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Sedentism and the Village: Social Motivations for the Beginning of Farming

For a long time the main focus of research regarding the beginning of farming has been on economic change, the processes of domestication and the practical matters surrounding farming. A problem always faced in these models was to explain why farming was adopted, once it was accepted that a unilinear evolutionary idea of progress was not an explanation, and that the benefits of early farming were not obvious as they required greater work effort and new social structures. The importance of social change has gradually been understood to be important, at least equal to the significance of the economic changes. The work of authors such as Cauvin has emphasised the social aspects of the so-called Neolithic Revolution (eg Cauvin 1997 and 2000). The number of references to Cauvin's work in this paper reflects the importance of his thoughts on this subject. However, in a sense he, and others, have focussed on a secondary phenomenon: the growth of ritual. Furthermore, it does not appear that this school of thought has been any more successful in explaining the origin of the changes simply by asserting the primacy of social and idealogical factors. I argue that the rise of ritual, in the same way as both agriculture and sedentism, is the product of human choice. Recent attempts to view the change from a cognitive perspective, such as those by Watkins (2002), while they seek to address the underlying causes and to explain why these happen at the end of the Pleistocene and the start of the Holocene, suffer by assuming that Cauvin's models can be taken as a given. In addition, there is an assumption common in archaeological literature, that there is a huge gulf between hunter-gatherer and farmer. This has a long history, through the work of Childe (1942) who introduced the concept of a Neolithic Revolution, Hodder's *Domestication of Europe* (1990), and in arguments by Renfrew (2003) and Watkins (2002) that not much happened before the Neolithic. At times there even appears to be a risk of dismissing the humanity of hunter-gatherers. This is of course not a new viewpoint, and the 19th century rationale put forward by Engels is discussed by Ingold (1996), and has remained within archaeological thought since (cf Braidwood 1957).

It is now widely agreed that the transformation from hunter-gatherer to farming societies involved a significant social change, and was not solely economic in nature. Some recent papers have almost ignored the economic aspect of the change using the term Neolithic to refer almost entirely to a cultural change involving the way people lived together. This viewpoint generally interprets the economic changes as secondary events forced upon people in order to sustain the societies and populations being created by the cultural changes occurring and the approach has many strengths. Interestingly, one aspect is that the changes that occur appear to have a long gestation, starting at least in the Natufian and continuing well into the Neolithic.

This paper will not attempt a broad sweep through such a long time period, rather it will focus on what appears to be the critical moment, the Pre-Pottery Neolithic A, or PPNA (ca. 11,700 – 10,500 calibrated 14C years BP, Kuijt and Goring-Morris 2002). Final Natufian (ca. 12,500 to ca. 12,000 calibrated 14C years BP) communities in the Jordan Valley ranged in size from small ephemeral hunting and gathering locations to somewhat more sedentary camps relying upon the intensive harvesting of wild cereals. With the end of the Younger Dryas period of aridity this economy began to change, and climate change must be seen as an important factor in constraining the economic options. PPNA communities ranged in size from small, clearly tempo-

rary camps (up to 150m^2), to medium-sized hamlets (ca. 2,000-3,000 m^2), to large (more than 2 hectare) villages. The presence of well built structures in the medium and larger-sized communities and rare large non-domestic buildings, like the tower of Jericho, suggests that a degree of sedentism may have been practiced, although this remains questionable (cf. Edwards and Higham 2001). The PPNA economy was based on a combination of hunting of wild animals and harvesting a mixture of possibly domesticated cereals, wild seeds and fruits. There is general agreement that by the end of the PPNA, settled communities were present across much of the Near East and sufficient unity in their social and economic systems justifies their designation as the Pre-Pottery Neolithic B (PPNB), although what this means in human terms is less clear. Whether the changes that led to cultivation arose at one center as proposed by Zohary (1996), or in a broadly contemporaneous manner throughout the region and within differing ecological zones, remains an issue for research. The second hypothesis is given greater weight by the variability apparent between PPNB sites.

Although generally accepted, the transition remains remarkable and dramatic. In southern Jordan, Wādī Faynān, there is a striking juxtaposition between the PPNA site of Wadi Faynan 16 and the PPNB site of Ghuwayr 1. The two sites are only a few hundred metres apart, and have radiocarbon dates that actually overlap slightly, which puts this transformation into stark relief (Simmons and Najjar 1998, 2003; Mithen *et al.* 2000). Mohammad Najjar and Alan Simmons, the excavators of Ghuwayr 1, are able to discuss the density of the architecture, the possible presence of two story buildings, the scale of the site, how big, how deep, how well built. From the perspective of PPNA Wadi Faynan 16, with its relatively slight and apparently malleable architectural forms, Ghuwayr appears as a different world. But if the transformation has happened by the Middle PPNB, it makes the PPNA all the more interesting. The ephemeral and apparently difficult to understand structures on Wadi Faynan 16 represent precisely that moment in time between hunter-gatherer and farmer. How much of the new PPNB has arrived ready-made from the Early PPNB in northern Syria, and how much is a local adaptation and development is hard to establish, but this is as a consistent problem of middle PPNB settlement (Cauvin 1997).

Of course Ghuwayr 1 should not be considered in terms of a modern fellahin village although sometimes it appears that many archaeologists do have the picture of *fallāḥīn* working in their fields when they discuss Neolithic farmers, the "confirmed peasants" of Cauvin (2000: 63). The changes that we can observe occurring within the PPNB continue to be very important. The PPNA is however a crucial period in our understanding of the huge changes that happened at the start of the Neolithic, especially within Jordan. Although we may be able to trace some of these changes back in time through the Natufian and Epi-Paleolithic, even into the Upper Palaeolithic, there is an enormous transformation that happens in the PPNA, or at the end of the PPNA. The differences between Ghuwayr 1 and Wadi Faynan 16 illustrate this very well. The point is made even more forcefully when a wider site distribution is taken into account, where the PPNB appears to explode, manifesting itself in the development of the truly large sites such as 'Ayn Ghazāl (eg Rollefson and Kafafi 1997), and in the increasing wide region occupied by PPNB settlements, as seen in the colonisation of Anatolia and Cyprus (McCartney and Peltenberg 2000). Within the Levant, figures compiled by Kuijt (2000) regarding the extent and the depth of deposits of PPNA, MPPNB and LPPNB show that the increase is exponential.

The PPNA suffers from a number of classificatory problems, including whether it should be treated as Epi-Paleolithic or Neolithic, and whether it can be divided into an early and a late, a Khiamian and a Sultanian. Indeed some have gone further and refer to the first phase of the PPNA as Epi-Palaeolithic, and the later as Neolithic (Cauvin 2000). Arguably this last problem is still caused by the small sample of sites examined, and problems with residuality from the Natufian in PPNA sites (Pirie 2001; Garfinkel 1996; Kuijt 1996, 1997; Gopher and Barkai 1997; Nadel 1990 and 1998; Ronen and Lechevalier 1999). As to whether we should consider the PPNA as Neolithic, this varies with different definitions of what the Neolithic is. The original definition of Neolithic was stretched to include a pre-pottery phase, but some recent works have begun to use Neolithic to refer specifically to a social change, and to ignore the economic basis for the Neolithic. For these scholars the PPNB (or late PPNA - Sultanian) villages are the evidence for this social change having occurred, so Neolithic in

a sense is used to refer to the village culture (Watkins 1990), although Cauvin, in the final revision of his book *Naissance des Divinites* (the English translation), despite his concern with social and ideological matters, still considered the economic change to be his "ultimate criterion" for the Neolithic (Cauvin 2000: 214).

It appears increasingly that the fundamental driving force for the direction of change must have been social. Of course, environmental changes almost certainly provided an impetus for change, with increased aridity making Early Natufian ways of living less and less viable, but they did not provide a direction to the change that led to the Late Natufian, nor to the subsequent development of the PPNA at the end of the arid phase. The impetus that led to villages came from social changes, and although clearly people did not set out to develop the PPNB as a deliberate plan of action, decisions must have been made regarding trying to live together in larger groups and to stay in one place as long as possible. The social and economic problems caused by this course of action are not slight, and much of the complexity of the PPNB arises out of the consequence of the route taken.

However, there are problems with changing the definition of what it may be to be Neolithic. Such terms are in essence labels that we apply for convenience and for shorthand. Trying to define them closely, or to re-define them, may from time to time be an interesting exercise, in that it exposes difficulties and problems, but our objective is not about terminology. Cauvin maintained a strict distinction between the process (neolithisation) and the state (Neolithic) (Cauvin 2000: 216). Emphasizing this distinction appears not to be productive. Rather we need to be looking at the process of change, and by establishing rigid barriers between phases, cultures and economies, we make it all the more difficult to understand the changes that took place, or we turn them into fundamental ontological shifts. This is what has happened with the Neolithic, with arguments about people's worldview changing dramatically, especially the perception of the wild and the domestic, the concept of *domus* (Hodder 1990), the idea of the home (Watkins 1990), and the development of religion, not just religion, but religion we can recognise, involving the mother goddess and the virgin birth (Cauvin 1997). Some ideas, including the idea that humans had to objectify the world, or nature, in order to start modifying it seem very heavily based in a western rationalist mode of thought. Ingold goes further, and observes that for some cultivators "the colonial image of the conquest of nature is entirely foreign to their way of thinking" (Ingold 1996: 17).

The research biases that exist begin with the identification of villages and the subconscious understanding of the beginning of the Neolithic as some sort of evolutionary process, a major hurdle to be jumped on the road to modern western civilisation. In Trevor Watkins recent translation of Cauvin's work this is not that subconscious (Cauvin 2000). Cauvin states that "we are the inheritors and the direct result of that artificial turning point, it is to that point that we must take our history back" (Cauvin 2000: 3). To read many accounts it would appear that the transition of farming is a one-way step to be taken, yet we know, both from what appears to happen on the arid zone margins with hunting in desert kites (Helms and Betts 1987), or in Cyprus (Peltenburg *et al.* 2001), that the PPNB was not a monolithic culture or economy. Hunting and gathering was still an option. This flexibility is apparent in modern anthropological studies, which have repeatedly shown that the boundary between farming and living on wild resources is a fluid one, with variations on the theme, and indeed with people oscillating between the two modes of subsistence. Ironically of course some of the ideas regarding prehistoric hunter-gatherer modes of thought come from analogies with modern post-colonial hunter-gatherers who may have previously subsisted as farmers, or at the very least have lived side by side with farmers for a very long time.

Much of our contemporary way of classifying people arises from a specific moment in imperial history, when hunter-gatherers were held up in opposition to so-called civilised people. Our contemporary way of categorising people by their mode of production has arisen from this. Indeed, the belief that modern hunter-gatherers make good analogies for prehistoric hunter-gatherers 10,000 years ago is based on very simplistic neo-evolutionary logic. The association between hunter-gatherers and their environment comes out of a belief that they are closer to nature, of nature. This is another idea that may seem past its time, but here again Cauvin states that "they drew from nature ... just like any other predatory species" (Cauvin 2000: 1) and man's "manifest ...unique supremacy" as "the king of creation" "in the bosom of nature is a sort of cer-

tificate of excellence" (Cauvin 2000: 2). Cauvin's view of hunter-gatherers is certainly not one that would be openly shared by social anthropologists or archaeologists who study hunter-gatherer societies. However, perhaps it remains at the back of many minds, as it is this placing of hunter-gatherers within nature that allows the common focus on changes in hunter-gatherer societies to be placed on external forces, such as environmental change, while subsequent changes are assumed to lie primarily within the social domain.

Anthropologists such as Ingold (1996, 2000), Descola (1994) and Bird-David (1990) make it clear that these generalised archaeological attitudes are misplaced. Many modern hunter-gatherers do not make the dichotomous distinctions between culture and nature, human and non-human characteristic of modern western thought. Instead they understand the world in terms of relationships and forces that are encountered and engaged with. Relationships between people and environment are understood as similar to those between people and people. Understanding of an environment is therefore often comprehended in social relationships. In this sense the modern concepts of domestication and management of resources may not be at all appropriate. Similar perceptions arise with some cultivators who see the relationships with ancestors and the environment as reciprocal. While perspectives will vary from group to group, and in different parts of the world, both within hunter-gatherer and simple cultivator societies, the relationship with the environment remains personal. In this sense, if, as Cauvin does, we interpret figures of people with upraised arms as in prayer, we are seeing a change in attitude, but not a quantum leap. Ironically, many of the fundamental perspectives that are nowadays taken for granted, appear to be 19th century changes in understanding. In particular is the Marxist idea of the transformation of nature by labour, be that by craftsman or farmer. In contrast, Ingold (1996) observes that both contemporary traditional farming societies and European thought from at least classical Greece to the 18th century, saw the work of craftsmen and farmers as quite different. Specifically, farmers are helping nature, not opposed, or trying to dominate it.

Furthermore, modern common sense and rationality may not be useful in understanding the past. Seeing nature and culture as separate and opposed entities is both ethnocentric and objectifying, and therefore probably misleading. That understanding human – environment social relations may be "difficult to interpret is no reason to assume that our values are the most appropriate way to understand them" (Warren 2001: 139). Barrett has argued that a social archaeology "considers how people reproduce (1) their material conditions through their actions on the environment; (2) the social system by maintaining the demands, and meeting the obligations of, social discourse; and (3) their knowledge and understanding of how to proceed in such practices. The emphasis here is on *reproduction* in the sense of the routine maintenance of social practices, rather than upon discovering descriptive terminologies for entire social systems, such as band, tribe, chiefdom, state etc. These routines are daily and traditional practices" (Barrett *et al.* 1991: 6-7).

In searching for the nature of the transformation that does occur with the Neolithic revolution, it can, and has been, argued that the development of storage techniques is perhaps more important than farming (Testart 1982). The delayed return economy has many of the features of an agricultural economy with its seasonal routines, and storage makes a more sedentary lifestyle possible without the need for the appearance of new natural resources throughout the seasons. The intensification of hunting and gathering of wild foods may also be a vital step in changing societies. Such intensification has been accepted in the European Mesolithic as the critical path for increased complexity, leading to sedentism, territoriality, and many other features which might be seen as Neolithic, but which occur in what are generally referred to as complex hunter-gatherer societies (Rowley-Conwy 1983). The classic ethnographic example used to demonstrate this are the people of the North-West coast of America, although there is no evidence that any European early Holocene hunter-gatherers reached similar levels of complexity. Group size rises and consequently social differentiation increases as a means for ensuring adequate decision making. The whole idea of complexity has become a dominant, orthodox interpretative framework in North West Europe. Yet of course in the European context it occurs absolutely without farming, indeed is seen as resistant to farming. However, it should be clear that such people are no more a part of nature than the Neolithic peoples of the Near East, nor is their concept of religion any more primitive. The idea of complexity amongst hunter-gatherers is a use-

ful reminder of the range and variety of strategies adopted. Contrary to much apparent archaeological usage, hunter-gatherers were, and are, not all highly mobile tropical people (Rowley-Conwy 2001). What is more, they are not static in social or economic behaviour. The often-accepted notion of a Natufian equilibrium existing until shattered by environmental pressure is unlikely (cf. Cauvin 2000: 65).

Rather than start from the premise that farming is opposed to hunting and gathering, it may be more helpful to try and understand early agriculture as part of the spectrum of available hunter-gatherer strategies. Certainly there is a continuum in environmental management strategies, from conservational management, where there are culturally sanctioned restrictions of resource use, to promotional management which uses active manipulation of resources to increase their productivity (such as selective culling and scrub burning), to domestication. Indeed all of these elements of the spectrum may be in use at any one time.

It may be useful to make a few more comments about religion, given the important place it undoubtedly held in the development of societies who could live together in large settled groups. Cauvin and Watkins have both suggested that while we can appreciate the aesthetic qualities of Palaeolithic art, and realise that it has ritual and religious meaning, we cannot understand it (Cauvin 2000; Watkins 2002). Cauvin stresses that (Venus figurines aside perhaps) there are no gods in the Palaeolithic. In contrast they suggest that we can truly understand Neolithic art, not just on a superficial level but at a more sophisticated level. Cauvin states that "The ambiguity of the symbol .... is readily decipherable for us who bear the 'terrible' mother in the deepest stratum of our unconsciousness" (Cauvin 2000: 71). What is more, Cauvin argued that we can see the origin of the mother goddess who dominates oriental pantheons until the time of the male dominated pantheon of Israel, the origin of the Minoan bull contest, even the origin of sacred theatre, in Neolithic religion. He noted a few problems, for example the 'Ayn Ghazāl statues which he considered not very beautiful to modern perspectives. He argued that he could make such an aesthetic judgment as the evidence from Jericho shows that the sculptors of the PPNB could also produce what he saw as works of talent. Yet this use of modern aesthetics surely confirms the fundamental problem of trying to force a modern understanding of religion and belief back into the past. The 'Ayn Ghazāl statues are remarkable, but their eerie appearance is surely as much because we do not understand them, as it is anything to do with aesthetics. In a sense these extraordinary figures make very clear the ritual context of PPNB artwork, and that we need to be very careful in assuming that we really comprehend PPNB religion. Such a need for caution is further revealed by Cauvin's statement regarding the burial of modelled skulls. These he assumes must be ancestors who have fallen out of favour as it "makes no sense at all for a skull that is buried" (Cauvin 2000: 114). It seems impossible for us to believe that we have such a knowledge of PPNB ideology and religion that we can make such statements. In a review feature both Hodder and Rollefson observe the difficulties with Cauvin's interpretation of figurative objects (Hodder 2001; Rollefson 2001).

The skull cult alluded to appears to go back to the PPNA in a complex form. At Wadi Faynan 16 there are good examples of multiple and single burials, comprising in one case arranged collections of bones from several bodies, or an intact skeleton in the other, but in each case there is only one skull, and both are raised on a stone above the level of the other remains, and apparently placed as part of the initial construction of the building, with the skull apparently bulging out of the plaster floor. The importance of the association of dead bodies and skulls and buildings is clear. However, the highly variable architecture at Wadi Faynan 16 makes statements regarding the idea of house and home more difficult than might be though (Watkins 1990). The purpose of some of these buildings should be questioned, with possible alternatives including ritual and storage, as well as the often-assumed domestic function. The modern western linkage between the concept of a home being linked to a fixed building is in any event less obvious working in the South of Jordan amongst the Bedouin and their tents.

If we cannot easily make links between evidence for growing sedentism and the concepts of *domus* and home, nor between evidence for increased material culture relating to ritual and religious practices or ideology, how far can we advance our understanding? I believe that it is clear that the social changes occur in advance of the economic changes, further, that the economic changes occur because they are required to enable people to lead the life-

style they have selected. That way of life notably includes leading an increasingly sedentary life, in increasingly large communities. The development of ritual also appears to have occurred as a result of this social choice as a necessary mechanism for enabling people to live together in a more permanent manner. There is however an important point to be made here. The visibility of ritual inevitably increases with increasing sedentism. If ritual is practiced in permanent structures then it will, as with all other cultural and economic material, leave greater quantities of tangible evidence. In other words, perhaps the presence of structures apparently set aside for ritual activities in a permanent settlement should be no surprise. This is especially the case as one of the features observed during this process of transformation is the increased segregation of space. With permanence comes a clearer division of settlement and structures into work areas, storage areas, refuse areas, and presumably living space, as well as ritual space. This would appear to be an almost inevitable consequence of long-term settlement. The need to separate refuse in particular from other activities becomes more important, if not for health, then for the simple physical requirement of maintaining living and working space. This separation can be seen in the widespread change to clean occupation horizons or floors in the PPNA from typical hunter-gatherer dirty surfaces, strewn with artefacts in the preceding periods (Hardy-Smith and Edwards 2004). It can also be seen in the separate deposition of midden material at Qermez Dere (Watkins 1990), adh-Dhrā' (Finlayson *et al.* 2003), and Wadi Faynan 16 (Finlayson *et al.* 2000). Use of space in a settlement may be one of the key ways to see changes in society, including the development of patterns of community working.

Unfortunately, trying to argue for a clear sequence of changes: social, then ritual and economic, is impossible. The changes must go hand in hand to allow them to successfully proceed. What is of great interest is what was provoking the changes, especially as this process does turn into a global phenomenon during the Holocene. In a sense economy and ritual appear to be proxy indicators of underlying behaviour. Hodder is right to suggest that it is necessary to contextualise the rise in symbolism with changes in economy and the processes of power (Hodder 2001).

Our current archaeological knowledge of early villages (as opposed to smaller camp sites) of this period is largely geographically limited to the Mediterranean Woodland zone due to the historical context of research. The majority of recent archaeological research on the PPNA period has focused on smaller settlements, with the majority of these settlements being located within Levantine Corridor, from Jurf al Aḥmar in the north, to adh-Dhrā' and Wadi Faynan 16 in the south, but with a distinct concentration in the Jordan valley, just north of the Dead Sea, which contains the largest known sites of Jericho and Netiv Hagdud (Belfer-Cohen and Bar-Yosef 2000: 29, Fig. 3). It remains unclear, therefore, if these PPNA communities were characteristic of all other regions of the southern Levant, or represent a regional adaptation located north of the Dead Sea. Current work being undertaken at adh-Dhrā' and Wadi Faynan 16 suggests that many of the same features are present further south too (Finlayson *et al.* 2000, 2003).

There is substantial variability in material culture at PPNA sites, and at present this is poorly understood. Alternative arguments have been put forward that this arises from variation in time, space, and functional activities that occurred within sites. Variability in stone tool technology between settlements is very high and includes significant differences in the percentage of diagnostic tool forms, such as lunates, projectile points and Hagdud truncations. It has been argued that this reflects either different periods of occupation, variation in archaeological recovery methods, variation in functional activities, and the mixing of cultural material from different periods of time, or a combination of these possibilities. The simple chronological phasing – the Khiamian followed by the Sultanian – that has been assumed by Cauvin to be real and allows his division of the PPNA into an early hunter-gatherer phase and a later Neolithic phase – appears on recent evidence from adh-Dhrā' and Wadi Faynan 16 to be largely the result of small samples and mixing of material as noted by Garfinkel (Garfinkel 1996). At both adh-Dhrā' and WF16 there appears to be good evidence that assemblage composition is related more closely to spatial distribution, and therefore presumably function, than to chronology. What is more, the function, and therefore the assumed symbology of projectile points, seen by many as vital images of virility, has been severely questioned (Finlayson *et al.* 2003; Goodale and Smith 2001). Research at a number of sites, for example adh-Dhrā', Wadi Faynan 16 and Cayonu

(Coskunsu and Lemorini 2001)), has indicated that so-called projectile points frequently have wear traces indicating other functions.

There is an urgent need for a greater understanding of PPNA society and population. The keyhole excavations designed to provide data leading to greater cultural and chronological resolution have largely failed to achieve these limited objectives. It has proved impossible to comprehend the significance of the material recovered. We have to look at the settlement level. We need to reconstruct the size of community and how it was organised by looking at the size and density of residential structures, and the number and types of non-residential features, including food processing locations, fire hearths, and storage areas. The size of individual features, the labor invested in their construction, the presence of non-portable artifacts such as pestles, grinding stones, and cup-holes, all furnish a general proxy measure of the relative permanence of occupation and the degree of sedentary life. The organisation of space will provide evidence of social organisation.

In effect, we can now argue a plausible case for the importance of social change, but as fieldwork to-date has focussed on economic aspects, with interesting observations when dramatic evidence of ritual has been encountered, we do not as yet have an adequate corpus of data within the PPNA to assess this model. The purpose of further work at adh-Dhrā' and Wadi Faynan 16 is to rectify this situation.

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