
The Birth of a Concept and the Origins of the Neolithic: A History of Prehistoric Farmers in the Near East

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THE BIRTH OF A CONCEPT AND THE ORIGINS OF THE NEOLITHIC: A HISTORY OF PREHISTORIC FARMERS IN THE NEAR EAST

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Abstract: Obviously, in the Near East and elsewhere the Neolithic was a period of very important developments, first and foremost the establishment of agriculture and sedentism. However, many of its defining features, such as village life, cultivation of plants and resource management, were already present in the Palaeolithic. This should make us aware of the potential arbitrariness of current typo-chronological categories such as 'the Neolithic'. More fundamentally, we need to be critical of the notion of 'progress' and our inclination to create oppositions (e.g. foragers vs. farmers). The Neolithic was not a revolution, but just one among many other important stages in the history of humanity.

Résumé: Le Néolithique, au Proche-Orient comme ailleurs, a été manifestement une période de développements majeurs, avec en premier lieu l'apparition de l'agriculture et la sédentarisation. Néanmoins un grand nombre de ses caractères, tels que la vie communautaire, la culture des plantes et l'aménagement des ressources étaient déjà présents au Paléolithique. Ceci doit nous alerter sur l'arbitraire possible des catégories typo-chronologiques actuelles, telles que le 'Néolithique'. Plus important encore, il est nécessaire de porter un œil critique sur la notion de progrès et sur notre tendance à créer des oppositions (par ex. cueilleurs versus agriculteurs). Le Néolithique ne constitue pas une révolution mais seulement une des étapes importantes, parmi bien d'autres, de l'histoire de l'humanité.

Keywords: Neolithic 'package'; Neolithic Revolution; Hunter-gatherers; Farmers.

Mots-clés : 'Package' néolithique ; Révolution néolithique ; Chasseurs-cueilleurs ; Agriculteurs.

INTRODUCTION

Jacques Cauvin has greatly improved our understanding of the Neolithic in the Near East, particularly with his book *Naissance des divinités, Naissance de l'agriculture*, which deals with the Neolithic Revolution and the diffusion of the Neolithic way of living. For Cauvin, following G. Childe,¹ agriculture and the 'mastery of nature' set Neolithic people apart from the previous hunter-gatherer communities from the Palaeolithic, which were supposed to be dominated by nature: "Neolithic man is therefore

'Neolithic' in the sense that he is the first human producer and there was no other before him".² The novelty of Cauvin's thesis is that the revolution would initially have been symbolic and (psycho-) cultural, and only later an economic one. However, in rather orthodox evolutionary terms the transformation is regarded as the first step towards 'our present power', 'civilisation',³ the 'capability of humanity' and even 'modernity'.⁴

These ideas about the Neolithic have been criticised as being too extreme, but the basic notions about a real break with

1. CHILDE, 1928 and 1936.

2. CAUVIN, 2000: 207.

3. *Ibid.*: xv.

4. *Ibid.*: 207.

the past and the idea of cultural progress are still basic features in Neolithic archaeology.⁵ While it is undeniable that the Neolithic was a critical period in the development of economy, social structure, symbolism and cognition, the singularity and superiority of the Neolithic are problematic issues. Moreover, the traditional traits of the Neolithic (e.g. domestication, sedentarisation, storage, pottery) and their relationships now appear to be problematic with regard to chronological frameworks. Recent discoveries of 'typical' Neolithic features in pre-Neolithic, hunter-gatherer contexts challenge our previous interpretations about developments in this period and indeed of the concept Neolithic itself.

The purpose of this contribution is to explore the history of some major elements of the Neolithic 'package' in order to deconstruct the idea of a Neolithic Revolution. The paper consists of three main parts. First, I shall present a brief account of the changing attitudes to the Neolithic. Second, the main elements of the 'package' will be dealt with. This will be followed by a discussion of some of the major problems in traditional thinking about the Neolithic, pertaining to (a) culture and chronology; (b) evolution and opposition, and (c) variability, agency and scale.

THE NEOLITHIC

Due to changing paradigms and new discoveries, definitions and interpretations of the Neolithic have changed substantially in the course of time. This is not the place for a detailed review of the evolution of our thinking about the Neolithic,⁶ but for the purposes of this paper a brief and general overview is required. We can distinguish four main phases in the history of the Neolithic as a concept.

First, the term Neolithic, or New Stone Age, was coined in 1865 by Lubbock in his book *Pre-Historic Times, as Illustrated by Ancient Remains, and the Manners and Customs of Modern Savages*. Lubbock, basing himself on the Three-Age system of Thomsen⁷ introduced the term Neolithic to indicate the later or polished stone age, in which (apart from gold) metal was not used. Later, this basic chronological framework was refined by Montelius, among others, by further subdividing the Stone, Bronze and Iron Ages.⁸ Material was now differ-

entiated according to regions and different geographical areas were correlated in a culture-historical approach. The 'birth' of the Neolithic, then, was based on classifications of artefacts and materials, foremost polished and ground stone tools and pottery.

In a second phase, starting in the 1920's, the culture-historical paradigm was further developed, especially with regard to the advents of sedentism and agriculture. According to Childe, the emergence of food-producing economies was the greatest economic revolution, the Neolithic Revolution, after the control of fire.⁹ It allowed the widespread development of village life and, consequently, civilisation. Similar to Childe, Braidwood also focussed on socio-economic aspects of the Neolithic and he also spoke of an agricultural revolution.¹⁰ However, while Childe had put forward an ecological explanation for the emergence of agriculture (his 'Oasis theory'), Braidwood found no evidence for this. Therefore, he tried to explain the agricultural transition mainly as socially and culturally driven. He argued that in the Neolithic 'culture was ready'; that people had evolved sufficient technological capacities to enable them to spending more time at favourable locales, resulting in incipient agriculture and farming village communities.¹¹

In a third phase, in the 1960's and 1970's, culture-historical archaeology was rejected by processual archaeologists, particularly Binford, who held that cultures were not marked by a set of traits (as Childe had put forward), but that cultures adapted by means of material culture (technology) to environmental pressures.¹² In so-called Systems Theory cultures were seen as bodies, systems, made up of various subsystems, which were connected by negative and positive feedback loops between each other and the environment.¹³ In the marginality model of Binford, for example, sea level rising in the early Holocene would have induced migration to marginal zones. In order to meet the increasing demand for food people would have moved cereals outside of their natural habitat, resulting in selection and ultimately domestication.¹⁴ Flannery adapted Binford's marginality model, but he rejected climate as the prime motive for domestication. According to him, agriculture appeared in response to demographic and economic changes. These would have been set off by the Palaeolithic 'broad spectrum revolution', leading to sedentism and population growth, due

5. E.g., WATKINS, 2010a.

6. See e.g., THOMAS, 1991 and TRIGGER, 1989.

7. THOMSEN, 1848; TRIGGER, 1989: 76.

8. MONTELIUS, 1903.

9. CHILDE, 1928 and 1936.

10. BRAIDWOOD, 1960.

11. See VERHOEVEN, 2004 for an extended discussion of the various ways in which the emergence of agriculture has been approached.

12. BINFORD, 1972.

13. CLARKE, 1968.

14. BINFORD, 1968.

to which people would have moved to marginal zones where they started cultivating grain.¹⁵ Due to this concern with adaptive strategies, the Neolithic, and in fact all other periods, was largely seen from a functionalist, adaptational and economic point of view.¹⁶ Such environmental approaches are too one-dimensional to properly explain the transition from foraging to farming.¹⁷ As Barker, among others, has argued, the evidence tells us that foragers became farmers in different ways, at different rates and for different reasons.¹⁸

Finally, in what have become known as ‘post-processual’ approaches environmental determinism and the supposedly passive and reflective nature of material culture have been rejected. Instead, the focus is on agency, contextuality and the symbolic role and cognitive effect of material culture. While in some cases environmental determinism has been substituted for cultural determinism, in principle these basic notions of post-processual archaeologies allow for more contextual, nuanced and inclusive reconstructions.¹⁹ Domestication, for instance, is most often regarded as a holistic and reflexive process, between many natural and cultural elements. As Ingold has put it: “... both humans and the animals and plants on which they depend for a livelihood must be regarded as fellow participants in the *same* world, a world that is at once social and natural. And the forms that all these creatures take are neither given in advance nor imposed from above, but emerge within the context of their mutual involvement in a single, continuous field of relationships”.²⁰

CONCEPTUAL CHALLENGES

Thomas has argued that these different approaches have not resulted in an ever better understanding of the Neolithic.²¹ There seem to be four main reasons for this. First, paradoxically, due to the general effect of accumulation of research and knowledge, new data often generates new and more questions. Second, confusion arises as old approaches and definitions are used, while new ones are introduced. Third, language and terminology have the potential to obscure, rather than clarify

things.²² As we have seen, the concept has been used since a century and its meaning has changed according to personal insights, archaeological fashions, new discoveries, etc. Language and terminologies are constructions with, for instance due to new discoveries, changing meanings. Moreover, the introduction of fancy terms—such as Neolithic Revolution—should not distract us from what really happened in the past. Archaeological terms, then, are not explanatory; they just make communication—and confusion—about the past possible. In this regard it should be noted that certain concepts have the power to move our thoughts in specific directions, which can be quite unhelpful for reconstructing the past.²³ Fourth, most approaches tend to focus on particular aspects, such as subsistence, symbolism or cognition, largely disregarding other important elements. This is understandable, as the Neolithic refers to many different features: economic, technological as well as social and psychological.

In fact, this complex of elements is sometimes referred to as the Neolithic ‘package’, “... the sum of traits that appear repeatedly in the Neolithic assemblages...”.²⁴ The most common traits in the Neolithic in the Near East are: agriculture, sedentism and houses, craft specialisation, polished and ground-stone tools and pottery. It should be acknowledged that the constituents of this assemblage varied according to region and time and that it needs to be untied and broken down in order to be usefully applied.²⁵ As Thomas has put it, the Neolithic is not a ‘thing’ but a ‘field’, consisting of various combinations of elements (such as agriculture, monumentality, stone tools, etc.), which can vary according to period, region and cultural preferences.²⁶

Notwithstanding these problems, it is clear, that the term ‘Neolithic’ is here to stay, at least as a chronological marker. So let us investigate what it means in and for Near Eastern archaeology.

15. FLANNERY, 1973.

16. THOMAS, 1993: 367-368.

17. VERHOEVEN, 2004.

18. BARKER, 2006: 411-414.

19. See e.g., HODDER, 1990; INGOLD, 1996; THOMAS, 1991; TILLEY, 1996.

20. INGOLD, 2000: 87.

21. THOMAS, 1993.

22. As an anonymous reviewer made me aware of.

23. See WATKINS, 2008 for an attempt to replace the concept ‘Neolithic culture’ by ‘supra-regional networks’, consisting of interacting humans, exchanging particular goods and materials and sharing cultural behaviors that characterise the Neolithic.

24. ÇILINGIROĞLU, 2005: 3.

25. E.g. ÖZDOĞAN, 2010.

26. THOMAS, 1993: 390.

THE NEOLITHIC SEQUENCE IN THE NEAR EAST

The Neolithic in the Near East, following the Epipalaeolithic (the Natufian in the Levant), is dated between *ca* 10,500 and 5600 cal. BC. This long period comprises several periods and according to region there are different periodisation systems in use²⁷. However, the main distinction between the Aceramic and Ceramic (or Pottery) Neolithic is often applied to the Levant, the East (Iraq and Iran) and the North (Turkey).²⁸ On the basis of a calibration of 317 prehistoric ¹⁴C dates from all over the Near East, it has been proposed to use the term Proto-Neolithic for the (Epipalaeolithic) Natufian and the PPNA in the Levant and contemporary cultures in the East.²⁹ The analysis is a further refinement of the chronological system of the French *Atlas des sites du Proche Orient* (ASPRO), based on a combination of radiocarbon data, stratigraphy and archaeological information, and consisting of six periods.³⁰ According to Aurenche *et al.* "The advent of the true Neolithic of the Middle East with the beginning of agriculture and livestock rearing can be reasonably dated around 8000 cal. BC, or, more correctly, between 8300 and 8000 cal. BC".³¹ While the concept of Proto-Neolithic acknowledges the deep roots of developments and practices in the 'true Neolithic' (in the Middle PPNB), at the same time it is teleological, as it is seen as a stepping stone towards the 'real thing'.

For the purposes of this paper I shall focus on the Levant and southeastern Turkey, which are areas where significant recent discoveries challenge our traditional understanding of the Neolithic.

UNWRAPPING THE PACKAGE

Because it explicitly refers to the multi-dimensionality of the Neolithic, the package is a useful concept for exploring the dynamics of life in the Neolithic. However, this does not mean that it can be applied in a straightforward manner. In

fact, many, if not all, of the traditional elements of the package had their roots in societies that were quite different from those that are normally perceived as Neolithic farming communities (of the PPNA, PPNB and Pottery Neolithic). As will be shown, many defining features originated in Palaeolithic hunter-gatherer communities. Farmers, then, had great impact but they were no revolutionaries. In addition, boundaries within the Neolithic also prove to be problematic.

The following presents a survey of the history of some of the most important elements of the package, presenting mainly examples from the Near East, but including other areas as well. To most researchers working on the Neolithic these examples will come as no surprise. The intention is not to present new data or theory, but to bring together the main elements of the package in order to isolate a number of basic problems with regard to the concept Neolithic and specifically the Neolithic Revolution.

DOMESTICATION

Full domestication of plants and animals was achieved in the PPNB, but it is also clear that in Natufian and PPNA hunter-gatherer contexts there was small-scale cultivation of wild cereals and pulses, for instance at Abu Hureyra in Syria, as indicated by remains of cereals, sickle elements (often polished) and grinding/pounding tools.³² Moreover, in a wider sense, regarding domestication as a multidimensional cultural process involving the active manipulation of *e.g.* humans, plants, animals, ancestors, material culture, etc., it has been argued that domestication had already started well before the PPNA. For instance, sites from the Epipalaeolithic Kebaran (*ca* 23,000-15,000 BC) in the southern Levant (*e.g.* Ohalo II, Ein Gev I) have revealed wild grains, heavy stone-processing tools, ovens and burials with symbolic configurations.³³

Until now the term 'hunter-gatherers' has been used. However, more precisely, we have in fact dealt with *collectors*. While foragers are small, very mobile hunting-gathering groups that most often immediately consume what they find, collectors regularly store products and consequently are less mobile.³⁴ For convenience and as a form of short hand, I shall continue to speak of hunter-gatherers, but it should be acknowledged that in the Palaeolithic and Neolithic periods under discussion here, these people were collectors rather than foragers. In con-

27. See CAUVIN, 2000: xviii.

28. Especially in the Levant and Turkey the Aceramic period is divided into two successive phases: the Pre-Pottery Neolithic A and B (PPNA and PPNB); KENYON, 1957. The final PPNB in the southern Levant is also referred to as the PPNC.

29. AURENCHE *et al.*, 2001. Cultures in the East: Zarzian and Trialetian ('Natufian'); Mlefaatian and Nemrikian ('PPNA').

30. HOURS *et al.*, 1994.

31. AURENCHE *et al.*, 2001: 1201.

32. See *e.g.*, HARRIS, 1999.

33. VERHOEVEN, 2004: 231-234.

34. BINFORD, 1980.

trast to their foraging predecessors, they collected, stored and processed wild plants such as cereals and legumes.

SEDENTARISATION

Small villages were already present in the Natufian. There is good evidence, such as animal remains, the thickness of cultural deposits, the presence of substantial dwellings, storage features, large numbers of flint and stone artefacts, burials, etc., that large Natufian sites were marked by extended periods of occupation. For example, in Ain Mallaha in Israel each of the three phases contained about 50 substantial circular houses and open areas with (presumably) storage pits. The size of the settlement (*ca* 2000 square metres) and the well-built houses suggest that this settlement was occupied by a community of between perhaps 200 and 300 people for extended periods of time.³⁵ However, it is important to realize that there are different degrees of sedentism; there is a continuum from fully mobile to fully sedentary societies. In fact, with regard to Neolithic farming communities, various sites have provided evidence for rather flexible systems combining mobile and 'sedentary' ways of life, *i.e.* settlement systems of villages/hamlets, task camps and hunting camps, or pastoral nomadism.³⁶

Sedentism in the Neolithic, then, should not be exaggerated. Some have argued that there were so-called megasites in the Late PPNB of the southern Levant, such as 'Ain Ghazal, Basta and Wadi Shua'aib. These would have been very large (up to 12 ha) and densely occupied settlements with large numbers of people (up to 4100). Such estimates figure prominently in accounts of the origins of agriculture (population pressure leading to intensification of subsistence practices and hence domestication),³⁷ the emergence of public ritual (communal ceremonies serving to alleviate stress due to living in densely occupied settlements)³⁸ and the development of symbolism and cognitive faculties, enabled by the built environment.³⁹ However, there are profound problems with such high estimates.⁴⁰ First, the excavations at the sites in question have been very limited, *i.e.* *ca* 2% at the most, making extrapolations with

regard to houses at other parts of the sites very hazardous. Furthermore, occupation density cannot automatically be assumed to be homogeneous across a settlement. Occupation may have shifted from one area to another in the course of time. Ultimately this would have resulted in a large occupied area (a megasite), but in fact the site as we see it today may never have been fully covered with architecture and populated at one point in time. There is a difference, then, between an archaeological *site* and a prehistoric *settlement*. Third, as already noted, settlements need not have been occupied year-round (by large numbers of people). In short, for the PPNB there is no good evidence as yet for the existence of megasites, which would have been central to the advancement of Neolithic life.

STORAGE

The first unequivocal evidence for plant storage facilities comes from PPNA sites in the Levant.⁴¹ Recently, at the site of Dhra', located next to the Dead Sea in Jordan, at least four granaries, interspersed between domestic buildings, have been recovered. These structures were circular, *ca* 3 m in diameter and had suspended floors, probably for air circulation and protection from rodents and insects.⁴² Micromorphology and phytolith analysis seem to indicate the storage of wild barley. At Dhra' and other PPNA sites in the southern Levant (*e.g.* Netiv Hagdud, Gilgal I), these storage structures appear in 'pre-domestication' contexts, *i.e.* in communities that probably were cultivating as well as foraging peculiar wild plants (particularly barley).⁴³

RESOURCE MANAGEMENT

Not only farmers carefully manage their resources; there are many examples of this in hunting-gathering contexts as well. In the most practical sense, storage (as mentioned), but also fish traps and the use of burning to control the distribution, diversity and abundance of plant and animal resources may be mentioned.⁴⁴ However, as Ingold and others have

35. *E.g.*, VALLA, 2008.

36. *E.g.*, at Tell Sabi Abyad I in northern Syria: AKKERMANS and DUISTERMAAT, 1997.

37. *E.g.*, BAR-YOSEF and MEADOW, 1995; BELLWOOD, 2005; MACNEISH, 1992.

38. KUIJT, 2000.

39. WATKINS, 2010b.

40. VERHOEVEN, 2006.

41. The function of so-called silos or storage pits at Natufian sites (*e.g.*, Mallaha) is still unclear: VALLA, 1998.

42. KUIJT and FINLAYSON, 2009. The floor beams rested on notched-disused-grinding stones. Interestingly, BANNING, 2011, has suggested that this use of grinders was intentional and symbolic; it would have symbolically associated food processing and storage.

43. See INGOLD, 1983 and TESTART, 1982 on delayed return and 'social storage'.

44. *E.g.*, WILLIAMS and HUNN, 1982.

noted, on a more spiritual and symbolic level, many hunter-gatherer groups show a great concern for their environments.⁴⁵ In many cases they do not opportunistically exploit their surroundings, as it is often still supposed; rather, they “... aim to keep up a dialogue with it”.⁴⁶ This is based on their idea that humanity and nature are closely related, part of the same universe or world, and that there are therefore many links between people, animals, plants, etc. For example, as opposed to modern western hunters, the Cree of northeastern Canada do not consider the animals they hunt as dangerous beings that they need to pursue and by which they are afraid to be killed. Rather, they believe that animals willingly offer themselves to them, in order to be killed. The animal thus offers its meat, but its soul is released and will be joined with meat again. However, this reproductive cycle (for both animals and humans) is disturbed when hunters do not obey certain rules of conduct concerning the act of killing, butchering, eating and disposal.⁴⁷

POLISHED AND GROUND-STONE TOOLS

The occurrence of polished and ground-stone tools (*e.g.* mortars, axes) is traditionally regarded as a hallmark of the Neolithic. However, it has already been mentioned that in the Near East ground-stone implements such as grinding/pounding tools and mortars were present at Kebaran and Natufian sites, such as Ohalo II, Ein Gev I and Mallaha, where they were used for the processing of vegetal materials. Also in the East, in northern Iraq, ground-stone implements have been recovered from Shanidar cave and nearby Zawi Chemi.⁴⁸

In Japan ground-stone implements even appear in Palaeolithic contexts dated to *ca* 30,000 BC. More than a hundred axe-like tools with a ground edge have been found at 30 sites throughout Japan. Furthermore, whetstones, which appear to have been used for grinding, were found at a number of such ancient sites as well.⁴⁹

POTTERY

Prehistoric Japanese communities produced not only the oldest ground-stone tools in the world, but also the oldest



Fig. 1 – A hunter-gatherer accomplishment: decorated ceramic vessel from Wadai, Japan. Middle Jomon (5000-4000 BP). H: 32 cm, D: 28 cm (redrawn from KANER (*ed.*), 2009: fig. 37).

pottery. This so-called Jomon pottery goes back to *ca* 12,000 cal. BP, and perhaps even to *ca* 16,000 cal. BP!⁵⁰ The Jomon culture, following the Palaeolithic period, but also represented by hunter-gatherer-fishermen, flourished for more than 10,000 years. Apart from the pottery, the Jomon period is characterised by large (sometimes enormous) settlements, a rich and varied subsistence, the engagement in extensive trade networks and the many indications of ritual and symbolism, especially elaborate ceramic figurines, but also stone circles, earthworks and burial mounds. In general, the Jomon can be regarded—somewhat like Natufian communities—as affluent societies of complex hunter-gatherers.

To return to the ceramics, from the earliest time onwards (Incipient Jomon) the pottery is decorated, mostly in geometric patterns. True masterpieces of decorated pottery appear in the Middle Jomon (*ca* 5000-4000 BP) (see fig. 1). In this period, many ceramic containers show highly complex

45. INGOLD, 2000: 65-69.

46. *Ibid.*: 68.

47. *E.g.*, BRIGHTMAN, 1993.

48. SOLECKI and SOLECKI, 1983.

49. IMAMURA, 1996.

50. HABU, 2004; KANER, 2010. In the Russian Far East and China, pottery has been dated to *ca* 15,000 BP: KUZMIN, 2009.

three-dimensional decorations. Indeed, some of the pottery is ornate to such an extent that it must have been impractical to use. Similar symbolic elaboration can be observed in the figurines.⁵¹

But what about the Near East? Undoubtedly, pottery was produced and used here *en masse* only from the Late Pottery Neolithic onwards. However, recent field investigations at a number of Early Pottery Neolithic sites in Syria and adjacent parts of Turkey have given evidence of the presence of pottery, albeit in very limited quantities only, in what in every other aspect appears to be Aceramic, Late PPNB, communities. Surprisingly, these very first ceramics appeared in a fully developed fashion, with mineral tempering, burnishing and painted decorations. The expected plain coarse wares came approximately 300 years later.⁵²

It is not suggested here that these early ceramics in Upper Mesopotamia were used by hunter-gatherers, for there is no proof of that.⁵³ But it is important to realise that, again, our classifications with regard to the Neolithic, particularly the separations between ‘cultures’ (aceramic *versus* ceramic), are problematic when applied too strictly. It should also be pointed out that, just as is the case for agriculture, the introduction of pottery was a gradual process and that in the beginning it probably did not make much—functional—difference. It was a minor addition to the containers made from stone, plaster, basketry, clay, bitumen and probably wood. As Nieuwenhuyse *et al.* have recently discussed, PPNB communities already had the tools, raw materials and technological skill (such as pyrotechnology) to start production, but this only happened after a long time.⁵⁴

MATERIALISATION AND ENTANGLEMENT

Traditionally, the diversity and accumulation of material culture, or materialisation, and the so-called entanglement of people in “social, material and conceptual webs of dependencies and relations”⁵⁵ is linked to Neolithic village life. However, such material entanglement in artificial surroundings had already started much earlier (albeit less intensive than in the Neolithic), possibly even in the Kebaran. But it is especially in the Natufian that we unequivocally see materialisation and entanglement at work. In their settlements, people were sur-

rounded by dwellings, ground-stone tools, bone tools, figurines, decorative objects of stone, bone and shell and waste. With regard to the latter, Natufian sedentism in fact resulted in unprecedented large amounts of garbage. Hardy-Smith and Edwards⁵⁶ have suggested that the Natufians lacked (in our view) systematic practices of refuse disposal. At most sites refuse was allowed to accumulate on house floors, as evidenced by enormous quantities of waste. ‘Objectification’ of the environment and the social, economic and symbolic opportunities and drawbacks, with which all of us are nowadays so familiar, goes back quite a while.

TECHNOLOGY AND SPECIALISATION

The Neolithic—the New Stone Age—is often perceived as the era of great inventions and of technological progress and specialisation. The cultivation of plants, domestication of animals, invention of pottery, use of ground-stone and polished tools and the building of sophisticated storage structures are some of the commonly used indicators for this. But, as we have seen, well before the Neolithic plants were collected, processed and stored, houses built, intricate storage structures erected, resources managed, polished and ground-stone tools used, and pyrotechnology applied. With regard to the Neolithic the recent discovery of copper adornments in Late PPNB burials at Tell Halula in Syria and earlier finds of metal objects at PPNB sites in Turkey⁵⁷ indicate metallurgy long before the Bronze Age.⁵⁸ Clearly, this early metal processing was very basic (*e.g.* cold hammering) and rare, but still it does point out that there are no straightforward correspondences between traditional periods and the use and technology of particular materials.

MONUMENTUALISM, SYMBOLISM AND RITUAL

In various parts of the Near East recent and ongoing research has resulted in some significant and fascinating discoveries related to prehistoric symbolism and ritual. The PPNB period has been known for quite a while now for its rich material culture with regard to ceremonial life, such as decorated skulls, large statuary, figurines, varied burial traditions, wall

51. KANER (ed.), 2009.

52. NIEUWENHUYSE *et al.*, 2010.

53. But see JORDAN and ZVELEBIL (eds.), 2010 for Eurasia.

54. NIEUWENHUYSE *et al.*, 2010.

55. HODDER, 2006: 186; see also BOIVIN, 2008.

56. HARDY-SMITH and EDWARDS, 2004.

57. *E.g.*, at Çayönü Tepesi and Aşıklı Höyük.

58. MOLIST *et al.*, 2010. See also YENER *et al.*, 1996.

paintings discovered at sites all over the Near East.⁵⁹ Cauvin was one of the first to discuss the importance of symbolism in the PPNA in the Levant and Syria, in his opinion illustrated in particular by female and bull figurines.⁶⁰ Recent research indicates that he was quite right, not with regard to a 'religion of the woman and the bull', but with regard to the centrality of symbolism and ritual in Early Neolithic society. PPNA sites such as 'Abr, Jerf el Ahmar and Dja'de near the Euphrates in Syria and Göbekli Tepe in the foothills of southeastern Turkey have produced large and/or powerful symbolic objects. These include subterranean 'community buildings' with decorations and/or ritual deposits, large sculptures of humans and particularly animals, buttresses with abstract multicolour-painted designs and even large decorated monoliths.⁶¹

Especially the latter site is captivating, due to its monumental architecture dating from *ca* 9100 cal. BC. A number of large subterranean oval buildings have been excavated, all marked by up to 3 m high T-shaped pillars decorated in bas relief with mainly 'dangerous' animals, such as wild bulls, foxes, snakes and spiders.⁶² These pillars surround two central monoliths, up to 5.5 m high, of stylised humans or humanoid 'gods', with bent arms and loincloths. It can well be imagined that these complex and evocative buildings were the focus of all sorts of rituals.⁶³ Due to its monumentality at such an early date, Göbekli Tepe is now world-famous. Many people are astonished above all by the fact that the people who built and used these structures were hunter-gatherers (collectors, but not farmers). While it has been argued that the site was the focus for ceremonial practices for large groups of people, whose intensive collecting of naturally occurring cereals must have set off domestication,⁶⁴ there is as yet no evidence for the domestication of plants.⁶⁵

Göbekli Tepe and other PPNA sites again show that what is traditionally ascribed to farmers and later often termed to belong to 'complex' societies ('art', monumental build-

ings) already occurred much earlier and in hunter-gatherer contexts.⁶⁶

SYNTHESIS

This discussion of the early history of elements of the Neolithic package has made us aware that it is not very Neolithic at all and that many 'typical' Neolithic processes and materials go back to the preceding Palaeolithic. On the one hand, this is acknowledged by many scholars, but on the other hand, it seems that the Neolithic is still seen by many as a singular transformative stage in human history.⁶⁷ This idea is especially strong in general handbooks⁶⁸ and popular media. In the following, I have isolated three series of issues with regard to such rather static perceptions of the Neolithic.

CULTURE AND CHRONOLOGY

Göbekli Tepe and other sites makes us aware of the arbitrary and artificial nature of divisions between and characterisations of the Palaeolithic and the Neolithic, as well as of divisions within the Neolithic. The problem is that the Neolithic is regarded both as a time period and as a set of cultural traits. What about supposedly typical Neolithic features that occur in Palaeolithic contexts, or *vice versa*? This conundrum makes clear the problems that arise from such separations. They are necessary as heuristic devices, but when applied too strictly they can hinder understanding. As shall be argued in the next section, the story of human 'progress' depends on chronological schemes, such as the periodisation from the Palaeolithic to the 'Modern Age', denoting a unilinear concept of time.⁶⁹ Thus, culture-historic periods move from what with hindsight are regarded as simple to complex societies. In a way, chronology overrules culture, inducing teleological—ethic—thinking, which can severely hinder understanding of—emic—past practices, as we then impose ourselves upon the past.

59. Such as 'Ain Ghazal, Jericho and Aswad in the Levant, Abu Hureyra and Halula in Syria, Çatalhöyük, Nevalı Çori and Çayönü in Turkey and Jarmo and Ganj Dareh in Iraq. See *e.g.*, CAUVIN, 2000; GEBEL *et al.*, (eds.), 2002; KUIJT (ed.), 2000; LICHTER (Hrsg.), 2007; ÖZDOĞAN and BAŞGELEN (eds.), 1999; STORDEUR 2010 and VERHOEVEN, 2002 for overviews.

60. CAUVIN, 1972 and 2000.

61. *E.g.*, COQUEUGNIOT, in press; SCHMIDT, 2006; STORDEUR, 2000 and 2003; YARTAH, 2005.

62. SCHMIDT, 2006; HODDER and MESKELL, 2011; MESKELL, 2008.

63. But see BANNING, 2011, who argues that the buildings were houses.

64. SCHMIDT, 2006.

65. This also holds for the other PPNA sites mentioned.

66. Göbekli Tepe is not unique: in its surrounding area sites with similar, although smaller, T-shaped pillars, some decorated, have been discovered, such as at Karahan Tepe (with at least 266 such pillars *in situ*): ÇELİK, 2000. Moreover, at later (PPNB) Nevalı Çori in a rectangular community/cult building, T-shaped pillars were also present: HAUPTMANN, 1999.

67. *E.g.*, HAUPTMANN and ÖZDOĞAN, 2007.

68. *E.g.*, RENFREW and BAHN, 2008.

69. LUCAS, 2005.

EVOLUTION AND OPPOSITION

While not many archaeologists would call themselves evolutionists, current archaeological thinking, speaking and writing is still saturated with the idea of unilinear progress. Popular notions such as the ‘Neolithic and Urban Revolutions’, the ‘Rise of Civilization’, ‘from foragers to farmers’, ‘complex societies’, etc., betray an obsession with development and progression.⁷⁰ Furthermore, they often seem to contain a value judgement as well. Of course, things have progressed and there were hunters before farmers and villages before cities. But, instead of slotting such elements in a model that is based on thinking towards the future, and mostly on a path leading from simple to complex, it would be better to take the archaeological evidence ‘at face value’. Things like pottery in ‘aceramic’ contexts or hunter-gatherer storage are mainly to be explained in their own contexts, social, economic or otherwise. They need not always or in the first place be opposed to what was before or came after. Moreover, it has to be acknowledged that there was (and is) not always progress and development, but also crises and returns to earlier ways of living. For instance, Finlayson has argued that the Neolithic in the Levant arose from a rather un-Neolithic Late Natufian, rather than from a Neolithic Early Natufian.⁷¹ Another example is the deterioration and abandonment of Late PPNB farming villages and a gradual return to pastoralism in the Levant and Syria by *ca* 7000 cal. BC.⁷²

This brings us to the problem of dualist thinking, which is highly typical of evolutionary thinking. For instance, on the basis of Cauvin’s work, Watkins has argued in a series of articles that the symbolic revolution took place in Epipalaeolithic (Natufian) built environments used by collectors. He reasons that sedentism led to large populations, *i.e.* novel forms of community which required sophisticated cognitive and symbolic skills. Life would have been ‘deeply enriched’.⁷³ Indeed, important changes took place in the final Pleistocene, and the power of the recursive relationships between the (built) environment and people should not be underestimated, on the contrary, but the same can be said for the (pre-Natufian) landscape. We only have to think of the Dreaming of Australian Aborigines to appreciate the potential cognitive and cultural

richness of foragers, including the symbolic power of the landscape.⁷⁴

While it is often convenient and sometimes enlightening to think in terms of oppositions, in the end such polarities are mostly too simplistic. For example, it seems to be the case that the economic structure of some of the Late Neolithic communities at Tell Sabi Abyad I in Syria was based on a distinction between farmers and pastoralists.⁷⁵ However, it were the manifold relations, and not the distinctions, between both groups and their practices that actually shaped their lives. The associations between storage, residential farmers and pastoralists, for example, seems to have been based on different networks of relations, some of them manipulated in complex community rituals.⁷⁶

VARIABILITY, AGENCY AND SCALE

Clearly we shall always need handbooks, overviews, syntheses, generalisations, ‘meta-narratives’, chronological frameworks, etc. in order to make sense of all the data, to delineate continuity and change in different regions and time periods and ultimately to write history. However, such large-scale work, by necessity, often subsumes or overlooks regional and local practices and developments. These are often regarded as illustrations of a particular point to be made, rather than as achievements of local communities. Nevertheless, as recent research has shown, fascinating and unexpected discoveries that change the ways in which we perceive the past are usually made by fieldwork at site level. We would also benefit from more attention to human agency, *i.e.* the internal dynamism of individual social actors, which shape but are also shaped by the wider social and natural environment.⁷⁷ As Finlayson has recently put it:

“Agency theory provides a way for us to free ourselves from generalised bland modelling and make full use of our diverse and fine-grained archaeological data from meticulous excavation to write local histories. These not only allow us to create the building blocks for larger scale accounts, but also enable us to consider the role of people within the process.”⁷⁸

It is when such detailed evidence is put into regional, instead of extra-regional or global, context that we arrive at

70. A lesser known example are the so-called house societies in the Neolithic (*e.g.* HODDER, 2006; KUIJT, 2000), which are sometimes represented as an evolutionary phase between kin-based and hierarchical social organisations.

71. FINLAYSON, 2010: 143.

72. SIMMONS, 2000.

73. WATKINS, 2010a: 107.

74. *E.g.*, MYERS, 1991.

75. AKKERMANS and DUISTERMAAT, 1997.

76. VERHOEVEN, 2011.

77. See DOBRES and ROBB (eds.), 2000.

78. FINLAYSON, 2010: 145.

a level that is compatible to what prehistoric people actually experienced. Combining and relating, instead of separating and opposing, and the application of various scales and sources of analysis will allow us to account more successfully for the manifold relations and idiosyncrasies which connected and differentiated prehistoric communities. It is becoming clear, for instance, that the Early and Middle PPNB in the Levant featured a complex mosaic of different subsistence modes. In different regions farmers, foragers, collectors, pastoralists, fishermen, and hunters probably interacted in various ways, leading to multiple contexts for both continuity and change.⁷⁹

CONCLUSION

As we have seen, in the Near East there is considerable evidence of continuity between the Epipalaeolithic and the Neolithic. It therefore appears that the Neolithic package is not very Neolithic at all, that Neolithic Revolution is a myth and that culture was ready already in the Palaeolithic.⁸⁰ The shift from foraging to farming was a long-drawn and slow process. Moreover, the obsession with the impact of agriculture may have to do more with the way modern western archaeologists perceive the importance of the past than with the real significance of cultural innovations. In fact, the 'invention' of *e.g.* fire, tool making, building houses, etc. were also of crucial importance in human history, but, while this is of course admitted,⁸¹ in academic discourse these innovations are generally overshadowed by the 'Agricultural Revolution'. Cauvin's 'Symbolic Revolution' is problematic as well. While there was indeed a florescence of material symbolism in the PPNA, symbolism and symbolic thinking *per se* is a human capacity that must have been active well before the Neolithic. The fact that in the Neolithic this was materially expressed in often quite dramatic ways is another matter. Furthermore, a number of classes of Neolithic symbolism have clear roots in the Natufian⁸² and symbolic 'innovations'⁸³ occurred throughout the Neolithic and not in one specific circumscribed short period, as a revolution would suggest.

As we have seen, hunter-gatherers (collectors), instead of farmers, were the instigators of many elements of the Neolithic package, such as the cultivation of plants, sedentism, storage, ground-stone tools, monumentality, art and symbolism.⁸⁴ It is therefore important to do justice to the contribution of hunter-gatherers to important cultural developments. Hunter-gatherers were much more than merely the predecessors of farmers; they were as significant as agriculturalists for what many people still prefer to call 'civilisation', *i.e.* our modern world.⁸⁵ Hunter-gatherer elements in Neolithic contexts and *vice versa*, pastoralists associated with farmers, and so on, are indicative of the variability and cultural dynamics of prehistoric communities. It should therefore be accepted that all societies are complex in their own right. They are not to be ordered in an evolutionary sequence from simple to complex.⁸⁶ The Neolithic is just one among many other important stages in the history of humanity. It was a period in which the foundations laid in earlier times were integrated, developed, intensified and changed in social, economic and symbolic networks in ways that still reverberate in society and archaeology.

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79. GORING-MORRIS and BELFER-COHEN, 2010: 19.

80. See also WATKINS, 2010b.

81. *E.g.* fire: GOUDSBLOM, 1994; houses: WILSON, 1988.

82. *E.g.* manipulation of skulls, depositions of horns, human-animal associations.

83. Such as large sculpture, megalithic art, skull plastering, ritual buildings, wall paintings and pottery decoration.

84. See GORING-MORRIS and BELFER-COHEN, 2010 for a similar argument.

85. PRICE and BROWN (eds.), 1985.

86. VERHOEVEN, 2010.

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