. Where male menstruation had become the rule, real women’s menstruation became feared as a threat to men’s supremacy. Mythologies associated with male menstruation reiterate its positive, magical and empowering values conducive to good hunting luck.

**Blood /semen equivalences**

The best known examples of men invigorating their bodies by bleeding, and where blood/semen equivalences are implicit, are classic accounts from Papua New Guinea. Gilbert Herdt (1987) reports on the Sambia and Ian Hogbin (1970) on the Wogoos.

Male bleeding rituals/pollution rites amongst the Wogoos are correlated with growth and undertaken to ensure that the boy will grow into a man. In a series of initiation rites, bleeding is induced from orifices such as the ear, the tongue and from the genitals (1970:101).

Hogbin (1970:91,141) describes the salutary effects assigned to penile bleeding:

> “The man’s body loses its tiredness, his muscles harden, his step quickens, his eyes grow bright and his skin and hair develop a luster. He therefore feels light-hearted, strong and confident. This belief provides a means whereby the success of all perilous or doubtful undertakings can be guaranteed. Warriors make sure to menstruate before setting out on a raid, traders before carving an overseas canoe.” (1970:91)

In the initiation rites of the Sambia (Herdt 1987), freedom from female contamination is achieved both by bleeding and by promoting the ingestion of quantities of semen to provide that essential male substance and achieve manhood (1987:107-8).

**Potency**

These examples demonstrate the notion that potency is attained through bleeding. The most parsimonious explanation for male bleeding is that it mimics female menstrual bleeding and provides a ‘language’ in which to express ritual power (Knight 1991:433).

Knight (1991:435) describes the potent qualities of female menstruation that men seek to acquire:

> “The magical powers of menstruation, then, derive in part from the blood’s perceived connection with wider rhythms of social and cosmic renewal. It is this connectedness – ‘harmony’ and ‘synchrony’ are alternative terms – which men appear to envy and attempt to duplicate by artificial means.” (1991:435)

The widespread recurrence of seemingly conspiratorial secret male initiation rites testifies to this process (1991:435).

The overwhelming pattern is that symbolism of blood relates to menstrual blood. In the course of the male bid for ritual power – which led to the religios of the monotheistic male god – inversions and manipulations of bodily substances took a range of forms.

The usual pattern is of males secretly imitating female blood flow to acquire its potency. Male blood letting includes artificially causing nose bleeding and tongue scarification, as well as penile bleeding. This artificially induced bleeding from orifices and genitals suggest mimicry of female menstrual bleeding. These rituals are characteristically surrounded by great secrecy. In a society characterized by mutual antipathy between the sexes the secrecy stems from fear of female ridicule.

**Divine Kings**

De Heusch (1975, 1982) draws on rich accounts of the symbolism of initiation ritual among sets of central African peoples such as the Kuba and Lunda peoples. Through the analysis and interpretation of symbolic products, particularly myth and ritual symbolism, he discovers common structural elements of mythical ideas between them, recording important social transformations. He demonstrates that the myths constitute transformations, one of another. He is also able to show that the rituals of the region, mainly initiation rites, are based upon “a symbolic language constructed in myth”. Of interest to this study is the role of ‘blood’ in such social transformation. Through his analyses De Heusch demonstrates the roles of different kinds of blood, the blood of menstruation (bleeding genitals), of the hunt (animal blood) and of warfare (bleeding heads).

**Social transformation**

A pervasive theme in the myths and ritual of African tribal kingship is that of the intruder or foreigner who obtains kingship...
through conquest of autochthonous, chaotic, female-identified powers whose excessive and prolonged menstruation has resulted in the breakdown of cyclical order. The myths studied by De Heusch describe the restoration of order accomplished as the female powers are transferred through the creation of incestuous lineages. They illustrate transformative processes in the evolution of small-scale nonindustrial societies.

De Heusch shows how the process of male appropriation of ritual power in Central African mythology is arranged around the mytheme of sterility. The reasons given for male appropriation are that the earlier cyclical balance has been disturbed – females are menstruating excessively and the rhythms of social and cosmic renewal have broken down, resulting in sterility. In the Lunda mythology for example, “…fear of menorrhagia dominates the scene. In the menstrual cycle, the sign of biological periodicity, the Lunda paradoxically discern the danger of a continuously sterile and non-periodic nature.” (De Heusch 1982:157)

Menstrual blood becomes encoded as absence of life (sterility) while the blood of the hunt is encoded as birth (fecundity) (1982:156). This sterility is opposed to the blood of hunting and killing – the new sources of fertility. The blood shed by men in the hunt and the menstrual blood of women are opposed as fecundity to sterility. Hunting is the image of fecundity in the magico-religious legitimacy of power, the ultimate source of all fecundity (1982:167-8). The transformation of menstrual blood to signal sterility, and the blood of violence to signal fertility lies at the heart of the creation of a New Social contract discussed in chapter 9.

Through a quasi-historical account, the female ritual potency is absorbed into the male. In a Lunda origin myth for example a maternal primordial serpent of ambiguous sex, a “mother of all things”, identifiable with the rainbow who commands terrestrial waters, marries the lightning, master of sky, rain and story. Thus the female power of the serpent via an incestuous lineage becomes the forebears of the Lunda royal ancestors (De Heusch 1982:152).

**Bleeding Heads and Bleeding Genitalia**

The blood of war and menstrual blood are related respectively to specific parts of the human body.

The symbol of the excessively menstruous ancestress is a bracelet, a circlet made of human genitals. This becomes the supreme symbol of chiefly status among tribes of Lunda origin, its original whiteness transformed to red, not through menstruation, but through the blood of male and female slaves sacrificed at each new installation. This bracelet is worn on the king’s left or feminine arm, representing the power/potential fertility of a vulva bleeding from menstruation, which must be appropriated by an aspiring king to restore a new fertile order after a chaos that threatens sterility (Power personal communication).

Numerous accounts tell of the severed heads of dead Luba chiefs preserved in sacred baskets. De Heusch supposes that these symbolise the same primordial sacred magical powers.

The warrior hero of the Luba epic decapitates his enemy. The Ndembu war chief brandishes the bleeding heads of enemies killed in combat during his triumphal dance (Turner 1967:150). The bleeding head of a king and the bleeding genitalia of a queen express the symbolic opposition and complementarity of war and menstruation. Blood of war and killing replaces menstrual blood.

De Heusch (1982:158) remarks that in this Luba myth which follows diachronically the epic of state foundation, we can understand how in mythical thought the higher natural orifice is substituted for a lower one in the same physiological context, that of menstruation. Bleeding genitalia oppose bleeding heads – the cosmic dimensions of menstrual blood have been transferred to the new order. The bleeding menstruating heads are a symbol of war and conquest and represent a veritable symbolic transformation whereby war, which is finally conceived as a hunt for heads, is related to menstruation (De Heusch 1982:171).

**Ndembu blood symbolism**

The symbolism of blood has been closely studied by Turner among the Ndembu who belong to the same culture area. The Ndembu distinguish three main kinds of blood all connoted by the colour red; the blood of hunting, violent and beneficent; maternal blood, good and pacific; and the blood of homicide, circumcision and war, associated with courage and transgression, and calling for ritual purification (Turner 1962:149-50). De Heusch identifies a ternary structure of blood displaying different blood meanings in the form of a triangle opposed in pairs: the hunt (animal victim); war (human masculine victim); menstruation (female victim sterility). The potency of blood is appropriated by the hunter, and then by the warrior. Hunting, like war, connotes the enlargement of the social group, in the one case by natural reproduction and in the other by conquest.

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From these examples we see that the different meanings appear in narratives of transformed social systems. All assign potent powers to blood, suggesting that they represent inversions of an original syntax. These examples do not challenge the original hypothesis of the potency of female menstrual blood,
but represent inversions of that original syntax; the different forms they take display transformation of the original potency harnessed to serve changed male interests.

8.3 Entoptic imagery

A number of characteristic iconographic features for the supernatural emerge from the FCC model. My interpretation of the schematic elements of the iconography rests to a certain extent on an interpretation of geometric motifs as genitalia.

Figurines are seen as inseparable from these motifs – both seem to engage the same shapes and ideas. Some researchers, however, show that the same geometric motifs that appear in the imagery are envisaged by people in an altered state of consciousness.

A neuropsychological model (Lewis-Williams and Dowson 1988; Lewis-Williams 1997:325; 2004:19) shows that the images people see in altered states of consciousness are cross-culturally the same. Carr (1995:1) presents detailed examples of the huge range of these geometric forms as they appear in different art forms suggesting that such visions originate in the brain and then move to the material sphere. If we accept that these shapes, like the iconic items, had denotative origins we must reject the trance-induced explanation in favour of a model that locates them in a social context promoting a specific social goal. As Power (2004:98) points out, the neurophysiology of shamanic experience does not inform us about social contexts that the FCC model does:

“The symbolic domain emerges through collective female defiance expressed in ritual performance.” (Power and Watts 1999:104)

I propose that both a ritual and a trance explanation for these motifs in the iconography can be reconciled. Contrary to Lewis-Williams, I suggest that the origin of such images should be sought in the kind of repetitive rituals performed by female coalitions signalling their withdrawal to an imaginary other world of unavailability proposed by the FCC hypothesis. The powerful ability of ritual to indoctrinate could account for these images being wired into human brains. Such imagery would most likely emerge in altered states of consciousness as suggested by Lewis-Williams. The most compelling evidence to explain the overlap between features of trance and other rituals is that they are both ways of getting to the other world:

“To attempt to counterpoise trance to initiation in this imagery is to miss a fundamental aspect of Knight’s representation of supernatural potency. Whether belonging to a healer or to a menarcheal girl, it is the same potency. The experience of one may be rendered in terms of the experience of the other, conflating the world of trance with the body of the menarcheal maiden. Gender ritual provides an organizing principle template for movement to the other world.” (Power 2004:88)

Thus alternative explanations for symbolic behaviour have been shown to be lacking in contextual grounding. Different roles of bleeding belong to a later inversion of an original female menstrual meaning. The focus on bleeding from orifices and the acquisition of potency support an original female bleeding.
in this chapter, I consider why material effigies of anthropomorphic deities may have been produced at this time. How does the presence of these material gods in human form assist our understanding of their spatial Near East context and the larger temporal context of cultural transition?

I suggest that the presence of such gods in the record allows us to assume the establishment of hierarchical religion and ritual activities associated with it. This can be seen in the material symbolic evidence as the end of a process from the Natufian, when good evidence exists for female shamans, to the Pottery Neolithic period, when I suggest the evidence can be interpreted to suggest that male elites control male gods. This occurs some thousands of years before written evidence for male monotheistic gods.

Goring-Morris et al 2009b present the accepted view of archaeology that the early cultures in the Southern Levant represent a culmination of a process of subsistence and social adaptation initiated at the beginning of the Middle Epipalaeolithic. During these millennia, they claim, population growth and changes in subsistence modes necessitated “realignments and intensification in social organization and ideological adjustments” (2009b:208). Belfer-Cohen and Goring-Morris (2002:124) suggest that the mechanisms available to populations to negotiate such situations were embedded in the realms of the sacred and communal, rather than the mundane and individual (my italics).

I agree that the sacred and communal – in other words, organised religion – were implicated in the process, but these phenomena of religion and its characteristics, the gods, the sacred and the communal, had to be constructed.

In this chapter I ask what pressures drove the transition to the new religion, the new male gods, the sacred and the communal. Who invested in their creation and what ritual activities and strategies ensured their communal acceptance? I speculate that some answers to these questions can be found in the archaeological record of my data.

The establishment of this new religion was, I suggest, driven by economic factors – pressure to circumvent the strictures of hunter-gatherer economic rules, rules of an ‘original social contract’. Control of ritual power was the key to cornering control of resources. The increasingly visible archaeological remains of such a process would, I predict, indicate increasingly costly and elaborate rituals as different male cult groups, the perpetrators of the new religion, compete for ascendancy.

My model proposes that much of the archaeological remains of this period in the Southern Levant are the result of these activities. Competition between elites resulted in the creation of a pantheon with a variety of gods attached to durable structures; variable success in this established a hierarchy of sites established by male elites.

In this new religion, ritual, I suggest would work to bind communities together. A ritual activity which appears to be prominent is that of sacrificial offerings. Abundant skeletal remains might indicate victims of ritual killing offered to supernatural recipients – the gods – in designated places.

My model predicts that the deposition of material remains of these rituals, the sanctified human and animal skeletal remains and remains of sacrificed inanimate objects, contributes to creating sacred space.

The material remains of sacrifice would represent a form of symbolic capital.

These deposited gifts to the gods would provide ritual authentication for appropriating ritual power and subsequently control over territory. In partnership with gods, created for this purpose, the new elite religion endorses a ‘new social contract’. I suggest that centres where such rituals were carried out established permanent points in the landscape attracting sacrificial donations. This ritual sedentism would enable an increasing degree of control of wild cereals and caprids.

The ritual activity used to this end is recognisable to a different degree in most sites. Strategies of ritualization, the creation of tangible artifacts in ritual, make it possible to identify the model in the archaeological record. As Bradley (2003:6) notes, it is the very existence of rituals in the past that makes much of prehistoric archaeology possible.

Creation of the realm of the gods

I predict that authentication of changed socio-economic structures and ideology in a new social contract would require extraordinary measures of persuasion requiring group cohesion and leadership. My model assumes that ‘costly signalling’ (e.g. Zahavi and Zahavi 1997; Boone 1998, 2000; Irms 2001; Sosis 2003; Sosis and Alcroft 2003; Sosis and Bressler 2003) is used in ritual to promote collective religious fantasies. Communal constructs of ultimate sacred postulates (Rappaport 1999) and a fundamental separation between the sacred and the profane
social structure can be described as the replacement of an et al referred to by goring-Morris (2009) consist of. the ‘realignments and intensification in social organization’ involves a changed social contract. this, i suggest is what culture combining elements from both. the process of transition power can be expected in the form of hybrids in the material evidence for the transition between the two kinds of ritual and the deposition of these would create ritualized place. both kinds of signals would produce ritualized material objects or scarification.

Mutilation such as for example head-shaping, circumcision to emerging elite groups by individuals; those of physical kinds are costly signals in the form of rituals of commitment and ownership of gods and access to them. the second competitive elite groups advertising their ritual power, the creation and recognition in the record. one kind are the signals of competitive behaviour in the transition between transegalitarian and egalitarian societies in the southern Levant.

I suggest that at least two kinds of signals can be anticipated and recognised in the record. One kind are the signals of competitive elite groups advertising their ritual power, the creation and ownership of gods and access to them. The second kinds are costly signals in the form of rituals of commitment to emerging elite groups by individuals; those of physical mutilation such as for example head-shaping, circumcision or scarification.

Both kinds of signals would produce ritualized material objects and the deposition of these would create ritualized place. Evidence for the transition between the two kinds of ritual power can be expected in the form of hybrids in the material culture combining elements from both. The process of transition involves a changed social contract. This, I suggest is what the ‘realignments and intensification in social organization’ referred to by Goring-Morris et al (2009) consist of. The transition from a hunter-gatherer way of life to a hierarchical social structure can be described as the replacement of an ‘original social contract’ underpinned by female ritual power to a ‘new social contract’ driven by male elites. Such elites were recorded for the following Chalcolithic period e.g. Levy 1995; Joffe, Dessel and Hallote 2001.

9.1 Original Social Contract – Hunter-Gatherers

A prediction of the FCC model (Power 2009:274) is that the male response to female strategies aimed at increasing male economic support, is to forego consumption of their own kill – in other words, for males to sacrifice the consumption of large killed animals and share them with others. This sacrifice is described in an economic finding called the ‘Own Kill’ rule (Knight et al 1995, Knight 1991). This rule underpinned an ‘original social contract’ whereby underlying ancient kin patterns joined a hunter and his wife’s kin as parties to an exchange relationship, surrendering food for sexual access.

“The society seems to want to extinguish in every way possible the concept of the meat belonging to the hunter,” writes Marshall of the Kung bushmen (1961:238). Nomadic ‘hunter-gatherers’ who lived according to the rule are described as a politically egalitarian society whose members’ lives were arranged around complex systems of food sharing and division of labour.

People lived according to this ethic for many thousands of years until impacted by climatic events, and the extinction of African megafauna in the Near East by 20ka (see chapter four). The change in the availability of large game had long eroded the universal hunter gatherer way of life of the ‘original social contract’ and it can be anticipated that by the final extinction of the last large animal (the auroch) in the eighth millennium BP (e.g. Jasim 1985; Yener et al 2000), this social organization attached to large game hunting had collapsed.

Avoidances of Original Social Contract

Another factor responsible for the erosion of the ‘Own Kill’ rule is that of ‘avoidance’ practices, which Knight (1987:68-70, 1991) describes as a common feature of every system of rules – another set of activities aimed at avoiding them. The ‘Own Kill’ rule was systematically undermined by evasions contained in secondary edicts encased in ritual form (Knight 1991:88, 89). These edicts are illustrated in the ethnographic and historical records and include exceptions to the rule to reduce its burden such as exemptions according to age, stages of life, and kinds of animals, seasons or places of kill. In this way, the principle of the rule is maintained, but its costs are diminished or evaded. The ‘Own Kill’ rule provides the base-
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line assumption from which ritual acts of evasion derive. The guilt a hunter feels in killing an animal and his need to identify with the kill and apologise before consuming it, are part of a range of rituals, in particular in respect to large animals to which the distribution mostly applied:

“...the larger the animal, the greater the range of relatives who “ought” to be invited to share in the meat.” (Knight 1987:71)

One strategy of avoidance is that of separating the actual killing from the distribution and consumption of the animal by sharing it between partners:

“If the killing of a bear can be blamed on someone else, then of course the meat can safely be eaten.” Knight (1987:72-4)

In another strategy, a hunter may deny that the animal was killed at all suggesting that the animal’s soul lived on (Knight 1987:79).

Partners in the kill – origin of sacrificial ritual

Sacrificial ritual, present in avoidance of the ‘original social contract’, are described by Knight (1987:100) as part of the spectrum of rituals relating to animal or human ‘meat’ or ‘flesh’ such as ‘totemism’, ‘increase rites’, ‘blood avoidances’, ‘menstrual taboos’, ‘cooking rules’, ‘the couvade’, ‘male initiation rites’ and so on. Knight (1987:89, 90) provides many examples of ritual gestures of hunters who removed the guilt attached to consuming their ‘own kill’ by symbolically offering it to someone else, possibly an imaginary being – a spirit or god – and suggests that much of the earliest logic of sacrifice derives from this source.

I suggest that the final legitimization of the circumvention of the ‘original social contract’ ritual included forms of sacrificial ritual originating from such avoidances, and that their organization into hierarchical religion formed a ‘new social contract’.

9.2 New Social Contract

Our knowledge of religion from historical sources infers that the ‘new social contract’ establishes new parties to the distribution of the kill. In the new regime, the main benefits of a hunter’s kill are directed to a union of ritual practitioners, the donor and the supernatural agent – the kill is divided between the three. I suggest that that aggrandizers and ambitious individuals (Hayden 1995) drove the changes and that ritual practitioners co-operated with them, sharing the responsibility for the kill and providing the ritual authentication for changing the rules from the earlier ‘original social contract’. For example, the idea of a partnership is described for the sacrifice of domesticated animals in Vedic religion. In the Rg-Veda, there is a patron of the sacrifice on the one side, and an officiant – a “poet” – on the other; the patrons donate the flesh and the officiants give ritual authentication (Oguibenine 1998:78).

Distributions of the kill

The three-way division of the kill is confirmed cross-culturally by theological descriptions of distributions of religious sacrifices (e.g. de Vaux 1964; Burkert 1983:8; Jensen 1995:154-5) which reveal that certain parts of the kill traditionally went to the ritual specialist like the blood, head, skin and feet of the animals, and other parts to the god and donor. Such divisions of the kill are also recorded in most ethnographic accounts of religious sacrifice (e.g. Evans-Pritchard 1954:212; De Heusch 1985:11).

Boyer (2001:261) notes, a paradoxical element of this exchange relationship with the gods:

“Although it is presented as giving away some resources in exchange for protection, the brutal fact remains that the sacrificed animals are generally consumed by the participants – the gods cannot actually share in the feast.” (2001:261)

“In many places,” Boyer states (2001):

“people find some clever way of finessing this conceptual difficulty. They say that the gods crave the smell of meat, that they ingest the smoke, and that they eat the soul of the animals.” (2001:241).

Several researchers describe the share of the gods: De Heusch (1985) notes that:

“At the human ritual table in Greek sacrifice, derived from the Vedic model ...the gods content themselves with the smoke of the charred bones”(1985:18).

He refers to rituals of different African peoples where “ancestors consume their part of the sacrifice through smoke and fire” (De Heusch 1985:18,21,51). Amongst the Nuer in Africa:

“God takes either the life or the spirit. What belongs to God in the sacrifice is the blood that soaks into the earth and the chime.” (Evans-Pritchard 1954:212)

Mythical sources are rich with the demands of the gods for human energy which is conveyed through the sacrifice of animate victims in return for benefits which the gods would bestow (Burkert 1996). De Vaux (1964) describing
Old Testament sacrifices, notes that a part of the victim in a ‘communion’ sacrifice, the fat which surrounds the entrails, is burnt on the altar as a burnt offering for the god while the breast and the right thigh are assigned to the priests. Green (1998a:176) speculates that fire sacrifices are an appropriate medium for the celestial divine recipients of holocaust sacrifices in Iron Age religion.

9.3 Sacrifice

My model suggests that sacrificial ritual, which was once an avoidance ritual becomes institutionalized in religion and provides authentication of the final abandonment of the ‘Own Kill’ rule. Green (1998a) argues that one may not assume that human life was of itself sacrosanct in prehistoric periods:

“In antiquity the killing of a living being, whether human or animal was not inevitably regarded as more efficacious (in relation to value) that the consignment of a gold necklet or decorated shield cover to the spirit world” (1998a:170).

Following Green (1998a) I suggest that since there is a solid body of both literary and archaeological evidence for human sacrifice in antiquity, one can assume that is is present too in prehistory. Knight’s claim (1987:89, 90) that the ritual of sacrifice originates in avoidance practices of the ‘original social contract’ leads one to assume that it would be present in the ritual of the ‘new social contract’. Sacrifice expresses more than almost any other concept the heart of a religious system (Firth 1936:13). The mortuary and faunal remains in the archaeological record of the Neolithic of the Southern Levant suggest that sacrifice of both humans and animals took place.

Sacrificial ritual as exchange relationship and creation of the sacred

The ritual of sacrifice is very closely implicated with the creation of hierarchy. The two meanings usually assigned to sacrifice are that it is a contract and a communion. Both, I suggest, are means of communication with the other world.

Boyer (2001:241) describes the general ideology of sacrifice as almost invariably the notion that misfortune can be kept away and prosperity or health or social order maintained if the participants and the gods enter into some mutually beneficial exchange relation. He describes supernatural agents as exchange partners, beings with which humans can interact (2001:156, 200). Green (2001:20) notes that sacrifice is a means to an end rather than an end in itself: it is carried out in order to acquire benefits for an individual or a community.

The other intrinsic meaning of sacrifice is that killing is an act of communion (Green 2001:34). The death of a victim of ritual killing, Bradley (1995:9-10) argues, creates a sacred bond...
between the recipient (god) and the individual or community enacting the sacrifice – it constitutes the “creation of the sacred” (Burkert 1996). The act of violent killing unites the object sacrificed with the deity – sanctity is transferred to the sacrificed person, animal or thing. Bradley (1995:9-10) suggests that the sacrifice may have had its genesis in the sacramental rather than being contingent upon the giving and receiving of gifts, but this is not common to all religious sacrifice.

Ritualization of material objects

I return to Bradley’s (2003:12) recommendation that attention be paid to the “practice of ritualization” which, he suggests, should be understood as a distinctive kind of social strategy, by which certain actions gain an added emphasis. I propose that the ‘symbolic significance’ that Goring-Morris and Belfer-Cohen (2002:67) identify in the archaeological record of my data refers to ritualized remains of religious rituals. Such ritualized features of the record can reveal, I believe, the strategies used by the new elite to promote a cohesive religious community.

Subjects for ritualization were human and animal material remains, material objects and place. I suggest that the deposition and curation of these remains created a ritualized world of the gods and the sacred on earth.

Archaeological recognition of sacrifice

Firm evidence for human sacrifice in the ancient Near East in, has been cited, for instance in Mesopotamia (Green 1975); Palestine (Day 1989); and Nubia (O’Connor 1993). Green (1998a) describes the caution with which the whole subject of human sacrifices should be approached:

“In any consideration of sacrifice as a concept, the issue of the recipient is crucial.” (Green 2001:22; and see Hughes 1991:3)

Studies of sacrificial burials have provided cross-cultural regularities which I suggest can help to identify burials of sacrificed humans in my data. For these I draw from historical accounts of Vedic ritual (Talbott 1995), Old Testament Leviticus sacrifice (de Vaux 1964) and classical literature on sacrifice (Green 1998a, 2001).

Brown (1991:17) suggests that graves of sacrificial victims are deemed to have few or no grave goods. He suggests (1991:52-3, 69) that the clear and intentional mixing of animal bones in the remains of Late Carthaginian child sacrifice tophets indicates that the animal bones are considered as a substitution for a child.

In these historical accounts, three essential elements are deemed necessary to recognize sacrifice – a supernatural recipient, evidence for violence and the notion of separation (e.g. Green 1998a:170, 2001:22; 185; Merrifield 1987: 65 and Hughes 1991:3).

I describe below examples of how the three elements for recognizing sacrificial ritual, the supernatural recipients, violence and separation can be identified in the archaeological record.

The creation of supernatural recipients

“One of the ways in which the gods and their worlds are constructed is through the ritual of sacrifice.” (Green 1998a:173).

In chapters five and six I suggest that that the counter-intuitive iconography of the imagery indicates that supernatural recipients were present in the Neolithic record.

Contrary to Boyer (1996:94), Knight et al (1998) declare that:

“The gods do not just appear and then replicate themselves autonomously through being attention-grabbing; rather the immortal need organized and communal help.” (1998:129)

I suggest that the first gods of the new religion are constructed in rituals of violent acts of dispatch to the other world. Violent killing resulting in a sudden transition of a victim from living to dead, simultaneously converts him or her into a god. This is not a new idea. The notion that sacrificed humans became gods is well-known. Talbott (1995:46) for example shows clearly how, in Vedic religion for example, gods are sacrificial victims reborn as gods in the moment of death. Supernatural recipients were created in the ritual of human sacrifice, and becoming gods, sacrifices were made to them.

Natural death with subsequent ritual treatment of the body does not qualify for sacrificial status Green (1998a:173).

I suggest that one may identify different kinds of supernatural recipients in archaeology such as those from the earth or those from the sky by certain kinds of remains. The counter
intuitive material images of gods give us some idea of how they were envisaged.

**Blood and fire sacrifices**

In some African symbolic systems quoted earlier, the transition from an earlier social contract to a later one resulted in a changed meaning of blood.

Violent sacrifices creating gods may be of different kinds and are often classified as bloody or bloodless, the bloodless referring to inanimate artifacts or food.

The shedding of blood, whether that of humans or beasts, is a significant element in the ritual process (Green 2001:81-91; 1998a:172; Jones and Pennick 1995, 9-21). A show of blood is defined by Green (1998a:172) as the required signal to access the other world. In blood sacrifices, the blood of a victim may be distributed to the ritual specialist or the god (e.g. Jensen 1995:154-155).

De Vaux (1964:6), describing the distribution of the animal in the Old Testament Passover sacrifice, notes that the priests took its blood and poured it out at the foot of the altar – seemingly it was destined for the earth deities. Sprinkled blood too is used for sanctification in Old Testament sacrifice (Burkert 1983:4); in Mesopotamia, blood offerings were regularly made to demons and gods (Burkert 1987:17).

In the horse-sacrifice among the Altaic peoples of east Central Asia, a light coloured horse is cruelly killed by breaking its backbone, not a drop of blood being allowed to fall to the ground (e.g. Eliade 1964:192; Diachenko 1994).

Green suggests (1998a:177; 2001:90) that the identification of blood-sacrifice will seldom be possible:

“For bodies which survive in the archaeological record only as skeletons, identification as blood-sacrifice will seldom be possible: on rare occasion there may be circumstantial evidence such as the presence, in or near the body of penetrative weapons like daggers or arrows.” (Green 1998a:177)

Weapons are found in burials in my data such as a burial at Eynan for example, where a red flint dagger lies 25cm from the skull of the skeleton (Perrot et al. 1988:46). Goring-Morris (2000) reports one of the few intact arrowheads found at the PPINB site of Kfar Hahoresh directly associated with a detached plastered skull (2000:121). These may provide circumstantial evidence of bloody violent death.

Recognition of blood sacrifice may be noted in encrusted altars and channels for draining blood. Özbek (1988:130) for example describes a flat stone from the site of Çayönü, stained with blood of animals and humans which was probably used as an offering table. One may speculate too that bloody earth burials were sacrifices destined for chthonic underground gods while burnt sacrifices would rise to celestial recipients as smoke. This fact could help to identify which gods were recipients of sacrifices.

**Burnt sacrifices**

The burning of victims removes them from the earthly world as flames, smoke and ashes which rise to the sky, suggesting that such a gift is destined for celestial divinities (Green 1975:127; Day 1989:82-5).

“The god is present at his place of sacrifice, a place distinguished by the heap of ashes left from ‘sacred’ offering burnt there over long periods of time” (Burkert 1983:2).

Concentrations of ash ranging from quite small to very large are found all through the period of my data; these are usually related to domestic fires or conflagrations (see Akkermans and Verhoeven 1995 Akkermans and Schwartz 2003). They may equally represent the remains of fire sacrifices. In this case, ash, the remains of burnt victims acquires sacral significance.

Burnt sacrifice might be supported by evidence of burnt bones.

These were reported for various periods for example from Kebara Cave, (Turville-Petre 1932), Wadi Hammeh (Edwards 1988, 1991:146), Nahal Hemar (Arensburg and Hershkovitz 1989:122); Mureybet (Özbek 1976); Atlit (Hershkovitz and Galili 1990:337) and Basta (Roehrre-Ertl et al 1988:135-6).

Between the Natufian and the Pottery Neolithic periods in my data, a change in mortuary ritual is recorded (Gopher and Gophna 1993); earth burials found in the earlier part of the period, almost disappear in the later part.


If as I suggest different kinds of human sacrifice may be identified in this data, then this change in burial mode might indicate changed recipients of sacrifice from underground (female) gods and goddesses which left skeletal remains, to celestial solar (male) gods which left only ashy deposits.
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**Violence**

The creation of gods from violent acts requires archaeological recognition of violence, a requirement that is problematic. A low incidence of warfare and raiding among hunter-gatherers is assumed in classical anthropological thought, and the evidence of violence in early skeletal remains is rarely a research focus (but see Keeley 1996).

I indirect evidence in the mortuary record for the creation of gods in violent acts of blood and fire sacrifices was described above. A number of examples of direct evidence of violence on skeletons regarded as the cause of death in my data period can be added to support the suggestion that sacrificial killing took place.

**Direct evidence of violence**

Evidence for traumatic injuries reported for the Natufian include a depressed fracture of the skull at Nahal Oren (Ferembach 1959), a depression in the skull of a probable male from El-Wad (Belfer-Cohen 1995:12). The skull of a male child of 8-9 years from Basta (PPNB) revealed evidence of ancient injuries of two blows to the head by a sharp edged instrument which was considered to have caused his death (Röhrer-Ertl et al. 1988). Flint projectiles embedded in the spine are cited as the cause of death for example, at Kebara Cave (Bocquentin and Bar-Yosef 2004). These are common in pre-Neolithic Nubia (Wendorf 1968; and PPNB and PPNB Jordan (Rolfsson and Kafafi 1996:22-3). A later PPNB skeleton shows evidence of a violent cause of death: a flint bladelet (snapped at both ends) penetrated the left side of the skull with such force that a 3cm piece of the inner wall of the cranium was jammed into the brain (Rollefson 2000:173).

In addition, complete bodies with no signs of violence may have been subjected to forms of violent killing which leave no traces on the body. For example, sometimes demands by gods for whole victims or for burnt victims create an objective difficulty in recognizing violent death.

The god Moloch required the death of child victims through fire (Day 1989). The Hindu god Siva was “hungry for a child aged five years without blemish, the only son of a good family” (Shulman 1993:22-3,73). The god’s great hunger required the meat of his head and of his eyes (Shulman 1993:39). When the head was omitted, the sacrifice was deemed wanting. This example may throw light on the mortuary rituals of the PPN when adults were found decapitated, but children, up to a certain age, were found intact.

**Skulls**

In the Near East, isolated skulls have attracted much attention. Skull removal is thought to be post-mortem (e.g. Bienert 1991: note 9; Nadel 1992; Belfer-Cohen 1995:9, 11; Goring-Morris 2000). Some *in vivo* decapitation seems to have taken place, however, and is identified by spinal elements left attached on skulls e.g. in a Late Natufian skeleton from Eynan (Perrot et al 1988:49), at PPNB Jericho (Kenyon and Holland 1981:49-50) and at PN Lod (Blockman 1997:9). *In vivo* decapitation is identified from Çatal Höyük (Hawkes and Molleson 2000:162). Wright (1988:52) suggests that the virtually continuous evidence of decapitation from Neolithic to modern times represents a renewal rite.

Smashed skulls too may be the result of violent acts. The curation and special deposition of skull fragments may suggest that skulls were ritually smashed. Single ‘bastard’ skull fragments are found in isolation – either deposited in fills, or more significantly placed in graves. For example Wendorf (1968: 978) notes a burial covered with a stone slab in the Nubian cemetery Site 117 containing only a fragment of an adult skull; cranial fragments were found in a collective burial at Natufian Erq el Ahmar (Neuville 1951:109-110); Avner (1997) notes the deposition and curation of fragments of human skulls in tumulus tombs in East Sinai (e.g. 1997:19, 28, 34) in contexts of the Negev Kebaran, Ramonian and fifth and sixth mill. BC. In the PPNA site Nétiv Hagdud, fragments of a child’s skull were recovered from under a floor and in fills (Bar-Yosef and Gopher 1997:206). At Byblos Néolithique Ancien Dünand (1973) notes an elderly adult burial represented by one foot and a skull fragment; in the same site a pot burial T1152 contains fragments of unfused skull bones (1973). Isolated skull fragments were present in fills in all strata of Nahal Zehora II.

**Fragmentation**

The appearance of quantities of fragmented material items on sites is a cross-culturally integral feature of Neolithic assemblages. Almost every artifact assemblage in Neolithic sites is fragmented to some degree and whole items are rare.

While fragmentation may result from natural causes, I suggest that one must consider too the possibility that the fragmented record could result from rituals of symbolic breaking-up of a whole and scattering, or exchanging parts of it making ritualized objects from scattered fragments. This can be seen as an indirect manifestation of violence.

This form has survived in countless historical records and served a variety of social and legal purposes. Chapman (2000:23-25) discusses the different claims that fragmentation is the result of ritual acts, concluding for his European data...
that ritually intentionally fragmented artifacts were active in social relations.

I speculate that this ritual form may originate in sacrificial ritual of inanimate objects, in the mandatory requirement for the destruction of a victim and its dispatch it to the other world. Green (2001) notes that a gift to the gods must be physically or metaphorically removed from the human world to that of the divine by transformation. One way of doing this in the case of an inanimate object, is to destroy it; in the case of living beings – animals or humans – destruction means slaughter.

**Breakage of figurines**

Chapman (2000:23) describes different kinds of breakages of objects in archaeological sites – breakage from human activity, soil pressure and/or other post depositional processes and activities including attrition. He distinguishes these from the phenomenon of a broken object which cannot be restored to completeness because it was never deposited as complete item.

A number of researchers (e.g. Hockmann 1965; Talalay 1987; Bausch 1994:92,108; Biehl 1996:167; Chapman 1996, 2000) have suggested that intentional breakage of figurines can be identified. Others describe figurines which appear to have been intentionally made for dismemberment (e.g. Elderkin 1930; Barbour 1976; Talalay 1987; Broman Morales 1990; Marangou 1992; McAdam 1997:119). This phenomenon and the possible function are the subject of debate.

Chapman (2000) offers an explanation for the depositions of figurine fragments in pits in the Neolithic and Chalcolithic of South Eastern Europe (2000: 68-79). He rejects the explanations of breakage during use and subsequent ritual burial by Garfinkel (1994:178-9) and the ‘ritual killing’ and ‘fertility dispersal’ explanations of Masayoshi (1974), proposing instead (1996, 2000) that figurine fragments are active in strategies of enchainment and commodification for social relations. According to the *pars pro toto* principle, a fragment may stand for the whole. Enchaigned relations, he suggests, are based upon a class of goods called ‘inalienable objects’ exchanged between relatives (Weiner 1985, 1992). These are not commodities but ‘inalienable’ items of family heritage in which status and rank are implicated as an extension of people or groups (Chapman 1996; 2000:5). Thus giving fragments from these items is like giving fragments of oneself; ritual breakage of these significant items and circulation of their fragments in exchange systems enchained people together in a particular kind of relationship (Chapman 1996).

Support for a theory of circulating fragments of figurines would require evidence of matching fragments from different places. At present, only the evidence from Nahal Hemar in chapter five of body parts of plaster figures brought from different places, and the intra-site refitting of figures in Shaar Hagolan (Garfinkel 2002) can be cited.

In addition to the evidence for decapitation in the PPN, isolated single human bones, common on many sites or partial skeletons may represent pre- or post-mortem mutilation or dismemberment of human bodies. Such bones are often only mentioned briefly in excavation reports. The detailed documentation of isolated bones in the description of human skeletal remains at Nahal Zehora II is a welcome development (Gopher and Eshed 2012 Table 56.1-2). Since figurines too are found mostly in fragmented form, a ritual of breaking god images simulating the ritual of killing human victims may be operating. Barkai (2005:66-7) suggests that some bifacial tools appear to have been deliberately damaged.

An assemblage which is particularly fragmented on Pottery Neolithic (and other later pottery bearing periods) is that of pottery. The production of pottery comes late in the sequence of my data period. In the sites of my data, reconstructions of whole vessels from sherds with ancient breaks are rare.

Gopher and Goren (1995) regard pottery as a symbolic rather than utilitarian innovation. Whether these vessels were used in feasting, or sacrificial offerings, the state in which they are found suggests that they were intentionally fragmented after use.

The production and destruction of pottery is another example of the process of ‘materialization’ and like the figurines, pottery may have been made for intentional breakage. An example of the deliberate destruction and hoarding of pottery fragments is found in the site of Yarim Tepe where Merpert and Munchaev (1987) described a hoard of fragments below a floor as an ‘offering’.

**Dismemberment in myths – Fertility**

The ritual killing and dismemberment of living things to send them into the other world, is expressed in ‘dismemberment myths’ where the scattered parts of dismembered victims may have different cosmogenic, political or social roles. Merrifield (1987) relates all intentional breakage acts to an original religious idea of the transformative nature of moving a material item from one world to another. This is a central motif in Indo-European cosmology (Lincoln 1986; Mallory 1989:140; von Franz 1995[1972]:154; Knappert 1995:151; Yvanoff 1998). It appears too for example in the Mesopotamian myth *The Epic of Creation*, and the Egyptian myth of Osiris (Frazer 1992[1922]:365); in Portuguese fairy tales (Cardigos 1996:62); in African mythology (Knappert 1995:151) and in Indian myth (Tiwari 1985:16).
I suggest that this ritual form echoes the ideology of circulation of non-material qualities – such as the circulating “naam” of the Maprusi king in Ghana (Drucker Brown 2005:171). Frazer (1992:379) describes legends and myths which tell how the potency of the king or magician was disseminated in a widespread practice of dismembering the body and burying the pieces in different parts of the country in order to ensure the fertility of the ground and fecundity of man and beast. All these rituals represent in fact, a sharing out of goodness – a just agenda for social relations which lies at the basis of the early social organization.

I propose that fragmentation can be considered a strategy in founding the new religion. Mimicking the dismemberment and distribution of the hunted animal, rituals of the new religion, dismember or break-up ritually sacrificed victims and things.

A scenario for the British and European Neolithic was proposed by Whittle (1996) and Thomas (1999b) that circulating people, objects and animals in predominantly mobile populations create material and social memories at certain key spots. One may hypothesize that in the Levantine context of my model, that the circulating fragments of violently transformed humans and animals which have become gods act as a form of ritual currency in various systems of redistribution, exchange and trade as hinted at by Chapman for the Neolithic, and described by Geary for medieval periods (Chapman 1998; Geary, 1986). Through this ingenious method, I suggest, the shared ideals and values of religion would disseminate in the population, creating a community. Circulating ritualized fragments would serve to reinforce the potent act of communion and broadcast mental fantasies of sanctity.

Strategies of this kind in my view contributed to achieving social cohesion in religion, and increasing differentiation in this part of the world over several millennia.

**Separation**

The third requirement for the recognition of religious sacrifice is that of ‘separation’.

This is another means of removing sacrificial gifts from this world by making them physically inaccessible and invisible. This was achieved by burial, immersion or other means of concealment (Green 2001:24).

Offerings might be transferred to the other world by placing them in sanctified space: a temple, sacred enclosure or some other demarcated liminal area. Such separated space acts as a sacred link (and barrier) between worlds and serves to create on earth what was, in effect, a divine ‘embassy’, a terrestrial manifestation of the supernatural world (Green 2001:24).

Talbott (1995:47) describes a tripartite structure for sacrificial acts in Vedic and Old Testament religion. The first stage, the entry stage, includes rites of purification; in the second stage the act of killing takes place where the victim meets the god and making a clean break from the profane world takes on a new divine nature – i.e. becomes a god.

The third phase of the scheme of the sacrifice, ‘The Exit’, involves separating the now sacred remains of that vital union attained in the sacrificial act and returning all the participants in the act back to the profane world (Talbott 1995:46). Hubert and Mauss (1964[1907]) draw on Indian and Hebrew texts to describe the discard of the victim’s remains which, they comment, were extreme precautions designed to prevent the remains of the now consecrated victim from coming into contact with profane things.

“Even those remains of the cremated offering that could be neither destroyed nor put to use were not thrown away at random. They were deposited in special places protected by religious prohibitions.” (1964 [1907] 40-41)

Pits appear in the record from the Natufian onwards, and were, I suggest, separation devices for the careful disposal of the victim and all items used in the sacrifice.

Descriptions of the contents of pits resemble the kind of sacralised remains of objects of sacrifice and the accoutrements of the accompanying ritual, buried together and sealed by various surfaces. Some pits are found empty, but many are full of the collected fragments of flint, stone, bone items and occasionally a figurine or a whole or part of a skeleton. Rollefson et al (1992:463) and Rollefson (2000:186) describe the deposition of a skeleton in a pit containing concentrations of different artifacts which they call a ‘rubbish’ or ‘trash’ context. A skeleton of a woman was deposited in a similar pit full of fragmented artifacts at the Pottery Neolithic sites of Lod (Blockman 1997).

Deposition of remains of sacrificial ritual in pits expresses Green’s third essential element required to recognize sacrifice archaeologically – that of separation. This idea recalls Frazer’s comment (1992:200-201) that the ritual disposal of the remains of a Eucharist feast may have survived in the taboos surrounding left-over food, and especially that of kings in modern Africa whose left-over food is buried in a hole in the ground.

**Ritualized place**

Another highly ritualized phenomenon is that of ‘place’ here referring to both structures and sites.
The traditional normative assumption for sites containing structures is that they are dwelling sites. However, this view is being eroded. For example, Finlayson et al (2011) reject the:

“default presumption in early prehistory that when we encounter architectural remains, these must relate to the provision of basic shelter.” (2011:1).

Special buildings

Archaeologists committed to models of sedentism have attempted in a number of different ways to distinguish between dwellings and special structures. The co-appearance of mortuary ritual with monumental architecture in the Natufian has been related to sedentism (e.g. Bar-Yosef and Belfer-Cohen 1989b: 447-8; Valla 1995:183; Lieberman 1991). Chapman (2000:136) suggests the transition to sedentary life is made first by the ancestors in what he calls an osteological sedentism.

Goring-Morris and Belfer-Cohen (2003, 2008) question the assumed linear evolution of dwellings from flimsy to durable through time (and see Garfinkel and Ben-Shlomo 2002). They recognise the inability to identify basic domestic structures in these early settlements but recognise the complex variety of functions assignable to “special” public structures within sites (e.g. Byrd 1994; Bar-Yosef and Alon 1988; Goring-Morris 2000; Goring-Morris and Belfer-Cohen 2008; Goring-Morris and Kolska Horwitz 2007; Kuijt and Goring-Morris 2002; Bonogofsky 2002; Garfinkel 1994).

These interpretations are challenged by Garfinkel (2006a). Different kinds of ‘special buildings’ are identified by Finlayson et al (2011) for the PPNA. These buildings come in very different styles with very different ascribed functions. Goring-Morris and Belfer-Cohen (2008) note for the PPNA that a “major innovation” is the “occasional appearance of substantial communal architectural endeavours (2008:254 ref.4). These ‘special buildings’ are characterized by their size and shape and special features, such as massive posts which suggest totem pole-like features, and floor features suggesting storage facilities.

Communal stores are identified (Kuijt and Finlayson 2009) – buildings with suspended floors are regarded as granaries at Dhra and WF16. Stordeur et al (2000) report a sequence of communal buildings at Jerf el Ahmar and compare them with similar discoveries from the excavations at Mureybet. Stordeur et al (2000) suggest functions of a meeting place with a cultic role for these structures. Finlayson et al (2011) suggest that the first buildings may have been community centers.

As ‘special buildings’ are increasingly revealed, the suggestion of ritualized place gains support.

Superimposition

Special buildings are usually uncovered in the rare instances when it has been possible to isolate the perimeters of such a building. More often than not, structural elements of durable architecture are superimposed on top of each other. This makes it difficult to describe isolated structures and establish contemporaneity and their relation with other features of the record.

Superimposition is a feature of Palaeolithic image-making that has long puzzled researchers (e.g. Marshack 1991b; Bahn and Vertut 1988). Superimposition of images on cave walls, common to Palaeolithic cave art in Europe, is regarded as the repetition of earlier ritual acts.

I suggest that another kind of ‘special’ building not previously recognised is one where a structure is built above deposited human skeletal remains or other kinds of artifacts.

Archaeologists attempting to estimate occupation levels recognize an architectural sequence of foundation, floor and structures. I suggest that rather than regarding these as architectural features, they be understood as the remains of a vertical sequence of events recognised in this kind of ‘special building’ where an initial deposition of skeletal remains or artifacts precedes and in fact prompts the creation of a ‘floor’ and a subsequent structure.

Foundation deposits

I refer first to the phenomenon of ‘below floor burial’ or of deposition of skeletons in the ‘foundation area’ of a structure. Goring Morris (2000:107) notes that this like other specific aspects of the PPNB ideological ritual and mortuary practices may be directly traced back some two to four millennia to the Early and later Natufian periods. The relationship between graves and structures in Natufian, PPNA and PPNB sites was noted by (Goring Morris and Belfer-Cohen 2008:250,254,265). Natufian burials occur under the floors of some structures (2008:250); in and around (sometimes abandoned) houses in PPNA sites (2008:254) where:

“...burials are found on-site in settlements, sometimes under house floors as foundation deposits, after abandonment.” (Kuijt 2000 and references therein)

Others describe human interments and skull caches found in building foundations, or “below floors” as foundation deposits or offerings e.g. Kenyon and Holland 1981:48; 1981:305; Goring-Morris 2000:128; Rollefson 2000:170; Kuijt, 2001). Kuijt (1996:319) describes some burials (especially children/neonatals) from Kenyon’s excavation at PPNA
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Jericho, sometimes immediately under a single “post socket” (“totem” hole) or plastered “bin” as foundation deposits. Goring-Morris (2000:120) notes possible parallels with the Late/Final Natufian cemetery at Nahal Oren where there are circular features/postholes (“totem” holes?). Kuijt (2000:148) relates deposition of caches of skulls to dedicatory rituals.

In a related example, Goring Morris (2000) describes cult practices of corpse disposal, postmortem skull removal, and the manipulation of skeletal matter which he traces to the Natufian and earlier. He labels them a “founders cult” (2000:127), while for the later PPN, they are thought to be part of an “ancestor cult” or “cult of the heroes” (Goring-Morris 2000:127).

In all these references to the deposition of skeletal remains ‘below buildings’ as “foundation deposits” or offerings, none relate to the fact that foundation deposits refer to ritually killed objects or persons, deposited in a liminal context.

Green (2001:166) in referring to so-called ‘foundation’ sacrifices notes that sometimes the context of a ritualized death provides clues as to intention. This refers to the historical practice of so-called ‘foundation’ sacrifices, the deposition of human remains during the construction of buildings or other structures. Historically, interment of children and infants, in relation to below floor contexts of structures and in relation to post holes, is regarded as the remains of ritual killings, sacrifices (e.g. Scott 1999; Green 1998:185; Green 2001:154). A sacrifice could be an effort to placate a god in response to disaster; the dedication a structure above the deposition could be an act of supplication or thanks. Burkett (1983:39) relates the importance of foundation sacrifices to their association with the symbolism of endurance and longevity. Descriptions of foundation offerings thus clearly relate to ritual killing; the deposition of an infant who died a natural death would not bring the desired results.

Floors

Floors are recognised in excavations of the data period. These are usually made of beaten earth or lime plaster products which are sometimes decorated with red pigment (e.g. Goring Morris 2008).

Limeplaster was used first in an Early Natufian structure which overlayers a cemetery (Perrot et al 1988). In the PPN lime plaster is very frequently used for floors and walls and its use is regarded as a hallmark of the PPNB in the southern Levant (Garfinkel 1988; Kingery et al 1988; Goren and Goldberg 1991). Goring-Morris (2000:126) notes that the production of limeplaster involved considerable skill and investment of labour, and it probably also had a major symbolic significance far beyond the mere utilitarian, as indicated by its elaborate use for modelling facial features on skulls and constructing large sculptures (Goren et al 1993). One of the subfloor inhumations at Kfar Hahoresh was covered by a thin layer of crushed chalk, prior to being sealed beneath the plaster floor (Goring-Morris et al 1994-5:105).

‘Floors’ are often found to be free of deposits of artifacts. They are usually described as ‘clean’ and in fact artifact remains and pits of remains are usually found below such ‘floors’ (e.g. Finlaysen et al 2011:4 at Jerf el Ahmar; Goring-Morris and Belfer-Cohen 2008:261). This supports the suggestion that an intentional separation of the remains of sacrificial ritual buried below floor contexts preceded the creation of the floors.

Superimpositions in sites seal off the accumulation of earlier depositions of human, animal and inanimate gods. Goring-Morris (2000:114), questioning the usual interpretation of ‘floors’, points out that in his data these surfaces seem to act mostly as coverings sealing graves (2000:114). He describes lime plaster surfaces as separation devices which should be viewed as simultaneously physically and symbolically segregating and integrating “the realms of the quick and the dead” (2000:126; Goren et al 1993).

Following Goring-Morris I agree that ‘floors’, traditionally interpreted as active features of ‘dwellings’, be regarded rather as devices separating the sacred from the profane. Floors generally and the elaborate costly limeplaster floors of the PPNB were, I suggest, used not to integrate realms, but to provide that separation device essential for the isolation of the sacred; they separate and isolate sanctified gods creating sacred realms.

Structures

Except in some cases, where several courses of stones have been found (e.g. Galili et al 1993:139), or two stories preserved (e.g. Kirkebide 1966) the structure built above the ‘floor’ and foundation are not preserved. Mostly a single course of stone remains.

Originally when post holes were found they were regarded as architectural features and posts were thought to support roofs e.g. Byrd (2000:66). However, posts are increasingly becoming recognised as non-architectural features (e.g. Goring-Morris and Belfer-Cohen 2010b:14; Finlaysen et al 2011). Whether roofed or not, repeated superimpositions of such structures, or of granaries in some periods, created considerable bulk which acted as a loud visual costly signal protruding into the prehistoric landscape.

Hershkovitz and Gopher (1990:17) trace the clear increase in site volume (both area and depth of sediment) from the Epipalaeolithic through the Natufian and again in the PPN (Bar-Yosef 1980; Bar-Yosef and Belfer-Cohen 1989a) and point
out the many variables involved in site formation processes. For example, they suggest that the use of sun-dried mud bricks in the PPNA and PPNB periods would result in a cumulative process leading to larger, deeper sites as opposed to the earlier Natufian sites in which the use of such materials is not recorded.

Both tels and open sites with structures represent what, I suggest, is the last phase in the vertical sequence of events of superimposed sacrificial rituals. The bulk created by superimposed structures is prominent in the landscape and represents a loud, costly signal of ritual power and signals control of the gods deposited between the layers of structures.

Sacrifice as a Fertility Ritual

The unpredictability of rainfall in areas of the Levant could, I predict, provide a deterministic explanation for the practice of rituals for fluid preservation, and rainmaking devices through specialized agents. Traditionally, the most reliable device for assuring seasonal regeneration was to placate the divine forces with the killing of a human victim and it would be most surprising not to find versions of such ‘fertility rites’ in the context of early agriculture in the Levant (Orrelle 2008b).

The sacrifice of a human in times of drought is reported for contexts of early agriculture in the Levant (Orrelle 2008b). The sacrifice of a human was thought to coincide with stages of development of maize, the fetus correlating with the human gestation cycle and the ritual calendar. Sacrifices of different aged humans were made to coincide with stages of development of maize, the fetus representing the vital phase equivalent to the quickening of the fetus in the womb. The sacrifice of a fetus would ensure rainfall, crucial at this stage to germinate the maize. Infants buried in jars, historically related to sacrifices, appear first in various places in the Levant in the Pottery Neolithic period. Drawing on the archaeological evidence, contextual mythological and modern ethnographic sources, Orrelle (2008b) relates these to sacrificial rituals connected to early agriculture.

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Political implications

The process of increasingly elaborate ritualization in Neolithic sites in the southern Levant has puzzled researchers (e.g. Belfer-Cohen and Goring-Morris 2002). Archaeologists have attempted to identify sources of social power and differentiation in prehistory through materialist regularities of wealth. Kuijt and Goring-Morris (2002:420-1) reject Hayden’s argument that food production created an economic context for the usurping and consolidating of authority and power by select individuals, claiming that the data does not show accumulation of food resources, social differentiation in “housing” or burial, interpersonal conflict or centralized cultic and ritual practices. They do however accept (2002:421) that there were “numerous coexisting hierarchical power structures” and that “social differentiation in the Neolithic was derived from the authority of ritual practitioners and civic leaders” (2002:421).

Competing for Ritual Power

I suggest that social differentiation in these millennia can be discerned in the competitive activities of different elite groups competing to produce increasingly elaborate rituals to display handicaps, signal difference and prestige. Such elite groups were thought to exist in the following Chalcolithic period.

If, as I predict, the costly signaling of these groups in the Neolithic represents competition ostensibly for symbolic not material capital, then a better fit with the data can be made. A competitive signaling strategy can provide, I believe, explanation for ‘difference’ such as the variable sizes of structures and differential site size. Sacrificial competition may not leave evidence of extensive interpersonal conflict, but rather the load costly signals of victim gods buried in superimposed structures.

The quantity and quality of ritual performances can be regarded as the spiritual capital that supports the authority of these cultic centres. Ritual activity would intensify as each centre
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... attempts to outdo the next in costly performance. I predict that in the process of establishing organized religion, different entities signalled differences between each other in inventing increasingly powerful gods, increasingly elaborate ritual to communicate with them and an increasingly impressive space in which to carry out these activities.

I suggest that an example of such competitive ritual display might be seen in the plethora of bedrock mortars and cupholes revealed at Raqefet Cave (Nadel et al. 2008; Nadel et al. 2009; Nadel and Lengyel, 2009). Nadel and Lengyel describe 77 bedrock holes hewn into the floor and terrace of the Raqefet Cave. They suggest (2009:46) that the best explanation for these is that they represent a form of costly signalling:

“We tentatively suggest that the ‘hard to produce’ deep narrow human-made bedrock holes could have been a means of gaining social benefit.” (2009:46)

I concur that the variety and complexity of these features seem to display an element of costly investment. Nadel and Lengyel do not suggest, however, who might have gained social benefit from such activities, nor do they indicate what such penetrations might be. I suggest that this kind of activity belongs to the sphere of sacrificial ritual. Artificial penetrations of the earth’s crust are one means of communicating with underworld chthonic gods.

This seems to be a ‘specialization’ of this ritual center which produced more and more elaborate evidence of ritual communication with the gods. These might be “economically useless”, in the words of Nadel and Lengyel (2009:46), but when considered as a form of competitive costly signaling, the production of these complex features for sacrificial ritual, the benefit would be the acquisition of symbolic capital. The function of these archaeological features would then be explainable as ‘libation’ holes – places into which liquid or other non human or animal sacrifices might be deposited – the narrow ones for small quantities of precious fluids like oil, milk or perfume and the larger ones for small animals and flint artifacts.

Competitive pressure to acquire animals and other resources for sacrificial performances would drive the intensification of food collection and the domestication of plants and animals. This suggestion is not new. It is the so called ‘religious hypothesis’ raised by geographer Erich Isaac (Isaac 1962; and see Davis 1987:152; Burkert 1987; Hayden 1992). Hayden suggests that competition took the form of what Appadurai (1986:21,50) describes as “tournaments of value” recognised from the earliest Natufian sites.

“'Tournaments of value' are complex periodic events, expressive ritualized forms of rivalry. Such tournaments involve status, rank, fame, or reputation of actors and most importantly, the disposition of the central tokens of value in the society in question.” (Appadurai 1986:21)

While modern ethnographic descriptions of such tournaments relate to economic resources and commodities, Harrison (1992:225) extends the meaning of ‘value’ to what he calls intellectual property, to forms of prestige and ownership of particular kinds of ritual and symbols, suggesting ways in which communities of political interest groups define themselves by exclusive rituals and distinctive symbolism (1992:226).

Ritualized animal killing

The archaeological sites all through my data period contain rich assemblages of remains of both large and small animals which had been brought into the site. These have generally been assumed to be the remains of domestic consumption or of feasts (Goring-Morris and Kolska Horwitz 2007). I suggest that they might be regarded too as the costly signals of commitment of individuals bringing victims to be sacrificed at a particular ritual center. Burkert (1987:167 note 14) suggested live animals were brought to be slaughtered in local ‘sanctuaries’ and saw this as a crucial step in the creation of animal sacrifice proper. Indirect archaeological evidence that hunting became ‘domesticated’ or ritualized may be seen in the increasingly elaborate arrowheads found on sites. Orrelle (2008a) speculates that these may have been more effective in a ritual context at close range than in the hunting of animals in their natural environment.

In hunter gatherer society status and privilege is linked to the distribution of the kill. Knight (1987) notes that:

“Possession of a kill in a hunting society confers not the right to its consumption, but the privilege of performing its distribution.” (1987:46)

While dead animals were once the source of status for hunters, the donation of live animals and humans in sacrificial rituals would be a source of status for the new elite. I predict that through the mechanism of the prestige, and accompanying debts and obligations of a community of donors, symbolic capital would convert to other forms of social and material differentiation.

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In my view, the differentiation that can be identified in these millennia in the Southern Levant lies in a network of competing clusters of secular and religious specialists displaying increasingly elaborate communication with a supernatural being authenticating the changed socio-economic rules.
This scenario has not been considered, I suspect, because the wrong unobservable principles are applied to the highly observable record. If one starts from the assumption that ritual potency is the subject of competitive accumulation, measured in sacrificed remains, in prestige and in inalienable objects, then differentiation can be discerned in graded handicap signals of differential success in this competition. Kuitj and Finlayson (2009) find no clear material evidence for extensive food storage – but the archaeological landscape reveals layer after layer of stored symbolic capital, ritualized, consumed, materialized, fragmented and dispersed. To use an archaeological term, the fossil directeur (or identifying characteristic) of differentiation, is the accumulated symbolic capital visible in the multi strata site or tel.

Through various rituals, sacred material resources were accumulated. Animals and foodstuffs would be brought to sites for donations, and to legitimize their consumption. By locating cult sites in favourable resource areas and providing the mechanisms and ritual authority for circumventing the ‘own kill’ rule, conditions were in place for the accumulation of material wealth.

9.4. Lineage

I have suggested earlier that in the period of my data from the Natufian through to the PN, a process of male appropriation of female ritual can be identified. The evidence from the early Natufian for female shamans suggests that females were still involved in ritual affairs; by the PN, the ritualized evidence suggests that a more hierarchically organized male religion can be inferred.

My speculation that this process of the new religion is driven by the ambitions of a male elite lineage is supported by a number of features of the record.

I have shown in chapter seven that the images of gods became increasingly phallic in shape in the course of the data period. This is I believe, a strong indication that males were promoting male gods.

Evidence for this may lie too in mortuary ritual; a study of changing burial modes may reveal a process that in the earlier part of the data period, both male and female chthonic and celestial gods and goddess were worshipped; in the later part of the period the focus of ritual appears to show an increasing preference for male celestial solar and axe gods.

Two pieces of evidence reveal that different aged males may have been selected for ritualized burial in certain periods. For example human burials at Kfar HaHoresh (totalling c.70 individuals) have a high representation of young adult males (Goring-Morris et al 2008). In another example, the DNA remains of infants in jar burials analyzed to date (Orrelle 2008b) from Pottery Neolithic contexts in the Levant has shown them to be males (Smith et al 1999; Kahila Bar-Gal and Smith 2001).

The presence of cranial deformation may too, I believe, be read as a sign that a particular group was signalling its exclusivity. Bliege, Bird and Smith (2005:232) interpret this as belonging to “embodied handicaps” – irrational forms of bodily modification – signalling visible distinctions between people or membership of a group. Such costly signals maintain symbolic value because they are indexically related to that which they signify: they are simply impossible to fake. In addition, hints of the presence of an inbred elite lineage, described by Molleson and Campbell for Arpachiyah in Iraq (1995), link skull deformation and a congenital dental condition with an inbred elite lineage. Since both skull deformation and the same congenital condition were found in different periods in the skeletal population in the Southern Levant I speculate that such an elite was also present in my research period and area and that the record suggests that it was driven by male interests.

Hierarchy in sacrifice

Accounts of Vedic sacrificial ritual contribute to understanding how hierarchy was promoted in the new religion. In Vedic ritual, a hierarchy in degrees of sanctity surrounds those in direct contact with the deity and with the consecrated victim at the top (Talbott 1995). Intimacy with a supernatural being could only be permitted to those whose lives were forfeit. The priest, donor and other functionaries were arranged in descending order, physically and ideologically around the victim (1995:48-9). By this system, I suggest, a religious and secular elite could acquire a certain sanctity and power from controlling the victim gods while retaining their own lives.

Archaeological recognition

A bias towards adaptive explanations in many studies suggests that this was the motivating force in social structure. While it is no doubt an important factor for explanation, other elements such as beliefs and the supernatural are no less important though relegated to a peripheral position.

I contend that huge resources of “fact-rich” data are available to support alternative models to the solely adaptive kind from the Natufian period onwards. The “marvellous facts” that De Heusch refers to are buried under the a priori assumption about the record. The assumption which has become dogma is that from the very first research of this material all sites represent sedentary living in dwelling sites. I attempt to provide “fact-rich” evidence for the marvellous – the gods – in the record,
and hint at the unlimited potential of ritual for other studies. These can bear fruit if the present bias towards materialist explanation is relaxed.

9.5 Continuity of symbols – changing meanings

I return to the statement of Goring-Morris et al. 2009 that ‘ideological adjustments’ were necessitated by the change in the socio-economic structure.

Cauvin regarded the essence of this new religion as the “birth of the gods” requiring a ‘revolution in symbols’ (2000a).

I suggest that both ethnographic and theological sources can demonstrate how symbols operate to negotiate such ‘ideological adjustments’. What occurred in my data was not I suggest a ‘revolution of symbols’ but a conflation of old and new meanings in the same symbolic syntax and using the same symbols.

Barley (1983) shows how symbols operate in changing contexts in a living community of the Dowayos; symbols collapse together, nest or merge and different rituals may nest in the same symbolic form, but rarely disappear. Griaule (1966) has demonstrated this for the Dogon people, and Thomas and Tilley (1993) apply this in an archaeological assemblage stressing the structural linkage between different assemblages.

I predict that in the area of this study, the Southern Levant, the potent symbols of the old regime are re-used in a different form to authenticate the new, and that the underlying attribute being signalled is ritual potency. I suggest that what was once the communal counter-dominance act of females is appropriated to promote a male elite: the notion is preserved in the new religion in form, but not in spirit. The symbol active in this transformation is blood.

Once the female flow of blood signalled withdrawal to a supernatural world; in the new religion, the flow of blood signals movement to the other world in a ritual killing which to be effective must be violent and bloody (Green 1998a:172; 2001:81-91; Jones and Pennick 1995, 9-21). The symbolic ritual of withdrawal to another world, performed at great cost by coalitions of females was, I propose, taken over by this narrow coalition of hunters, priests and their gods; the show of blood, the symbol of ritual potency and original template for movement to the other world conflated with the ritual structures of the new religion. In some cases, understanding the process of conflation can make sense of apparent continuity or conservatism in symbolic behaviour (e.g. Goring-Morris and Belfer Cohen 2002:69).

De Heusch’s analysis of the origins of the divine power of African kings (1982: chapter eight) traces the conflation of bleeding vagina to bleeding head. This process took place in a context of social transformation. Since this book too deals with a process of social transformation, and both these symbols are present in my data, this ethnographic data could be highly relevant.

The strategies of authenticating change through conflating old and new symbolic motifs on material devices appear for some as the prolongation of old worlds (e.g. Whittle 1996:360); for others it is an expression of cohesion (Belfer-Cohen and Goring-Morris 2002:145). Whatever it is called, the data reveals that over thousands of years, one set of symbols attached to a food-collecting lifestyle mixed with and authenticated those of a different religion which would be attached to food production. The tracking of symbols can identify change and reveal underlying structure in all assemblages in my data.

It can be expected that by the Neolithic, conflations of potent symbols and elaborated evasion and substitution will have created a complexity of meanings, collapsed together with symbols nesting and overlapping in a changed ideology. According to my model, fragments of sacrificed things have become, by virtue of their sanctity, material fragments of ritual power. The principle of pars pro toto envisages the potency of the whole contained in the ritualized fragment. Fragments may bear the potent symbol of the early syntax while at the same time provide a material memory of the ritual of their violent origins. Now juxtaposed on one fragment are the symbols of the old and the new.

Goring-Morris and Belfer-Cohen (2002) suggest:

“… there is also contextual evidence to indicate that seemingly everyday architectural elements, utilitarian items, manuports, and even faunal remains, and their setting were imbued with symbolic significance.”

(2002:67)

Shapes and signs emanating from ancient origins of symbolic behaviour are now recast and integrated. The FCC hypothesis provides the source for the symbols of the ‘original social contract’ and historical and theological records demonstrate how there were used in the new.

The old symbols can be identified as underlying structure in the new sites. The same sexual metaphor that I have suggested imbues the imagery assemblage can potentially be identified everywhere. Avner and Avner (1999) for example have recognised it in the rock art and stone monuments of the Southern Levant.

Plans of complete structures are rare in earlier prehistory, but circular Natufian architecture and later apsidal style structures
suggest that genital imagery was incorporated into structural design of monumental architecture. A critical examination of shapes in the flint assemblage will reveal the presence of these basic shapes. Elaborate flint arrowheads, for example, are replete with symbols of sexual metaphor. The skeletons, the immortalized sacrificial victims, are constrained by the same limited repertoire of counter-intuitive body positions as the figurines. While these are sometimes difficult to identify in the complex jumbled-up record of archaeological skeletal remains, symbols of early gods such as posture can sometimes be recognised as, for example, the open-legged stance of female skeletons.

The new social contract paves the way for patriarchal rule. The new redistribution of the kill means that older traditional kin loyalties are replaced by loyalties to affines, a change that would result in changed residence and production patterns. The ‘small death’ and transformation in rites of passage and blood signals have reappeared in new forms incorporated into a new ideology of rebounding energy (Bloch 1992). The blood signal has conflated with the costly violent counter-intuitive act by which human victims are dispatched to another world.

Quigley (2005) asks:

“If human sacrifice is indeed the original sacrament: if it is the source of kingship and all the institutions which spring from it; and if it is, as its etymology suggests, responsible for generating the sacred and consequently, not only kings but the gods themselves, from where does it derive such power?” (2005:51-2)

I have suggested that the origins of supernatural potency can be identified in the FCC model; the origins of sacrificial power can be found in the appropriation of this potency and its transformation into hierarchical religion.

9.6 Conclusion

In conclusion I summarize the contribution of this work to various aspects of prehistoric research.

This study places the focus of explanation on symbolic assemblages and the ideology they express. It makes a contribution to the decipherment of iconography, to the origins of organized religion and suggests an overview of the kind of transformations that were taking place in the Neolithic Levant.

This work confirms that the match between the predictions of a Darwinian symbolic origins theory and an assemblage of Neolithic images is the most parsimonious theory for deciphering these artifacts. The match confirms that the origin of the complex iconography of supernatural anthropomorphic imagery lies in ancient sexual selection strategies.

Using sources from evolutionary religious anthropology and later historical records it identifies characteristic features of early gods in the anthropomorphic imagery, thus giving a face to these intangibles – the gods. The decipherment of iconography in the data identifies a ‘grammar’ of counter-reality and liminality rooted in gender ritual. The iconography of intangibles provides a metalanguage of the supernatural, a blueprint for recognizing the supernatural cross-culturally in prehistoric assemblages.

It addresses the problem of interpreting the phenomenon of the sexless or mixed sex images identified in the iconography of Neolithic figurines and provides an explanation for this phenomenon, as these are traced to an original gender of power, a fused male -female gender celebrated in non-heterosexual performance.

Superimposition, changed/dual orientation, manipulation of raw materials, hybrid mixtures of old and new, changing media, monumental and minute body art are just a few of the techniques by which the notion of a ‘gender of power’ is incorporated into divine imagery.

Pantheon

This book provides an initial description of some gods in the Neolithic pantheon and some of the beliefs held by communities serving those gods.

It offers a contribution to the description of a Neolithic pantheon of gods in these pre-literate millennia of the Near East. Like other pantheons of gods the data reveals images incorporating the characteristic signature of the supernatural on anthropomorphic, zoomorphic and inanimate artifacts. Expressions of all three WRONG signals predicted by the FCC hypothesis are found to be present singly or severally on the majority of images in the data drawn mainly from the Southern Levant and surrounding areas.

The pantheon appears to include gods, goddesses, androgynous gods, therianthropic gods, red coloured gods, single, double or triple phallic gods, twin headed gods, snail gods, axe gods, solar gods, ram-headed phallic gods, and bird-god/goddesses before the invention of writing.

Gods may be identified initially as both chthonic and celestial; at the end of the period celestial gods may dominate.

A trend towards the dominance of male deities foreshadows the monotheistic male gods of the three major religions of history. The origins of male monotheism can be located in the iconographic changes that take place from the Natufian to the PN.
The model provides an explanation for the ubiquitous appearance of red colour which persists throughout the data.

The palaeoanthropological background to my data period describes elements of an archaeological signature of ‘sapiens’ behaviour. Starting in Africa, extending back to before ~200,000 BP and later in the Near East, a sparse but clear trail of evidence of modern symbolic human behaviour refers to female menstrual rituals. I relate this body of symbolic artifacts to an original social contract. The pre-Natufian evidence includes, too, rituals surrounding the deposition of bodies, movement between worlds and the curation of skulls, suggesting that the elements of the new social contract were already present in the pre-Natufian period as the ‘original social contract’ had begun to break down. This long paleo-archaeological time-frame provides the context for thinking that there may be significant cross-cultural universals.

The changing control of ritual potency is expressed in the Neolithic human imagery by subtle changes in this geometric shorthand/code, as combined male-female symbols expressing the androgynous ‘gender of power’ are marginalized and gradually give way to overtly male, phallic shapes which dominate the god images.

This increasing prominence of male gods in the Near East suggests the formation of a new social contract. This process is expressed in the establishment of aggregation sites from early to late EpiPalaeolithic (Natufian) with monumental structures signalling a loud physical display of increasing potency of the new order.

The study proposes that sacrificial ritual can be identified in the data. Cross-cultural studies of sacrificial ritual provide archaeologists with tools to identify burials of sacrificial victims.

The archaic ritual system surrounding female physiological substances gives way to a male response ritualizing male substances. The presence of belief systems known from historical periods is revealed in the analysis of the iconography of gods. The gods display features that suggest a concern with bodily fluids. Concerns with male life-substance, the muelos belief, are evident in the focus on body parts rich in semen such as skulls, phalli and thighs; the assimilation of genitalia and eyes hint at the presence of the Evil Eye belief, and twins and their associated beliefs appear in the iconography.

This speculative overview of the Neolithic suggests a model which draws on mortuary evidence, architecture and other assemblages to identify costly signals of human behaviour. Social differentiation can be traced through economic avoidance, sacrificial ritual, to control of ritual in shamanism and sacrificial rites. The motivation to acquire female potency drives competition for accumulation of symbolic capital.

The symbolic capital acquired through sacrificial ritual is the index of differentiation as revealed by costly signalling behaviour, the prominent political strategy of ambitious male elite agents for change.

I suggest that elements of this competition for symbolic capital can be identified in the archaeological record of this period. Behavioural signals of extravagant consumption are present in material form, such as monumental architecture and elaborate mortuary ritual.

The presence of male elites is suggested through the indirect evidence of male elite behaviour such as the iconography of phallic shaped gods, body mutilations and evidence for inbred anatomical conditions.

A difficulty in identifying the actions of this patriarchal counter revolution is that males used the same syntax for the mobilization of ritual power as females.

The changing ideologies and contracts build on the well known accepted symbols of the old. The male elites express their potency in the language of the female potency which they had taken over. This is achieved in a gradual process of conflation as old symbols might appear counterposed with the new before the new appear alone. This can be seen in the iconography of gods, as symbols of the old contract conflate with the new to accommodate new meanings. Transformations in society from an ‘original social contract’ to a ‘new social contract’ are identifiable in this conflation of symbols.

Overlaps between old and new can be discerned in hybrid combinations counterposed on the same artifact. In the black box of the Neolithic changing economy, symbols are retained, replaced, blended, mixed and change meanings. The strategy of conflating symbols can address the problem that has long puzzled archaeologists about the persistence of the same symbols in a period of clearly changing social contexts.

An important contribution of this work is to demonstrate the theoretical support that archaeologists can draw from the resources of anthropology and history in approaching artifacts of a symbolic nature. Evolutionary theories provide theoretical confidence in the survival of symbols and their meanings allowing archaeologists to draw on the wealth of cultural resources of anthropology, history and myth.

The understanding of the longevity of symbols and the faithful transmission of symbols provides the depth of contextual background justifying their use for analogical purposes.

It aims to demonstrate that the deep-seated taboos of archeologists to ‘transferring meaning’ between time and place are ill-founded. Theoretical tools from evolutionary anthropology provide strong support for the wide use of
analogy from widely differing times and places in prehistoric explanation for visual imagery.

***

Much of archaeological scholarship is concerned with searching for 'god in the details'. This study is an attempt to take the 'marvellous' seriously and to find god in the behavioural traits of human social groups, their mating strategies, their competitive behaviour and the signals they relay.
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PART II
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Material Images of Humans from the Natufian to Pottery Neolithic Periods in the Levant
### Provenance Data

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*Part II: Illustrations figures 1-125, figure references*
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<td>Shell type: Cowrie: modified</td>
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33  | Wadi Faynan 16, Jordan | Sandstone | 293 x 95 mm   | PPNA  |
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<td>Clay</td>
<td>50 x 15 x 17 mm</td>
<td>PPNB</td>
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### Table: Material Images of Humans from the Natufian to Pottery Neolithic Periods in the Levant

<table>
<thead>
<tr>
<th>No.</th>
<th>Provenance</th>
<th>Material</th>
<th>Measurements</th>
<th>Period</th>
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<tbody>
<tr>
<td>40:1</td>
<td>Sarab, Iran</td>
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<td>65 x 35 mm</td>
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<td>40:2</td>
<td>Aşık, Turkey</td>
<td>Stone</td>
<td>45 x 28</td>
<td>PPNA</td>
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<tr>
<td>41</td>
<td>Nevali Çori, Turkey</td>
<td>Limestone</td>
<td>135 mm</td>
<td>PPNB</td>
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<tr>
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<td>42</td>
<td>Ramad, Syria</td>
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<td>250 m</td>
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<tr>
<td>43</td>
<td>Khirokotia, Cyprus</td>
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<td>Period</td>
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<tr>
<td>44</td>
<td>El-Hammeh, Jordan</td>
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<td>110 x 40 mm</td>
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### Table: Provenance, Material, Measurements, and Period

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<th>Period</th>
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<td>Gōbekli Tepe, Turkey</td>
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<td>Urfa, Turkey</td>
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<td>Sheikh Hassan, Turkey</td>
<td>Alabaster</td>
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<tr>
<td>46</td>
<td>Nevali Çori, Turkey</td>
<td>Stone Pillar</td>
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<td>47:1</td>
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<td>Cayonu, Turkey</td>
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<td>48:2</td>
<td>Munhata, Israel</td>
<td>Limestone</td>
<td>20 x 9 mm</td>
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<tr>
<td>48:3</td>
<td>Beidha Jordan</td>
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<td>48:4</td>
<td>Wadi Faynan, Jordan</td>
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<tr>
<td>49:1</td>
<td>Munhata, Israel</td>
<td>Clay</td>
<td>31 x 20 x 16 mm</td>
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<td>49:2</td>
<td>Cayonu, Turkey</td>
<td>Stone</td>
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<tr>
<td>49:3</td>
<td>Cayonu, Turkey</td>
<td>Clay</td>
<td>30 x 20 x mm</td>
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</tr>
<tr>
<td>49:4</td>
<td>Cayonu, Turkey</td>
<td>Clay</td>
<td>45 x 15 mm</td>
<td>PPNB</td>
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<td>Measurements</td>
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<tr>
<td>50</td>
<td>Basta, Jordan</td>
<td>Limestone</td>
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Part II: Illustrations figures 1-125: figure references

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<td>51:1</td>
<td>Munhata, Israel</td>
<td>Clay</td>
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<td>Munhata, Israel</td>
<td>Clay</td>
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<td>51:3</td>
<td>Ain Ghazal Jordan</td>
<td>Clay</td>
<td>43 x 19 mm</td>
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<tr>
<td>51:4</td>
<td>Munhata, Israel</td>
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<td>37 x 21 x 12 mm</td>
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<tr>
<td>52:1</td>
<td>Munhata, Israel</td>
<td>Clay</td>
<td>15 x 13 x 13 mm</td>
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<tr>
<td>52:2</td>
<td>Munhata, Israel</td>
<td>Limestone</td>
<td>52 x 46 mm</td>
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<tr>
<td>52:3</td>
<td>Nahal Hemar, Israel</td>
<td>Limestone</td>
<td>140 x 45 mm</td>
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</table>
No. | Provenance            | Material | Measurements  | Period
---|----------------------|----------|---------------|--------
53  | Ain Ghazal, Jordan   | Plaster  | 810x190x75 mm | PPNB   

Part II: Illustrations figures 1-125; figure references
<table>
<thead>
<tr>
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<th>Material</th>
<th>Measurements</th>
<th>Period</th>
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<tbody>
<tr>
<td>54</td>
<td>Ain Ghazal, Jordan</td>
<td>Plaster</td>
<td>576x212x70 mm</td>
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</tbody>
</table>

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### No. | Provenance        | Material | Measurements    | Period
---|-------------------|----------|-----------------|------
55  | Ain Ghazal, Jordan | Plaster  | 840x292x75 mm   | PPNB
<table>
<thead>
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<th>Material</th>
<th>Measurements</th>
<th>Period</th>
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<tbody>
<tr>
<td>56</td>
<td>Ain Ghazal, Jordan</td>
<td>Plaster</td>
<td>324x124x113mm</td>
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Part II: Illustrations figures 1-125; figure references

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<th>Measurements</th>
<th>Period</th>
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<tbody>
<tr>
<td>57:1</td>
<td>Ain Ghazal, Jordan</td>
<td>Plaster</td>
<td>458x291x118mm</td>
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<td>57:2</td>
<td>Ain Ghazal, Jordan</td>
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<td>880x486x176mm</td>
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<td>Measurements</td>
<td>Period</td>
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<tr>
<td>58:1</td>
<td>Ain Ghazal, Jordan</td>
<td>Plaster</td>
<td>150 mm</td>
<td>PPNB</td>
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<tr>
<td>58:2</td>
<td>Jericho, Pal. Authority</td>
<td>Plaster</td>
<td>225 x 150 mm</td>
<td>PPNB</td>
</tr>
<tr>
<td>58:3</td>
<td>Ain Ghazal, Jordan</td>
<td>Plaster</td>
<td>150 x 70 mm</td>
<td>PPNB</td>
</tr>
<tr>
<td>58:4</td>
<td>Ain Ghazal</td>
<td>Plaster</td>
<td>Detail of Fig. 57:1</td>
<td>PPNB</td>
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<tr>
<td>59</td>
<td>Jericho, Pal. Authority</td>
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<td>67 x 67 x 43 mm</td>
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<td>Measurements</td>
<td>Period</td>
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<tr>
<td>60:1</td>
<td>Site 109, Israel</td>
<td>Limestone</td>
<td>48 x 61</td>
<td>PPNB</td>
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<td>Atlit Yam, Israel</td>
<td>Stone</td>
<td>35 x 27 mm</td>
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<td>60:3</td>
<td>Munhata, Israel</td>
<td>Limestone</td>
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<td>Kfar Hahoresh, Israel</td>
<td>Stone</td>
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## Part II: Illustrations figures 1-125; figure references

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<td>Site 109, Israel</td>
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<tr>
<td>62</td>
<td>Göbekli Tepe, Turkey</td>
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<tr>
<td>63</td>
<td>Göbekli Tepe, Turkey</td>
<td>Stone</td>
<td>3 meters x 150 cm</td>
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<tr>
<td>64:1</td>
<td>Nahal Hemar Cave</td>
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<td>40 x 22.4 x 8 mm</td>
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<tr>
<td>64:2</td>
<td>Nahal Hemar Cave</td>
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<td>30 x 17 x 8 mm</td>
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## Part II: Illustrations figures 1-125; figure references

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<th>Measurements</th>
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<td>Ain Ghazal, Jordan</td>
<td>Plaster</td>
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<td>Ain Ghazal, Jordan</td>
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<td>PPNB</td>
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<tr>
<td>65:3</td>
<td>Beisamoun, Israel</td>
<td>Plast’d Skull</td>
<td>189 x 152 mm</td>
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<td>Jericho Pal. Authority</td>
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<td>66:2</td>
<td>Kfar Hahoresh</td>
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<td>67</td>
<td>Nahal Hemar Cave, Israel</td>
<td>Human skull</td>
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<td>Mach Domah, Israel</td>
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No. Provenance Material Measurements Period

69:1 Munhata, Israel Greenstone 20 x 7 mm PPNB
69:2 Ain Ghazal, Jordan Limestone 55 x 16 mm PPNB
No. Provenance Material Measurements Period

70:1 Khirokitia, Cyprus Andesite 200 x 140 mm PPNB
70:2 Atlit Yam underwater, Israel Stone 50 x 25 mm PPN
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<td>72:1</td>
<td>Tell Te’o, Israel</td>
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<td>50 x 40 mm</td>
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<td>Limestone</td>
<td>30 x 25 mm</td>
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<tr>
<td>72:3</td>
<td>Givat Haparsa, Israel</td>
<td>Sandstone</td>
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<td>Shaar Hagolan, Israel</td>
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<td>74:3</td>
<td>Shaar Hagolan, Israel</td>
<td>Clay</td>
<td>~400 – 450 mm</td>
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### Table of Illustrations

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81:2  Shaar Hagolan, Israel Clay          |            | PN
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83  | Munhata, Israel    | Clay     | 84 x 48 mm   | PN     |
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89:2  Shaar Hagolan, Israel  Clay     28 x 13 x 15 mm  PN
89:3  Shaar Hagolan, Israel  Clay     38 x 16 x 16 mm  PN
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*Material Images of Humans from the Natufian to Pottery Neolithic Periods in the Levant*
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