#### ORIGINAL PAPER

# Beyond the Pre-Pottery Neolithic B interaction sphere

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**Abstract** This article aims to provide a critical evaluation of the influence of the culture-historical paradigm in the Neolithic archaeology of Western Asia through the re-assessment of currently established theoretical concepts, notably the Pre-Pottery Neolithic B (PPNB) interaction sphere, demic diffusion and acculturation. It is argued that these concepts are too abstractly defined to enable meaningful insights into the dynamics of Early Neolithic societies. A different theoretical framework is needed in order to achieve an historical understanding of the spatial and temporal variability of regional socio-cultural interactions and population displacement. This framework begins with the detailed analysis of local patterns of social organization and exchange. Exchange itself is seen as a socially situated process that was integrally related to the negotiation and reproduction of collective identities during the Neolithic.

 $\label{eq:continuous} \textbf{Keywords} \quad \text{Neolithic} \cdot \text{Western Asia} \cdot \text{Culture-history} \cdot \text{PPNB interaction sphere} \cdot \\ \text{Diffusion} \cdot \text{Exchange}$ 

#### **Background:** core issues in Neolithic research

The origins and spread of agricultural societies represent one of the most important transformations in the history of humanity (Reed, 1977; Harris, 1996; Diamond & Bellwood, 2003). Food-producing economies appeared independently in different parts of the world (Cowan & Watson, 1992). Their subsequent expansion has been variously interpreted as the outcome of external stimuli, such as environmental change pushing early cultivators outside the geographical boundaries of the "core areas" in search of exploitable territories, and population pressure, which is defined as the result of settlement aggregation and social

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restructuring in response to sedentism and to the new economic conditions (for useful overviews, see Moore, 1989; Harris, 1996, pp. 552–573). Other likely explanatory factors include modes of socio-cultural interaction between hunter-gatherers and cultivators such as the adoption of the new economy by indigenous populations (acculturation) and the transference of means of production and technological innovations via population movements (demic diffusion) (Cavalli-Sforza, 2002; Burmeister, 2000).

Drawing from culture-historical approaches and the tenets of Darwinian evolutionary biology, Shennan (2000) has put forward an alternative neo-evolutionary model for the interpretation of culture change based on the principle of "descent-with-modification". This views cultural transitions in prehistoric non-state societies as the outcome of systemic interactions between population dynamics, intra-group cultural transmission mechanisms and stochastic change. In addition to these, recent synthetic research on specific case studies has described population movements and the colonization of new areas as processes involving complex and geographically highly contingent socio-cultural adjustments (Broodbank, 2000; Perlès, 2001).

In Western Asia, the Early Neolithic broadly falls within the eleventh to seventh millennia cal. BC (Table 1; Fig. 1) during which agricultural economies became consolidated. This is generally viewed as a period of prolonged cultural development. The variability of the Pre-Pottery Neolithic A and the preceding Epipalaeolithic (both terms are used here as chronological indicators) as seen in site size and structure, architecture, settlement patterns and subsistence practices inter alia, was replaced during the ninth and eighth millennia BC by the "PPNB interaction sphere" (Bar-Yosef & Belfer-Cohen, 1989; Bar-Yosef & Meadow, 1995; see also Fig. 2). This saw a profusion of symbolic expression, and settlement expansion within and adjacent to the core area of socio-economic innovations: the "Levantine Corridor", a belt of alluvial habitats stretching from the Jordan river to the Damascus oasis and the upper Euphrates, and encompassing parts of modern Jordan, Palestine, Israel, Syria and southeast Turkey (Fig. 3). Some have described the PPNB of Western Asia as the first archaeologically documented occurrence of a pan-regional culture involving such developments as the emergence of a new religion, centred on the archetypal symbols of the "female and the bull", and of interaction spheres characterized by shared material practices, cultural emulation and the intensification of exchange networks, while at the same time displaying clear regional characteristics (Bar-Yosef & Belfer-Cohen, 1989; Bar-Yosef & Meadow, 1995; Cauvin, 2000; Watkins, 2003). Others have argued, instead, in favour of a much greater degree of regional differentiation by pointing out the persistent variability in settlement patterns, architecture and subsistence practices (Rollefson, 2004) and the regional differences in ritual expression and socio-political organization as ways of negotiating community cohesion and group identity (Kuijt, 2000a; Asouti, 2005). Despite local variations, a number of region-wide commonalities reinforce our perception of the PPNB less as a mere chronological horizon and more as a widespread

Table 1 Generalized regional chronology for the Early Neolithic (PPN) of Western Asia

Chronological/cultural horizon	Dates (cal. BC)
Pre-Pottery Neolithic A	~10,500–9200
Early PPNB	~9200-8300
Middle PPNB	~8400-7500
Late PPNB-PPNC/LN	~7500–6000

Source: Aurenche et al. (2001)



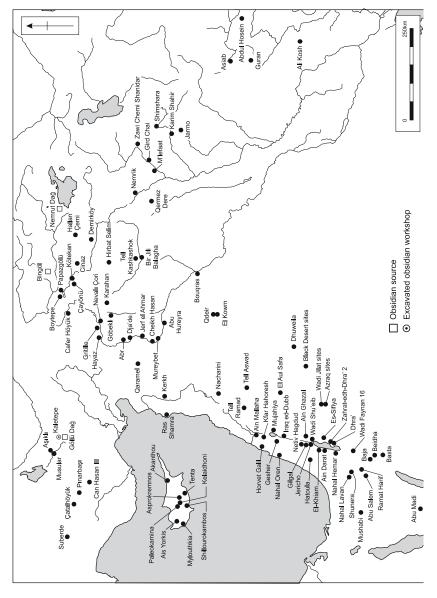


Fig. 1 Map showing the location of selected Neolithic sites in Western Asia (including all sites mentioned in the text)



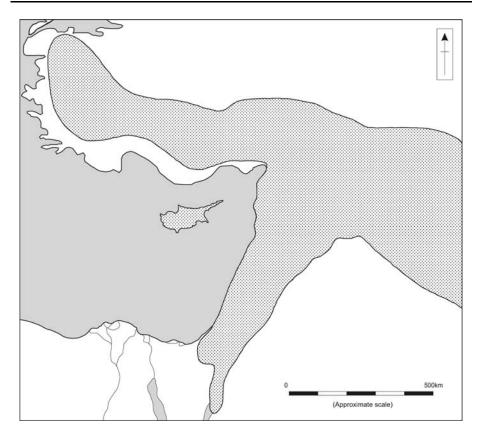


Fig. 2 The "PPNB interaction sphere" (redrawn after Bar-Yosef, 2001a)

(albeit loosely unified) cultural phenomenon. These include lithic technology, the ubiquitous presence of rectangular architecture, the widespread occurrence of "skull cult" rituals and the gradual consolidation of agropastoral economies (Bar-Yosef & Belfer-Cohen, 1989; Cauvin, 2000; Harris, 2002; Kuijt & Goring-Morris, 2002; Verhoeven, 2002a). The challenge that emerges is how to interpret then the PPNB. What gave rise to this phenomenon? At a more theoretical level this question poses a further challenge: how to integrate the observed areal and sub-regional variation without at the same time disrupting the potential of composing regionally meaningful narratives. I will suggest in this article that currently established theoretical approaches such as centres of origins/core areas, interaction spheres, polycentric and core-periphery models, are unlikely to provide satisfactory insights into a Neolithic world, where various socio-economic interactions, acculturation and demic diffusion were all active at different temporal and spatial scales. I will argue that an alternative approach should aim at identifying more precisely the specific local socio-economic contexts of inter- and intra-group interactions and population movements. This approach focuses on the nature of Early Neolithic social organization and, in relation to it, the operation of exchange as a socially situated process, which was integrally related to the negotiation and reproduction of group identities. I suggest that such a theoretical and working framework may open avenues for a more in-depth understanding of the historical dynamics of Early Neolithic societies compared to earlier approaches which have been overwhelmingly inspired by the culture-history paradigm.



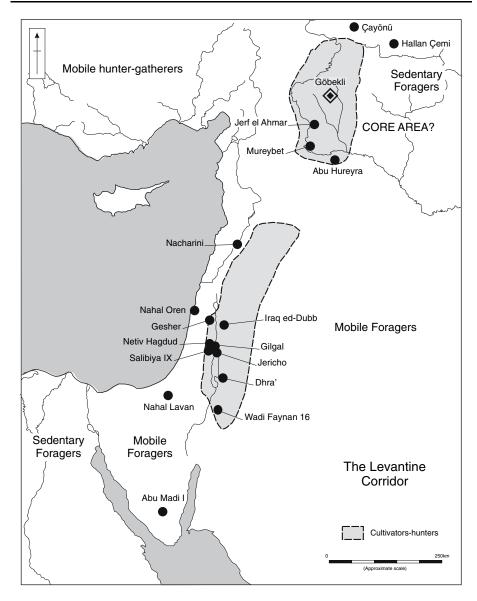


Fig. 3 The Levantine Corridor in the PPNA (redrawn after Bar-Yosef, 2002)

# Defining chronological and cultural frameworks in the Neolithic of Western Asia: a survey of ideas

The Neolithic of Western Asia has been traditionally subdivided into three major periods (PPNA, PPNB, Ceramic Neolithic) following Kathleen Kenyon's system of classification based on the stratigraphic subdivisions she established at Jericho. In her published work, Kenyon did not state explicitly whether this periodization was meant to depict an evolutionary continuum of cultural stages, or merely reflected the temporal subdivisions she



deemed suitable for describing the Jericho sequence. However, a closer reading of her preliminary reports reveals that she was convinced of the validity of these subdivisions as representative of genuine cultural stages (Kenyon, 1956, 1960). Ultimately, her classification system stood the test of time and, for that reason, embodies perhaps her most enduring legacy in the Neolithic archaeology of Western Asia. Later research in the southern Levant concentrated on the refinement of Kenyon's scheme and the definition of regional "cultures" based mainly upon the investigation of lithic typologies (see also Table 2) (Crowfoot-Payne, 1983; Bar-Yosef, 1981, 1991; Rollefson, 1989; Gopher, 1996). Hence the PPNA was equated with the shift to blade-core reduction strategies, the PPNB became identified with its classic type-fossil, naviform blade technology, whilst the Pottery Neolithic saw the return of flake-based reduction strategies. Most studies of material culture that developed in this context devoted themselves to defining the regional cultural-historical sequences (Kuijt, 2000a, pp. 6–9; Kuijt & Goring-Morris, 2002 and references therein). A number of later lithic studies have also focused on the functional attributes of lithic assemblages and tool types in relation to subsistence strategies (Quintero & Wilke,

Table 2 Early Neolithic chronology and sites in the southern Levant

Supra-regional chronological horizons	PPNA regional "cultures"	Selected sites
PPNA (~10,500–9200)	Sultanian (S. Levant) (~9800–8800)	Abu Madi I, Ain Darat, Beit Ta'amir, Dhra', Ein Suhun?, Ein Suhun, El-Khiam, Gesher, Gilgal I, Hatoula, 'Iraq ed-Dubb, Jericho, Modi'in, Mujahiya?, Nacharini, Nahal Lavan 108, Nahal Oren II, Netiv Hagdud, Neve Ilan, Poleg 18M, Ramat Beit Shemesh?, Rekhes Shalmon, Sabra I, Salibiya IX, Tell Aswad IA, Tell Batashi, Wadi Faynan 16, Zahrat edh-Dhra' 2, Zur Nathan
EPPNB (~9200–8300)		Abu Hudhud, Abu Salem II, Ail 4, Horvat Galil?, Jilat 7 lower, Michmoret, Mujahiya?, Nahal Lavan 109, Nahal Boqer, Nahal Hemar 4?, Sefunim IV, Tell Aswad IB, Tel Ramad??
MPPNB (~8400–7500)		Abu Gosh, Ain Ghazal, Beidha, Beer Menuha, Ein Qadis I, Divshon, Er-Rahib (?), Es-Sifiya?, Gebel Rubshah, Ghwair I?, Jericho, Jilat 7 middle, Jilat 26, Jilat 32 lower, Horvat Galil, Kfar Giladi, Kfar HaHoresh, Khirbet Rabud??, Lavan Elyon 1, Munhata 4–6, Nahal Betzet I, Nahal Hemar 4, Nahal Nizzana IX, Nahal Oren I, Nahal Qetura, Nahal Re'uel, Sefunim, Tell Aswad IB-III?, Tell Fara North??, Tell Ramad ??, Wadi Shu'eib, Wadi Tbeik, Yiftahel
LPPNB-PPNC (~7500-6000)		Abu Gosh?, Ain Abu Nekheileh, Ain Ghazal, Ain al- Jammam, Ain Sabha, Al-Baseet, Al-Ghirka, Atlit Yam, Azraq 31, Baja (?), Basta, Beisamoun, Burqu 35, Dhuweila 1, Ein Qadis I?, Es-Sayyeh, Esh Shallaf, El- Hammeh, El-Khiam IB?, Es-Sifiya, Ghoraifé II, Ghwair I?, Hagoshrim, Jilat 7 upper?, Jilat 13 lower, Jilat 25, Jilat 27, Jilat 32 trench 1, Labweh, Kfar Hahoresh, Khirbet Hammam, Mazad Mazal, Munhata, Mushabi VI, Nahal Aqrav IV, Nahal Efe, Nahal Hemar 3, Nahal Issaron, Ras Shamra Vc1, Ras Shamra Vc2, Tell Eli, Tell Rakan I, Tell Ramad II, Ujrat el-Mehed, Ujrat Suleiman I, Wadi Jibba I, Wadi Jibba II, Wadi Shu'eib, Yiftahel IV

1995) and on the regional patterns of exploitation of obsidian sources (Chataigner, Poidevin, & Arnaud, 1998).

Constructing Neolithic culture-history: Cauvin's "révolution des symbols" and "polycentric" evolution

In the early 1990s the publication by Jacques Cauvin of his seminal work "Naissance des Divinités, Naissance de l'Agriculture" (Cauvin [1994] 2000) presented for the first time a unified narrative of the Neolithic of Western Asia that brought together diverse strands of fieldwork and research generated until then within various intellectual traditions: culturehistorical, functionalist and ecological-environmental. A detailed critique of his work is well outside the scope of this article (see Cauvin et al., 2001). It is sufficient for our purpose to draw attention to the fact that Cauvin's approach was firmly set within the culture-historical paradigm. Culture-history, originally propounded in Europe by Childe (1939), seeks in principle to identify material culture assemblages with particular ethnic groups, and views cultural change primarily as the result of demic diffusion, population displacements or interactions between discrete "cultures" (acculturation). In this respect, Cauvin's book consolidated the status of earlier formal classificatory approaches to material culture, especially lithic industries, as the principal tool for defining regional "cultures" that were equated with different human groups. Where Cauvin departed significantly from earlier work was in his stated aim to displace what he perceived as the then established environmental/positivist consensus in the Neolithic archaeology of Western Asia, by arguing instead for the primacy of culture over nature, culture being associated in this case with the mentality of a dominant group, the original bearers of the "PPNB culture". This approach enabled Cauvin to conceptualize the PPNB not simply as a chronostratigraphic marker or a collection of co-developing regional cultures but, more crucially, as a cultural system that was qualitatively different from both what preceded and what followed it. This PPNB "supra-culture" had a specific point of origin, its core area being the northern Levant, and its perceived internal dynamic was expansionist, eventually bringing into its sphere of influence several previously culturally "peripheral" or "marginal" areas. In this framework, almost every element of the material culture found regionwide (rectangular architecture, naviform lithic reduction technology, female figurines, animal iconography and symbolism, etc.) was removed from its local context and became, instead, an indicator of cultural affiliation within an ideational frame of supra-regional cultural unity.

Hence Neolithic material culture was dissociated from its attendant social and economic realities, and came to be viewed primarily as the representation of a dominant ideology, which, in turn, was taken to reflect fundamental changes in human mentalities that would eventually lead to the emergence of religious systems. Under this perspective, Cauvin viewed the development of agricultural economies as a secondary, albeit indispensable, corollary of this all-embracing cultural phenomenon. Despite evidence for the independent onset in different parts of the region of economic innovations such as plant cultivation (see Colledge, Conolly, & Shennan, 2004; Willcox, 2005) and for local variation in animal exploitation that presaged caprine domestication and its adoption across the region (see Horwitz, Tchernov, & Hongo, 1999; Peters, Helmer, von den Driesch, & Saña-Segui, 1999; Zeder, 1999; Wasse, 2001), these were effectively neutralized as potential challenges to his belief in the existence of a single centre of cultural origins.



In contrast to Cauvin's theories, we find approaches that have fostered actualistic and region-specific explanations of Neolithic cultural formations emphasizing regional diversity. These "polycentric models" have sought to replace earlier schemes of unilineal Neolithic cultural evolution with multilineal ones, positing that there was no single centre of cultural and economic innovations. They promote, instead, a view of Neolithic Western Asia as a fragmented world composed of distinct local cultures, which independently followed different trajectories (Gebel, 2002, 2004). This emphasis on regional diversity developed largely as a result of the ever-increasing volume of excavation and survey projects across the region that put into question the certainties of earlier schools of thought, such as the "Levantine primacy" school (Rollefson & Gebel, 2004), and was further bolstered by the continuous enrichment and refining of radiocarbon-dated sequences. The accumulation of new dates and the improvement of calibration curves revealed much finer distinctions in regional chronologies, and significantly less overlap than previously assumed among individual sites and groups of sites that, until then, had been considered to represent homogeneous cultural assemblages (Aurenche, Galet, Regagnon-Caroline, & Evin, 2001).

One could categorize as polycentric, for example, much of the research undertaken within Turkish Neolithic archaeology, which presents Neolithic Anatolia as a potential case of independent neolithization and emphasizes the enormous cultural diversity found in this region (Özdoğan, 1995). For central Anatolia, in particular such an approach was supported by the differences observed between the local Early Neolithic assemblages and the long-established culture-historical sequences of the Levant (Özdoğan, 2002). These differences led Turkish prehistorians to substitute the Levantine periodization in PPNA, E(early)PPNB, L(late)PPNB/C and PN (Pottery Neolithic) with a new central Anatolian terminology, identifying five main periods under the rubric of "Early Central Anatolian" (ECA) (Özbaşaran & Buitenhuis, 2002) (Table 3). The principal assumption behind this

Table 3 Periodization and associated excavated sites belonging to the ECA ("Early Central Anatolian") period

ECA periods (cal. BC)	Correlation with the Levantine PPN scheme	Excavated sites
ECA I (Younger Dryas-c.9000)	Epipalaeolithic, PPNA/ EPPNB	Pınarbaşı rock-shelter Epipalaeolithic burial and hearths (radiometric dates are forthcoming; Baird, 2003)
ECA II (~9000-late eighth millennium)	E/MPPNB-LPPNB	Pınarbaşı A (8540–8230, 3 dates), Aşıklı Höyük >(8210–7480, 47 dates; basal level 3 undated), Kaletepe (obsidian workshop: 8290–7960, 3 dates), Can Hasan III (7600–6650, 16 dates), Suberde (7460–6770, 5 dates), Musular (7480–7080, 7 dates), Çatalhöyük East (7400–6200, 122 dates)
ECA III 7000–6000	LPPNB-PPNC-LN	Çatalhöyük East, Suberde, Pınarbaşı B (6400–6230; 6070–5920, 2 dates), Erbaba (6690–6440, 1 date)
ECA IV (6000–5500)	Early Chalcolithic	Çatalhöyük West (base: 5990–5810, 4 dates), Can Hasan I (2B: 5710–5640, 4 dates), Köşk Höyük (5300–4720, dendro-dates, but contains stratigraphically earlier deposits)
ECA V (5500–4000)	Middle Chalcolithic	Can Hasan I (1: 5320–5070, 1 date), Güvercinkayası (5210–4850, 10 dates), Köşk Höyük, Kaletepe upper (4850–4590, 4 dates)

Source: Özbaşaran and Buitenhuis (2002); The CANeW Project, http://www.canew.org/data; all dates cal. BC quoted at  $1\sigma$ 



classification scheme is that the ECA was a distinct geographical and cultural entity, characterized by internal cultural continuity until the end of the Middle Chalcolithic (c. 4000 cal. BC).

In a critique of regionalist approaches in general, Gopher (1989, p. 102) has outlined a number of concerns about their analytical and theoretical limitations which seem to be particularly applicable to polycentric models. He has identified as potentially problematic the segmentation of the region in distinct cultural areas, which invariably results in the production of independent narratives of cultural change that may not necessarily take into account comparable developments elsewhere. In this way, any consideration of the potential contribution of diffusion processes to cultural change is effectively eschewed. In Gopher's view, the end result is the failure of regionalist approaches to appreciate the broader "cultural milieu" of technological and material change. A second area open to contestation is their arbitrary use of the concept of the "full sequence" (ibid.) resting on the presumption of continuity in the cultural and chronological sequences of individual sites and site assemblages, which is often not warranted by their stratigraphic records that may present a more complex picture of broken sequences and temporal and/or "cultural" discontinuities.

# The "Golden Triangle" of Kozlowski and Aurenche

Polycentric models are often based on such hypothetical reconstructions of local cultural continuity which they employ, implicitly or explicitly, in order to support assumptions of cultural independence. Although they ostensibly seek to undermine the theoretical agenda of diffusionist "core-periphery" models, in practice polycentric models often adopt almost identical analytical tools and interpretative theory. The latter comprises culture-history sometimes reinforced with elements borrowed from evolutionary, ecological-functionalist, landscape and, more rarely, social approaches. As a result, both diffusionist core-periphery and polycentric models are frequently restricted in their outcomes by similar, even if not always identical, interpretative constraints.

An example of such an approach is the synthesis recently published by Kozlowski and Aurenche (2005). Their principal argument is that there are discrete and clearly recognizable cultural/geographical entities in Western Asia during the Neolithic, which emerged independently of each other (Fig. 4). Further, they identified an area that was culturally dominant and more dynamic than its contemporaries in the south and east. It encompassed the central part of the Fertile Crescent, including north Syria and southeast Anatolia and excluding the ''marginal'' Neolithic cultures of southern Levant, and the western and central Zagros and their foothills. This area they have labelled the ''Golden Triangle'' (Kozlowski & Aurenche, 2005, p. 80) (Fig. 5). According to Kozlowski and Aurenche, it was

"in the Golden Triangle that the earliest *real* domestication took place ... that rectangular architecture developed *most dynamically* and where *structured villages* were established (including the so-called community buildings/sanctuaries)" (Kozlowski & Aurenche, 2005, p. 80; my emphasis).

During the MPPNB, the material impact of acculturation and/or colonization became first clearly visible in the southern Levant and later in the eastern territories, including the Mesopotamian lowlands but excluding the Zagros "where they replace the earlier techniques with cohabitation phases according to well known phenomena of acculturation" (Kozlowski & Aurenche, 2005, pp. 81–82). Still later, during the LPPNB and the PPNC,



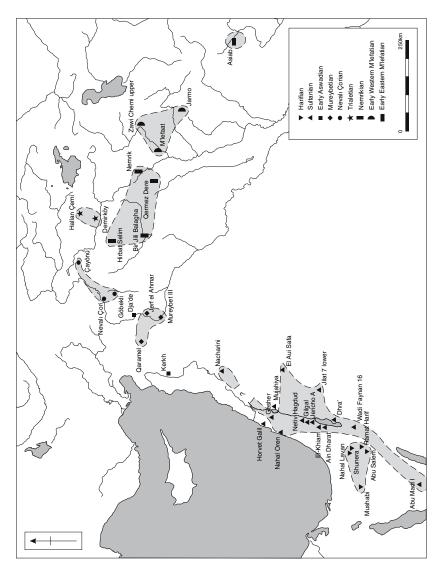


Fig. 4 Geographical distribution of cultural-territorial boundaries in Western Asia during the PPNA and the EPPNB based on lithic typologies (redrawn after Kozlowski & Aurenche, 2005)



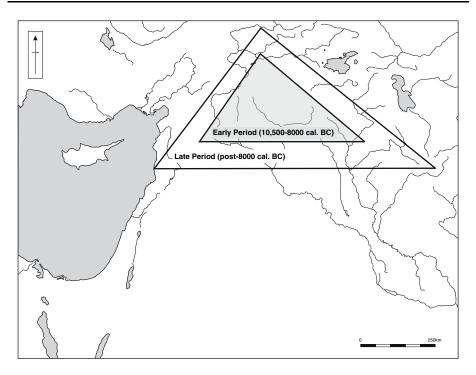


Fig. 5 The ''Golden Triangle'' in northern Syria, southeast Anatolia and the western Zagros (redrawn after Kozlowski & Aurenche, 2005)

the presumed more advanced cultures of the western wing of the Fertile Crescent (the northern and southern Levant) began to encroach into the east, particularly the desert:

"A combination of climatic optimum and cultural dynamism contributed to the *conquest* of these new lands" (Kozlowski & Aurenche, 2005, p. 81; my emphasis).

Kozlowski and Aurenche have taken their theoretical inspiration from the work of F. Barth, in order to support their contention that "there are discrete groups of people, i.e. *ethnic units*, to correspond to each culture" (2005, p. 11; my emphasis; see also Jones, 1997, esp. chapters 5 & 6). In turn, it is such "ethnic" boundaries that define a group. They propose territorial, rather than social boundaries as an appropriate target for empirical investigation, which is to be carried out following the methods of culture-history:

"The idea is to reveal "automatically" the existence of these cultures based on their territorial extension, each "territory" being defined by the boundaries which separate it from a neighbouring territory" (Kozlowski & Aurenche, 2005, p. 11; my emphasis).

Here, culture-historical concepts are elevated to an unprecedented level. On the positive side is the revision this approach brings to previously established concepts, such as the "Levantine primacy". However, several theoretically and archaeologically questionable parts of their argument such as the identification of a culturally superior area, and the presumption that early farming societies tend to conquer new territories, are couched in a language that differs little from the PPNB "expansionist ethos" of Cauvin, following earlier work conducted by the Lyon School, particularly Hours et al. (1994) (for a detailed



critique of the Lyon School culture-historical approach and its long-term impact on Near Eastern prehistoric research, see Delage, 2004).

# Social approaches and PPN diffusion

A number of comparatively recent studies in the Neolithic of Western Asia have concentrated on the identification and analysis of the social practices that structured the daily life and collective organization of Early Neolithic communities (Kuijt 1996, 2000a, b, c, 2002). Social approaches have a long and distinguished history in the Neolithic archaeology of the region, concentrating on diverse issues such as household structure and organization, social differentiation, competition and the negotiation of power (Flannery, 1972; Bender, 1978; Banning & Byrd, 1987, 1989; Hodder, 1990; Byrd, 1994; Hayden, 1995). Perhaps their most important contribution has been the breaking down of the artificial distinctions between site assemblages created by the culture-historical and regionalist schools of thought. This they do by focusing on the analysis of social processes, with an emphasis on human agency, which can be investigated through the comparative analysis of individual sites and groups of sites. Their main foci of analysis include ritual expression, household and kinship structure, kinship ideologies and practices in relation to subsistence and craft production, territoriality, group identity and social differentiation.

A trend in favour of anthropologically informed explanations is also latent in polycentric models (e.g. Gebel, 2002, 2004). However, polycentric models have proved more suitable for describing rather than explaining diversity. Several comparative studies of regional site assemblages based on social approaches have shown, for example, that important components of Early Neolithic lifestyles transcend archaeologically defined regional "cultures" and their formal chronostratigraphic facies. The recognition of this reality has in turn helped to define a number of core Neolithic social strategies that may lie behind similarities in material culture and symbolic expression, and which manifested in versatile ways across different geographical and cultural contexts (see contributions in Kuijt (2000a); other examples of similarly oriented theoretical and pragmatic, evidencebased approaches can be found in Rosenberg (1998), Wright (2000), Verhoeven (2002a, b, 2004), Hardy-Smith and Edwards (2004)).

Issues relating to the scale and scope of Early Neolithic social organization are particularly pertinent in exploring the likely causal factors of population dispersals. Settlement diffusion likely was a versatile process whose rate and geographical direction might have been controlled, at least in part, by processes of group fission in the (equally diverse) parent communities themselves. In turn, the causes of such phenomena could have more to do with emergent inter-societal tensions rather than a downright "expansionist ethos". In the case of the southern Levant, for example, it has been suggested that the social challenges of sedentism and attendant demographic shifts figured prominently among the concerns of the Early Neolithic communities, manifested in the domains of settlement organization and ritual expression (for general overviews, see Kuijt, 1996, 2000a; Kuijt & Goring-Morris, 2002). It is conceivable that such societal developments might not have represented a oneway road to success for every household and/or kin group. Despite the apparent status of mortuary rituals as socially sanctioned means for limiting nascent social inequalities, at the same time they fostered a measure of social differentiation (through the differential treatment of particular individuals and the codification of funerary tasks performed by ritual specialists) that prepared the ground for the emergence of ritual, civic and economic "elites" (Kuijt, 1996, 2000b, c, 2002; Goring-Morris, 2000). Thus they effectively



perpetuated a circle of egalitarian collective aspirations and actual social asymmetries. This is an observation particularly pertinent for the MPPNB of the southern Levant, where the socio-political role of funerary rites (involving skull removal and modification) performed by ritual specialists and observed by entire communities has been identified in the socially integrative function of such ceremonies and their associated elements of status differentiation (Kuijt, 2000c). In such socio-political contexts, group fission and emigration might have presented one available avenue for resolving tensions likely to have arisen from situations of increasing group size and resulting inter-/intra-household property and resource ownership disputes, claimed for this period (e.g. Bar-Yosef & Belfer Cohen, 1989, p.65; Byrd, 1994, 2000; Bar-Yosef and Meadow, 1995, p. 80; for ethnographic comparanda, see Sahlins, 1972, p. 98 and references therein).

In all probability, prehistorians will never find themselves in a fully qualified position to describe with concrete evidence the causes and workings of such postulated frictions among households, kin groups and/or nascent factions within Early Neolithic societies, or demonstrate beyond reasonable doubt the occurrence and degrees of territorial attitudes. Archaeological explanations invoking the study of settlement patterns, architecture and volumes of exchange are, for the most part, based on fragmentary records that more often than not do not provide the types of data and the chronological resolution required for reaching high-order interpretations of Neolithic social organization based on a sound empirical basis (see Hole, 2000). Yet, by comparing elements of the social systems found in notional areas of origins to those developed by migrant groups, we can at least begin probing into the nature and regional expressions of the diverse socio-economic processes lying behind Early Neolithic population dispersals. The thesis developed in this article is that Early Neolithic migrations maintained an historical dimension in that they were very likely commensurate with the nature, cosmologies, politics and limitations of the societies that gave rise to them. For this reason their study is useful not only with regard to specific local events and processes but, furthermore, as a compass for gaining meaningful insights into the structure and trajectories of Neolithic societies across the region. An additional benefit is that such an approach may be informative as regards the historical background of major socio-cultural shifts observed in later periods. It seems intrinsically plausible that these early and regionally diverse processes of community fission leading to group dispersals already contained in them the seeds of more radical socio-economic transformations that purportedly took place in the course of the LPPNB/C chronological horizon, and which are thought to have precipitated (underlined by other parameters, operating at a local scale, such as human-induced resource depletion and environmental/ecological change; see Rollefson & Köhler-Rollefson, 1989; Redman, 1999, pp. 121-122; Simmons, 2000) the eventual demise of Early Neolithic societies, their lifestyles, and patterns of collective organization and group co-operation.

# The "PPNB interaction sphere"

The varying levels of similarities observed among distinct regional "cultures" have been often interpreted as the consequence of "interaction spheres" (often conceptualized as trade networks) existing among otherwise independent cultural areas, which served as the main vehicle for cultural transmission across the region. Parameters used earlier to explain Neolithic cultural diversity such as population movements, migrations, and the PPNB cultural domination (as envisaged by Cauvin), were partly replaced by the elaboration of more nuanced interpretative tools such as the "PPNB interaction sphere". The latter was



originally proposed by Bar-Yosef and Belfer Cohen (1989) in order to define a broad-scale explanatory framework that could accommodate a number of similarities observed between different areas in lithic industries, architectural forms, subsistence practices and symbolic expression. One of their contentions is that during the PPNB chronological horizon exchange networks intensified, thus increasing the scope and opportunities for acculturation and regional cultural integration (Fig. 6)

Importantly, the original concept of the "PPNB interaction sphere" (Bar-Yosef & Belfer Cohen, 1989; Bar-Yosef, 2001b) contributed to models of acculturation a significant socio-economic dimension that overall has received little explicit commentary in the literature. By identifying a basic duality in the Levantine settlement patterns (with large village sites occupying the "core area" of the Mediterranean woodland zone and smaller forager sites being located in the arid and semi-arid areas of the southern Levant) it became possible to establish a genuinely socio-economic Neolithic core-periphery system, which was presumed to have been based on the manufacture and trade of "prestige goods", such as obsidian, copper ores, sea shells, bitumen, turquoise, and Dabba marble (Figs. 7). The directionality of such material and cultural exchanges was furthermore explicitly linked to the assumed superior dynamics of the sedentary village political economies. The Neolithic communities of cultivators and herders of the Levantine Corridor with their more advanced technologies and societal institutions were thus taken to represent the main forces that set the pace for region-wide social and economic developments such as plant cultivation, agropastoralism and, later, pottery use. This was seen as particularly relevant in the acculturation or colonization of less "developed", culturally "marginal" areas.

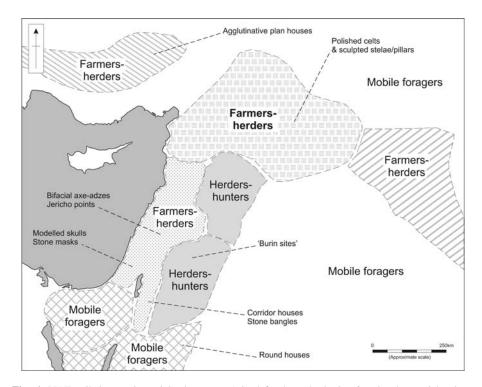
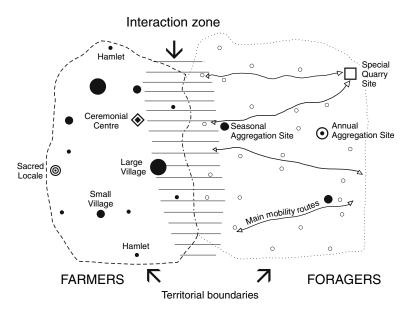
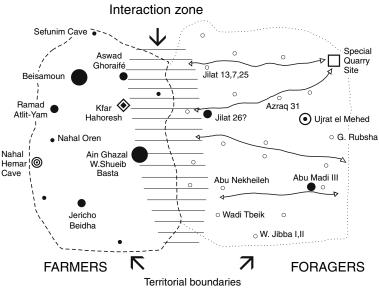


Fig. 6 PPNB tribal areas in mainland western Asia defined on the basis of regional material culture assemblages (redrawn after Bar-Yosef, 2002)







 $\begin{tabular}{ll} Fig.~7 & Core-periphery relations in the southern Levant: theoretical model (top) and actual site distribution (bottom) (redrawn after Bar-Yosef, 2001b) \\ \end{tabular}$ 

#### The case of obsidian circulation

As a concept, the PPNB interaction sphere usually lacks precise definitions of its intensity, tempo, social context(s) and the specific ways in which it might have materialized in the course of the Early Neolithic. This may be most readily examined in light of the circulation of obsidian, for which there exists much speculation as well as actual data.



Bar-Yosef and Belfer-Cohen (1989) and Bar-Yosef (1996) suggested that groups of hunters served as agents for the circulation of projectile points and the spread of lithic technologies across the region, in a pattern whose origins can be traced back to the longdistance movements and exchange practices of Epipalaeolithic hunting groups. Given the geographically limited distribution of obsidian suitable for efficient knapping (high-quality exploitable sources being confined to specific volcanic outcrops in central and eastern Anatolia), once it became valued it would have to be distributed in some way, be it "downthe-line" (Renfrew, Dixon, & Cann, 1966; Renfrew & Dixon, 1976) through hunters, itinerant craftsmen or community-bound part-time specialists (depending mainly, albeit not exclusively, on the distance of the habitation sites from the source areas). At the same time, several probable social occasions for exchange have been proposed, such as marriage exchanges, interactions between hunters, and gift exchange (Bar-Yosef, 1996, 2001b; Bar-Yosef & Belfer Cohen, 1989).

One could argue here that the communities of sedentary cultivator-herders are likely to have operated within socio-economic contexts that were somewhat different from those of Epipaleolithic hunter-gatherer groups. However, the main theoretical weakness of the model can be found in its substitution of an operative process (obsidian circulation) for the social process driving cultural change, thus transforming Early Neolithic socio-economic structures through "trade". Obsidian circulation per se stands for an operative process that cannot, on its own, offer an adequate explanatory framework for the commonalities (and their region-specific manifestations) observed in the social, economic and cultural realms of PPNB communities across the Fertile Crescent. Other variants of the concept of the "PPNB interaction sphere", such as the peer-polity or networking model proposed by (Watkins, 2003) also seem to be unconvincing in this respect. In particular, the projection onto the Neolithic of consumption and cultural emulation models inspired from later complex societies ultimately begs the question of the social context(s), scale and tempo of Neolithic exchange, and how such behaviours were organized, sustained, socially sanctioned and mediated by Early Neolithic communities.

Overall, there has been little explicit discussion in the literature of the social context(s) of obsidian circulation in the Early Neolithic. One possible explanation for this might be that artefacts fashioned in obsidian are often considered as an ipso facto proof of trade, given the distance of most sites, especially those in the Levant, from the raw material sources at volcanic sites in central and eastern Anatolia. However, where comprehensive comparative analyses of the areal/regional distribution, the quantities and the site-specific typologies of obsidian have been undertaken, their results have painted a picture that is rather more complex than simply projecting increasing volumes of obsidian "trade" across the region during the Early Neolithic. In their overview of the status of obsidian distribution in Neolithic Western Asia, Cauvin and Chataigner (1998) have argued that during the Epipalaeolithic and the PPNA the principal mode of obsidian circulation appears to conform closely to a classic "down-the-line" exchange pattern. The quantities of material reaching sites far away from the sources were minimal, and were probably circulated as "prestige" or "gift" goods. With the exception of Hallan Çemi (intensively exploiting the eastern Anatolian quarries of Bingöl-Nemrut Dağ) most of the sites known from this period contain less than 5% of obsidian in their lithic assemblages. The same authors have also questioned the hypothesis that southern Levantine sites such as Jericho might have operated as obsidian redistribution centres by pointing out a series of issues that must be addressed before such interpretations can be accepted. These include the degree of comparability among different archaeological sites, the intensity and longevity of habitation, the size of the sampled deposits and the collection of data pertaining to their respective Springer



chaînes opératoires. Cauvin and Chataigner (1998) expand upon this point with the example of Hallan Çemi in eastern Anatolia, where the full chaîne opératoire occurred, thus indicating that obsidian reduction was geared towards items destined for local consumption and not for redistribution elsewhere via an organized trade network. On the other hand, obsidian made up only 8% of the lithic assemblage from Demirci Höyük, another early habitation site located very close to Hallan Çemi in the valley of the Batman Su, thus indicating that proximity to the sources was not the sole factor dictating the selection of raw material.

In the EPPNB and the MPPNB the sole tangible difference in patterns of obsidian procurement compared to earlier periods is seen in sites located nearer to the raw material sources. Cauvin and Chataigner (1998) have drawn attention to the fact that in both central (Aşıklı) and eastern Anatolia (Papazgölü, Kötekan, Cinaz) the sites that were located near the volcanic massifs had very high densities of obsidian (c. 90–100%). Further away, although still within the 300 km procurement zone, obsidian ( $\sim 50\%$ ) was used alongside high-quality locally available flints at Çayönü, Cafer Höyük and Boytepe. Outside the 300 km zone, however, obsidian remained an "exotic" material. Artefacts are generally smaller and tools are rare. The exception of Nahal Lavan, situated in the southern Levant more than 800 km from Cappadocia, becomes less exceptional if one considers the actual weight of the material recovered from this site was only 452 g amounting to a core and a small quantity of blade products. Similarly, in the middle Euphrates and the Damascus region, the quantity of obsidian is very low. Here too there are some indications of in situ reduction at Abu Hureyra, Mureybet and Tell Aswad. In keeping with the pattern identified for earlier periods, there is still no evidence to suggest that Anatolian sites acted as redistribution centres or acquisition points, since complete chaînes opératoires occur at these sites. Nonetheless, at Nemrik, Ali Kosh and, indeed, in much of the Zagros, obsidian appears in the form of both cores and preforms, which might suggest more substantial procurement of this "exotic" material, while it was used locally for blade production.

Where Cauvin and Chataigner (1998) have departed substantially from other assessments of Neolithic obsidian trade is in their appreciation of the developments that took place in the LPPNB chronological horizon. There they distinguish what they have termed "communities of attitude towards obsidian" (Cauvin & Chataigner, 1998, p. 337). In central Anatolia, for example, obsidian is the principal source of lithic raw material irrespective of the distance of sites from the sources. In Cyprus and the coastal zone of the Levant, on the other hand, it constitutes less than <3% of the knapped stone assemblages (but see Sevketoglu, 2002). In the middle Euphrates and the Balikh valley obsidian ranges between 3% and 8%. At the same time, other sites that are located much closer to the source areas (e.g. Gritille, Hayaz Höyük) have some of the lowest obsidian frequencies found region-wide. Drawing from these observations, they have concluded that the intensity of obsidian procurement and consumption did not depend exclusively, or even primarily, on the distance of habitation sites from the sources (as implied by Renfrew's "down-the-line" exchange model), but instead seems to have been mainly a function of local needs (availability of sources of high-quality flint, their amenability to exploitation and control, and community preferences).

Production patterns offer further useful insights as regards the mechanisms of obsidian 'trade', or rather its absence, if by 'trade' one means intensive and temporally stable, long-range exchange networks. As noted already, in central Anatolia (Cappadocia and the Konya plain) lithic production was geared towards satisfying local needs, in that all stages of the *chaînes opératoires* are present. In the middle Euphrates and the coastal zone, the presence of low frequencies of both cores and debitage also points to local production.



The widespread variability seen in tool types appears likewise to reflect localized production and consumption, with different tool types predominating in the middle Euphrates and the Balikh valley, the coastal zone and the Damascus region, the Khabur basin, Jarmo and Deh Luran, whereas virtually no tools have been found in sites such as Ras Shamra, Ramad and Beisamoun (Cauvin & Chataigner, 1998, pp. 337–338).

Such an assessment of what in the literature is often presented under the generic label of "obsidian trade", is an example of a contextual approach that is based upon an understanding of obsidian procurement and consumption in their totality: as social phenomena (for a recent example of lithic analysis with similar theoretical orientation, see Carter, Conolly, & Spasojević, 2005). This is in contrast to distinctly typological and classificatory approaches which have the more limited goal of tracing the distribution of particular tool or arrowhead types in order to delineate hypothetical territories of past cultural or "ethnic" territories (for a discussion of such examples of lithic analyses from the southern Levant, see Kuijt & Goring-Morris, 2002 and references therein).

#### The convergence of culture-historical and social approaches

One prehistorian working in the southern Levant who has pursued both culture-historical and social approaches to the study of the Neolithic is Ofer Bar-Yosef. Although Bar-Yosef is one of the pioneers of culture-historical classifications resulting in the construction of areal and regional lithic typologies, a constant interplay in emphasis between culturehistorical and socio-economic interpretations has always been explicit and prominent in his work (Bar-Yosef, 2002; Bar-Yosef & Belfer Cohen, 2002; Bar-Yosef & Meadow, 1995). In a relatively recent paper, discussing inter alia the question of separating Neolithic "cultures", Bar-Yosef (2001b) identified two types of theoretical approaches appropriate for this purpose: (a) ecological-functionalist accepting that cultural choices can be best understood as responses to environmental and ecological determinants, and (b) culturehistorical accepting, instead, that stylistic attributes correspond to group identity signatures, hence equating style with "ethnicity" in the broadest possible sense of the term. Henry (1995) offers an example of a similar approach to the prehistory of the southern Levant. Bar-Yosef's conclusion was that although ecological parameters very likely maintained a significant degree of influence on human decision-making, culture-history offers a much more appropriate framework for an archaeological understanding of past cultures and cultural change:

"In essence, the definition of a "prehistoric culture" is similar to that employed by Childe (1926), amended by Clark (1968), and in common use in Near Eastern archaeology (e.g. Gebel & Kozlowski 1994, Levy 1995)" (Bar-Yosef, 2001b, p. 438; references therein).

A certain antithesis to his earlier work (Bar-Yosef & Belfer-Cohen, 1989) where he had based the concept of the "PPNB interaction sphere" on notions of *social* commonalities (such as community organization, the development of shared societal institutions, religion, burial customs, etc.) is evident. Yet, more often than not, he has merged the two approaches into a creative original synthesis of culture-historical attribution of particular material culture traits to discrete groups and communities with social perspectives that identify their territories as areas of shared social practices. This is evident, for example, in his maps depicting "tribal" territories, which themselves evoke regional subdivisions of the "PPNB interaction sphere" (Fig. 6).



It cannot thus have escaped the reader's attention that facets of both culture-historical and social approaches keep resurfacing in the published work of scholars who might otherwise be considered as representative of antithetical theoretical schools. In part, this is due to the predominance in Near Eastern Neolithic archaeology, frequently at the expense of theoretical reflection, of problem-oriented research, largely targeted at reconstructing the origins, development and spread of several important changes in material culture and subsistence production that took place at a crucial threshold in human prehistory. The origins and spread of the Neolithic mode of production have rightly achieved such prominence. There have been varying approaches to issues of economic and cultural change in Neolithic Western Asia, and a corresponding body of literature so vast that it cannot be reviewed in detail here. Instead, what I would like to emphasize is that most of these approaches have in common certain recurring theoretical concepts: Neolithic "trade", the PPNB "expansionist ethos" and the related notions of socio-political, cultural and economic domination that are implicit to the "PPNB interaction sphere", linked concepts of "ethnicity" and culture-history used to support the existence of multiple centres in the Neolithic, and a distinct preference for ecological-environmental and/or demographic explanations in order to interpret changes in "subsistence" and economy. Another reason for this theoretical convergence is the analytical importance that many of the scholars whose work has been discussed thus far ascribe to the culture-historical paradigm for defining and interpreting Neolithic "cultures". An impartial observer cannot but recognize the cardinal influence that the culture-historical paradigm has exercised and still exercises within the Neolithic archaeology of Western Asia.

Towards an alternative theoretical framework for social archaeology in the Neolithic of Western Asia

The preceding survey of currently established concepts helps us to identify one question that is crucial to the direction and aims of the archaeological debate. What might be an appropriate unifying framework that would permit the historically informative analysis of Early Neolithic societies without succumbing to the theoretical restrictions of either abstractly defined regional interconnections or extreme localism? I suggest that a socialhistorical perspective moves beyond traditional archaeological concerns examined largely in isolation from each other (such as, for example, symbolism or "trade" or subsistence) towards a more inclusive narrative of Neolithic "life patterns". How much do we actually understand the Early Neolithic societies of the Near East? Here, I would like to reiterate Kuijt's observation (2000a, pp. 311–320) that there is one aspect of the Early Neolithic that has received limited attention and theoretical development, especially compared to the growing body of literature on trade, production, settlement patterns and ritual/symbolism. This aspect is the nature of Early Neolithic social complexity and, more specifically, the emergence and development of heterarchical systems of social organization based on the differentiation of social, ritual and economic roles at the community level. It has become customary to refer to an abstractly defined concept of "egalitarian societies", as opposed to "hierarchical" ones, and to describe Neolithic social organization as "egalitarian". This may be because Neolithic social complexity is one that "we can hardly apprehend for lack of reference models" (Perlès, 2001, p. 305). Perlès was referring to models that might approximate the unique nature of the Neolithic worldview, one that was arguably very different from our own perceptions (significantly affected by ethnographic research) of "traditional" peasant societies, which are themselves the product of various historical and



cultural trajectories. At another level, however, a sustained social approach cannot limit its scope to re-arranging or expanding extant taxonomies of archaeological "cultures", economies and socio-political structures. Instead, it should aim at describing them in historically meaningful ways, as lived realities (following Boyd, 2004). One of the purposes of archaeological practice is to produce meaningful knowledge about past societies, moving, as Dietler aptly phrased it, "beyond mechanistic structural correlations, vague pronouncements about overdetermined social processes, and sweeping evolutionary teleologies" (Dietler, 2001, p. 66).

There have been important advances in this direction, especially as regards Neolithic social complexity (Kuijt, 2000a and references therein). However, there is still much to be done to develop appropriate analytical methodologies and to make available comparative material from different geographical areas. As many scholars have already argued (see contributions in Kuijt (2000a)) this absence of theoretical and analytical tools can be remedied by paying sustained attention to the reconstruction of Neolithic group, household, and gender identities, the local and regional strategies of socialization, and their transformations across space and time. In the remainder of this article I will attempt to demonstrate that a sustained social approach, at least to the investigation of collective and group identities, entails some important reassessments of currently dominant theoretical concepts. This applies particularly to the "PPNB interaction sphere" and, thereby, the nature and social context of Early Neolithic exchange. I will also argue that this reassessment may contribute towards a more productive view of the unfolding of similarities and differences in Neolithic material culture across the region. Such a view represents a departure from the arguments developed within a predominantly culturehistorical framework.

# Socio-cultural dynamics of the PPNB world: revisiting diffusion and the PPNB interaction sphere

Diffusion, acculturation or supra-regional interaction? The "neolithization" of southeastern and central Anatolia

One of the more fascinating and criticized aspects of Cauvin's narrative has been his description of the process of PPNB diffusion from its postulated homeland in the northern Levant. After excluding environmental, economic and demographic factors, Cauvin put together an eloquent argument combining different strands of evidence to demonstrate that the onset of Neolithic diffusion owed its internal dynamic to an overtly "expansionist ethos", as did also the PPNB culture itself. The factual weaknesses of his argument concerning the south-central Levant have been noted (Rollefson, 2001; Wright, 2001). Apart from the Levant, the assertion of an "expansionist ethos" as the catalyst for the neolithization of Anatolia is also problematical. According to Cauvin, "the PPNB of the Taurus appears from its beginning as [a] mixed culture; ... it demonstrates the acculturation of a local cultural background by a dominant, expansionist culture" (Cauvin, 2000, p. 89; my emphasis). The alternative proposition, that southeastern Anatolia, eastern Anatolia (Hallan Çemi), the northern Levant and northern Iraq (Qermez Dere, Nemrik) were a single cultural and language area (Stordeur, 2003), seems equally problematic. There is certainly evidence for contacts between these areas (Stordeur, 2003), but it is worth noting that several sites in southeastern and eastern Anatolia (Hallan Çemi, Çayönü, Cafer Höyük, Gritille) have given indications of a different subsistence base from the middle Euphrates.



The Anatolian sites have greater emphasis on pulses during their earlier phases, while the middle Euphrates sites emphasized cereals. This suggests that pulse gathering and/or cultivation might be an ecological or cultural marker separating Anatolia and the Levant during this period (Asouti & Fairbairn, 2002, p. 182, note 6). Early sites in the Zagros area show a similar emphasis on pulses (Nesbitt, 1998; Watkins et al., 1991; Savard et al., 2003). This matches the available evidence for similarities in symbolism and iconography between southeastern Anatolia and the Zagros. In addition, southeastern Anatolia, unlike the northern Levant, shows an emphasis on monumentality, manifested in the enormous sculpted pillars and free-standing figures associated with public or mortuary ritual buildings (Hauptmann, 1999; Özdoğan, 1999; Çelik, 2000; Schmidt, 2000).

In sum, the available evidence indicates that socio-cultural developments within southeastern and eastern Anatolia and the Zagros were more complex than anticipated by theories of assimilation or common cultural (and ethnic?) descent. The origins of these developments can, to some extent, be traced back to the local Epipaleolithic (Peasnall, 2000). It is also more likely that they occurred within the context of complex, multilayered, socio-cultural interactions between indigenous and Levantine elements during the Early Neolithic, rather than resulting from the assimilation of local groups by culturally "superior" PPNB settlers from the Euphrates. This interpretation is also consonant with the distribution of early, radiocarbon-dated sites across the northern Levant, southeastern and eastern Anatolia, and the Zagros (Fig. 8). This distribution is very equivocal about the cultural prominence of any particular area. In the middle Euphrates, similar arguments are made about Mureybet, which was set in the heart of what Cauvin believed to be the "true cradle" of the PPNB culture (Cauvin, 2000, p. 81).

Cauvin's second area of PPNB "expansion" relates to the appearance of large sedentary tell sites in central Anatolia, in the period corresponding to the MPPNB, and, specifically, to the founding of Aşıklı. Here, the case for colonization seems to be fairly secure. Aşıklı is the earliest large sedentary tell site known in Cappadocia. Its attribution to Early Neolithic colonists rests primarily on: (a) the presence of rectangular architecture and a fully developed settlement plan from the earliest levels of the site (Esin & Harmankaya, 1999); (b) the occurrence of a well-developed agricultural package of introduced domesticated plants (Asouti & Fairbairn, 2002) and (c) its co-existence with animal herding. The last may have been practised on local wild sheep, but there is no evidence that it was an in situ development (Martin, Russell, & Carruthers, 2002).

It is noteworthy that Cauvin was intrigued by the lack of clear cultural-historical parallels between the material culture of Aşıklı, particularly its lithics, and that of the Levant or southeastern Anatolia (Cauvin, 2000, pp. 91–92). What Cauvin could not have known back then is that, as evidenced from research and excavations conducted over the last 5 years, Early Neolithic sedentism can no longer be considered as an imported development in central Anatolia (Baird, 2006), although importation still remains the case for plant cultivation and animal herding (Asouti, 2005). It is therefore likely that (as in the case of southeast Anatolia) there were far more complex processes of population movements and cultural interactions than those envisaged by Cauvin's diffusionist "PPNB expansion". This lack of formal similarities, especially for exogenous features such as the naviform reduction technology, might further indicate the isolation of the earliest immigrant group from its point(s) of origins, resulting from the establishment of a self-sufficient economy and of a distinct local identity for the community. Evidence for such a process may be found in the clearly domestic character of obsidian reduction at Aşıklı and the complete lack of interaction with the highly specialized itinerant knappers who came to the Kaletepe



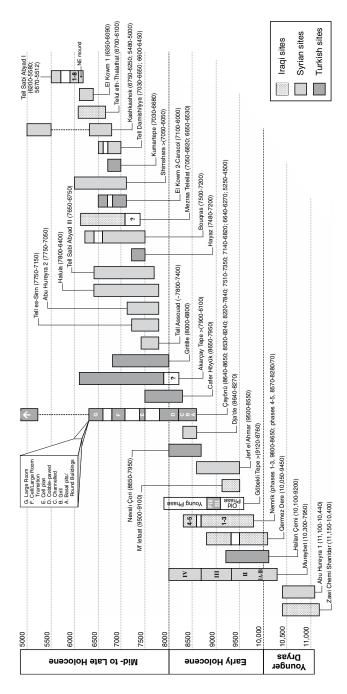


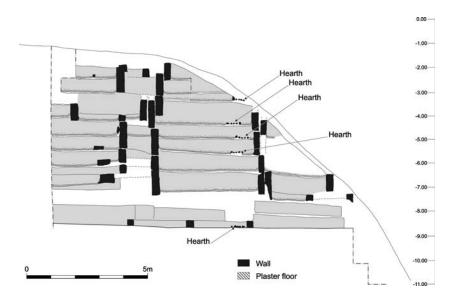
Fig. 8 Chart of radiocarbon dates for Neolithic sites in northern Syria, southeast Anatolia and the Zagros (redrawn based on the data available in the "CANeW Upper Mesopotamia C-14 chart" of the CANeW Project; see http://canew.org and http://canew.org/download.html)



obsidian workshops on a seasonal basis (Abbès, Atlı, Binder, & Cauvin, 1999; Binder, 2002).

Another pertinent question here is that of the motivation behind the early colonization of Cappadocia. Aşıklı is near the Göllü Dağ obsidian sources, which had been prized across the Levant since the Epipaleolithic. Its strategic location would seem consonant with a desire to control access to this highly esteemed raw material. However, the archaeological evidence shows that Aşıklı was largely closed to the outside "world" of the Levant, Cyprus and southeastern Anatolia (see below). This implies that control over the pan-regional distribution of obsidian was not a high priority of the local community at that time. The gradual closing up of the Cappadocian obsidian sources from the eighth millennium BC to northern Levantine exploitation and its re-direction to east Anatolia were developments broadly concurrent with the consolidation of sedentary habitation in central Anatolia (Binder, 2002; Abbès et al., 2003) and underscore further the gradual appropriation of the local resources by and for the benefit of central Anatolian Neolithic communities. Aşıklı itself may be seen as a self-sufficient and conservative segmentary (lineage) society (as indicated by the remarkable degree of long-term continuity in building layouts and the use of built space; see Esin & Harmankaya, 1999) (Fig. 9) that probably diverted most of its efforts and resources to the sustenance of its domestic economy.

For these reasons it would seem inappropriate to perceive the colonization of Cappadocia as "expansive". Furthermore, Aşıklı presents us with a pattern that is far removed from the expectations of models centred on the concept of the "PPNB interaction sphere". If the latter represented the main avenue for socio-cultural interaction based on trade, this is least apparent at Aşıklı which seems to have deliberately ignored all the potential benefits its location offered in this respect. One might argue, instead, that it demonstrates the absence of substantial long-range contacts. This hypothesis is further reinforced by the fact that exchange of "exotics" remained very low-level throughout the lifetime of the site. The sole (imported?) item reported thus far from Aşıklı is an engraved stone plaque



**Fig. 9** The stratigraphy in section of the deep sounding in Aşıklı showing the degree of continuity between building levels, building plans and the location of hearths (redrawn after Esin & Harmankaya, 1999)



that has parallels to similar finds from Jerf el Ahmar (Esin & Harmankaya, 1999, p. 128 & Fig. 22). The analysis of beads has also indicated that in all cases locally available raw materials were used (Esin, 1995; Esin & Harmankaya, 1999). It seems likely therefore that the Early Neolithic settlers of Aşıklı opted for a pattern of bounded territoriality, which they adapted successfully to the local conditions. They did not seek active and sustained participation in a supra-regional interaction sphere, even though they were in a position to do so by virtue of living near the obsidian sources. Possible reasons for this may include a lack of socio-economic resources and motivation for the maintenance of long-range contact networks at this scale. In addition, any latent tendencies of this kind might have been offset by the requirement to sustain the internal societal balance of the community. Resources (both economic and social) were largely invested within the local community, the main concern likely being its securing and reproduction.

It is not inconceivable that considerable material and non-material investment went towards the maintenance of such a social system. The evidence available thus far on the function and layout of non-residential buildings at Aşıklı indicates that they were probably not reserved for the use of ritual practitioners or (hereditary?) leaders, but might instead have formed loci used inter alia for feasting (which in turn might have been a socially accepted means for re-affirming community integration). Non-domestic structures like the T building and its adjacent structure HV (Esin & Harmankaya, 1999, p. 124 & Figs. 3, 13–14), albeit *conceptually* linked to southeast Anatolian prototypes, very likely performed very different functions. Although the excavators of the site have suggested their use as residences of community leaders, alternative readings of the evidence are feasible (such as part of a public cooking, feasting and/or processing area situated in isolation from the main residential areas). The large domed mudbrick oven found inside space HG, adjacent to the T building (Esin & Harmankaya, 1999, p. 124) (Fig. 10) and representing probably a substantial cooking installation, is indicative of large-scale cooking and feasting events. Another complex of structures with red plastered floors and some evidence for the existence of dedicated storage areas (post-dating the T building) was recovered at the northwest sector of the excavated area (Esin & Harmankaya, 1999, pp. 125-126 & Fig. 3). It



Fig. 10 View of Building T in Aşıklı showing the location of the large domed oven adjacent to it, in space HV (modified after Esin & Harmankaya, 1999)



should be noted, however, that all these structures (despite their size and meticulous construction) probably did not constitute permanent features of the settlement as a whole, but seem to be attested only in its later phases (i.e. the upper phases of Level 2). Still, the monumental ramp-like paved road separating the T building area from the rest of the settlement likely represents a long-lived feature of the site (Esin & Harmankaya, 1999, pp. 123–124). The full publication of the finds from these structures, including bone and plant remains, will elucidate their possible functions. No evidence has been produced for the association of the T building (or any other space) with mortuary practices similar to the PPNB mortuary practices known from southeast Anatolia and the Levant.

# The "PPNB interaction sphere": a contextual view

The apparent diversity and complexity of the neolithization process in southeast and central Anatolia bring into question a number of concepts that have dominated current interpretations of the dynamics of Early Neolithic societies in Western Asia. As noted earlier, the PPNB interaction sphere has been broadly defined as a supra-regional network of contacts focusing on the procurement and circulation of raw materials, and on sociopolitical/ritual interaction among Early Neolithic communities (Bar-Yosef & Belfer-Cohen, 1989). Yet, at the same time, there has been little concrete argument to support the proposition that outward similarities in architectural forms, economic practices and ritual practices necessarily translated in important social, economic and political inter-regional links and relations as some have suggested (e.g. Kuijt & Goring-Morris, 2002, p. 428). A number of similarities are certainly noticeable between the southern Levant, the middle Euphrates and Anatolia, but even more so are their differences (see Hole, 2000; Asouti, 2005). This is not to deny the existence of contacts, clearly demonstrated by the movement of people, material culture items and ideas among different communities and areas. The issue is rather to describe in more concrete terms their nature and context(s) instead of merely invoking a range of (abstractly defined) effects they presumably had on Early Neolithic cultural formations. How can a "PPNB interaction sphere" be perceived? In ethnographic terms as a collection of pre-modern agricultural "village" societies, in modern terms as a cultural entity shaped by "contacts", "mobility" or "sedentism", "trade", and "hierarchies" (interpersonal, political, socio-economic or ritual), or as something that was, perhaps, altogether different in content as well as in scale?

I would like to suggest here that (in the absence of political entities such as, for example, states) the material, social and symbolic resources available to Early Neolithic communities were mobilized across regional and areal boundaries in response to specific socio-political agendas whose overriding concern remained the survival, maintenance of cohesion, and reproduction of individual communities and group identities. This is to be expected during a period that saw major restructurings of economic and societal practices and relations; at this time many of the constituent elements of early food-producing societies (e.g. their economic basis) were being established gradually in diverse environmental settings and ecological contexts. Unfortunately, few excavated sites have yet provided the diversity and resolution of datasets that are required for a plausible reconstruction of the social structure, spatio-temporal transformations and diverse local manifestations of the Early Neolithic "village" as a social unit.

The central position awarded to group identity formation and the socialization of individuals in the life of Early Neolithic communities is borne out by the role reserved for material culture in this process. Studies of south Levantine beads have demonstrated, for



example, that the procurement and manipulation of local and "exotic" materials alike were not focused on the production of trade items sensu stricto. Instead, they generated objects that formed active ingredients in rituals and practices directly associated with the definition of group and gender identities (Wright & Garrard, 2003). Furthermore, evidence on the distribution of types, and the densities of beads and bead-production debris indicates that production was small-scale and took place at the household level, while exchange was also small-scale (ibid.). A contextual case has also been made for the prominent role of zoomorphic clay figurines as constituent parts "in performative acts which established symbolic equivalence between resources regularly mobilized in social exchange" in the context of negotiating and consolidating local and regional (kinship-based?) alliances (Wengrow, 2003, p. 153–154). Furthermore, with regard to the circulation of more utilitarian objects, such as the products of the naviform reduction technologies, the case can also be made against their perception as items of an organized regional "trade": in their majority raw materials were procured directly from the sources and reduced by groups and/ or individual knappers engaging in part-time, community-bound craft specialization (Quintero & Wilke, 1995; for a discussion of the potential symbolic values of lithics, see Goring-Morris & Belfer-Cohen, 2001).

Such evidence for the highly contextualized role of material culture within Early Neolithic societies runs counter to its conceptualization as a field of opportunistic interactions between communities seeking to buy into networks that circulated mainly "desirable" and/or "prestige" novelties in a quasi-entrepreneurial fashion (contra Watkins, 2003). It is something of an anachronism to espouse a modernist view of Neolithic material culture and to separate it from its local and regional contexts of production and consumption. It seems likely, instead, that such material items were invested with multiple layers of local meanings, kinship relations and stories of individual/group quests that formed the fabric of socialization rituals, cosmologies and mythologies of origins embraced by each community, and which could have been shared, to varying degrees, within and between different areas. Such a perception renders possible a definition of Early Neolithic exchange (following anthropological research among non-state societies) as a social reality that "combined many aspects of social practice and numerous institutions characteristic of the society" hence enabling "the society to represent itself (to others and to itself) as a whole" (Godelier, 1999, p. 40). It is such a perspective on the likely social dimensions of Early Neolithic exchange which leads me to argue here that viewing the PPNB predominantly as an "interaction sphere" based on generic and largely undertheorized notions of prehistoric trade, is misleading. In this sense, the PPNB of Western Asia very probably constituted a recognizable world but not a world system.

Any attempt to reconstitute this "world" has to accept the fact that, in this case, archaeologists might feel they have reached the limits of plausible interpretation: ethnographic research has little to offer that might help us comprehend the socio-economic environments and networks of relationships comprising Early Neolithic social landscapes (Perlès, 2001, p. 305). A starting point for theory building that might eventually allow us to push the limits of our knowledge further is the economic basis of Early Neolithic societies. A great deal is known about food staples, processes of domestication and their attendant symbolic and ritual domains (see Verhoeven, 2004) but still very little about the social contexts in which foodstuffs were produced, processed, consumed, circulated and valued. Seeds and bones, like material culture, have often been used in the quest to identify areas of origins and, implicitly, centres of cultural ascendancy in the process of neolithization (Asouti & Fairbairn, 2007). Much less pragmatic research has been dedicated to exploring the social impacts of changes in food production strategies, especially with regard to the Springer

restructuring of the ownership and management of land resources and thus gender, family and kin relations (Asouti, 2004). Regional syntheses of Early Neolithic archaeobotanical and archaeozoological data are more often than not preoccupied with questions of domestication (Asouti, 2004; Bogaard, 2005). In addition, once one has moved away from the level of the site, where the requisite attention to systematic sampling and the recording of contextual associations are feasible, the resolution of the record becomes too coarse to allow us to disengage from broad-scale explanations ("origins of agriculture", or "neolithization"). This is a point that can be applied to the study of material culture as well as that of prehistoric economies. I would summarize a desirable research agenda as follows: reconsideration of long-established interpretative models (including "trade" and "exchange") on the basis of appropriately designed material culture research programs; systematic acquisition of contextualized site datasets suitable for this purpose; production of synthetic narratives that can achieve detailed comparisons between different sites and areas and plausible accounts of Neolithic agency, without being unduly constrained by discourses of "origins" or the theoretical/interpretative limitations of ethnography.

## Neolithic society, migrations and the negotiation of group identities

In the following sections I will attempt to show how it might be possible to apply different perspectives to certain categories of evidence traditionally used to support interpretations inspired from the tenets of culture-history. In the context of Near Eastern Neolithic archaeology, migrations (or demic diffusion) represent the field of culture-historical approaches par excellence. Material culture assemblages, ritual practices and architecture have all been used in an attempt to identify the "origins" of particular ethnic groups and cultural practices. This discussion will also serve as a vehicle for redefining the concept of the "PPNB interaction sphere" by examining it against specific geographical, economic and socio-cultural contexts. The descriptions that follow concentrate on two of the more celebrated case studies in the Neolithic archaeology of Western Asia, the large tell site of Çatalhöyük in the Konya plain of central Anatolia and the PPN colonization of Cyprus. Both Çatalhöyük (corresponding to the chronological horizon of the LPPNB-Early Ceramic Neolithic (see Table 3) and the much earlier PPNB of Cyprus (Table 4) have provided evidence that the establishment of Neolithic sedentary habitation in these areas very likely depended on the mobilization and intensification of contact networks (Asouti, 2005; Peltenburg, 2004a). The discussion that follows is not intended to offer a full and exhaustive account of the bodies of evidence associated with each case study, but rather to outline some of their aspects that may illuminate the debate and demonstrate the potential that exists for alternative interpretations.

**Table 4** The chronological context of the Cypro-PPNB

Chronological/cultural horizon	Dates (cal. BC)
Akrotiri	~9703
Cypro-EPPNB	?-8100
Cypro-MPPNB	8100–7500
Cypro-LPPNB	7500–7000
Khirokitian Aceramic	7000/6500–5800/5500

Source: Peltenburg (2004b, p. 72)

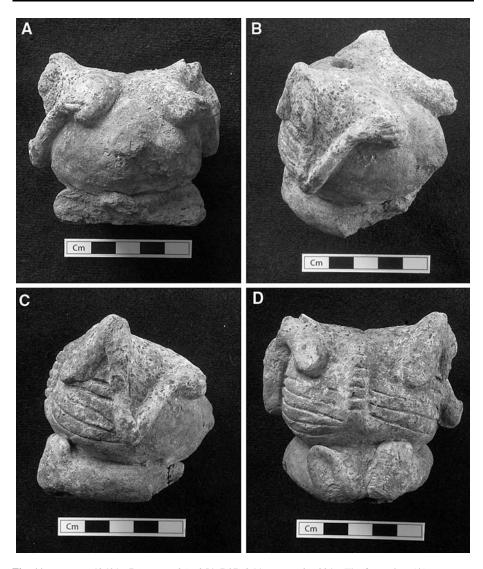


## Çatalhöyük

As noted above, the operation of regional interaction spheres as vehicles of substantial contacts between communities can be amply demonstrated for certain cases of Early Neolithic colonizations. Their specific local contexts, however, differ: at Catalhöyük such a process was probably necessary for achieving group cohesion and negotiating social and territorial legitimation in an area that was already inhabited (Asouti, 2005; Baird, 2006). For example, the lithic assemblages obtained from the earliest excavated levels at Catalhöyük have shown the transient presence of multiple *chaînes opératoires* known from central Anatolian assemblages at Pınarbaşı A, Canhasan III, Suberde (Konya Plain), Aşıklı, Musular (Cappadocia), as well as traditions found region-wide including PPNB territories in southeast Anatolia and the Levant (Carter et al., 2005). It would appear therefore that the early community of Çatalhöyük comprised both local (Konya plain) and "non-local" elements (west Cappadocia and, conceivably, southeast Anatolia and the Levant too). However, this early diversity wanes through time and, by the end of the eighth millennium BC, is replaced by much more homogeneous assemblages, thus indicating a process of localization (ibid.). The rapid process of settlement nucleation that eventually resulted in Çatalhöyük becoming something akin to a "mega-site" with no habitation sites (affiliated or independent) co-existing with it in the Konya plain (Baird, 2002) is perhaps the best testimony for the successful creation of a shared group identity among the Neolithic inhabitants of the western Konya plain. The persistent presence of a symbolic and cultural vocabulary rich in locally derived as well as southeast Anatolian and Levantine elements, mainly associated with burial/ancestor rituals and feasting ceremonies, might have been one key element in the creation of a shared group identity (Asouti, 2005; Baird, 2006). This is further indicated by the recurrence of its material signifiers (bucrania, plaster decoration, wall-paintings, etc.) inside inhabited spaces and by the concurrent absence of communal mortuary places and/or public structures (such as the ritual/public spaces found in southeast Anatolia and the Levant; Rollefson, 2000; Kuijt & Goring-Morris, 2002; Verhoeven, 2002a). This suggests the further symbolic empowerment of the household at the expense of supra-community bodies comprising ritual specialists and/or civic leaders (Asouti, 2005).

This pattern does not exclude of course the presence of groups or even individual ritual specialists and authority structures, based on their membership in age groups and/or individual qualities (such. as elders, practitioners of magic, healers, shamans, etc.). Such figures might have mediated in the event of intra-communal disputes and directed corporate decision-making. Evans-Pritchard (1987, especially pp. 172–181) discussed of the role of such institutions, which are characterized by the intentional absence of ascribed and/or hereditary political leadership and thus of coercive political influence, among the segmentary societies of the Nuer in Sudan. The most recent excavations at Çatalhöyük have provided some strong indications that comparable role differentiations were part of the life of the community. For example, a find with no parallel elsewhere in the region is the clay figurine presented in Fig. 11, which is strongly suggestive of magical practices. It could be plausibly argued that this figurine is likely to have been used as a talisman in the context of some sort of magic performance to protect a woman from the dangers of childbirth. It remains impossible, however, to suggest that the use or even manufacture of such items was restricted to particular segments of the local society (see Meskell & Nakamura, 2005).

The occurrence of obsidian points with clear traces of impact damage, perhaps as hunting "trophies" symbolizing personal achievement (Carter et al., 2005) could also Springer



**Fig. 11** Figurine 12401.X7 (H.xW.xTh.): 6.51x7.37x6.44cm; Weight: 221g. The front view (**A**) portrays a female figure with large breasts and protruding navel (umbilical hernia) characteristic of pregnancy. She has very thin, skeleton-like arms with delineated fingers which fold up to rest on the breasts. Red paint is present around the neck and between breasts in four concentric chains and on the wrists and likely the ankles too (**B**). The back view (**D**) portrays an articulated skeleton including a modelled spinal column, pelvis and scapulae which project above the shoulders. Ribs and vertebrae are also depicted. A dowel hole (**C**) indicates that the piece had a separate, detachable head. The figurine was plastered and was found together with ground stone, grinding stone and a mace head in an ashy area of a partially burnt building excavated in 2005 (space 252; preliminary level attribution IV–V; dating from the second half of the seventh millennium cal. BC) (source: Meskell & Nakamura, 2005)

belie a preoccupation with individual status differentiation. Notions of achieved social status may also lay behind some exceptional burials found at Çatalhöyük, such as the (thus far unique) burial of a young male adult in the midden deposits of Space 115, or the single decapitated burials under the floors of Buildings 6 and 1 (Farid, in press; Andrews,



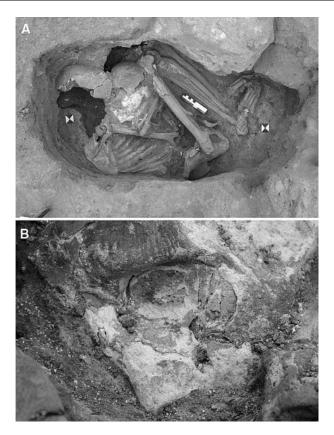


Fig. 12 Plastered and painted skull found in Building 42; Level V (circa mid-seventh millennium cal. BC) The skull (sk. 11330) was found in a burial cut (F.1517) that had been cut into midden deposits underlying Building 42 and representing a foundation burial. In the same grave a neonate was found a few cm above the inhumation of an adult female. Tightly flexed on her left side, she was holding a plastered and painted skull of an adult female. Placed between the arms of the female, the skull faces the chest, clutched tightly against her body. It is modelled in soft white plaster from the forehead to the chin, and covered with red pigment. The eye sockets are also filled with plaster. According to preliminary observations by the excavators on the layering of the pigment on the right eye socket and its mixing with plaster, it seems likely that the skull had been remodelled more than once before its final deposition in the grave. It is also probable that it had been on display for sometime before its final deposition in the grave: as indicated by the re-plastering and painting of parts of the skull. Further modification is suggested by the thickening of the plaster towards the top of the cranium. Right by the same adult female a bone pendant made of a leopard claw bone was found. Leopards have been considered ritually important animals, with their presence attested most spectacularly in wall plaster reliefs. Yet, until the 2005 excavation season no leopard bones had been found at Catalhöyük. This might be an indication that such rare items were probably collected, fashioned and curated over long periods of time. (sources: Chaffey & McCann, 2004; Boz & Hager, 2004; Hodder, 2006)

Molleson, & Boz, 2005; for a similar burial in trash deposits from MPPNB 'Ain Ghazal, see Rollefson, 2000). Such burials could be perceived as representing the opposite ends in the local social scale from the stranger/social outcast to the powerful/exceptional individual (household head, skilled craftsperson, cultivator, hunter, traveller), whose death was marked in this atypical way (primary intramural inhumations were the norm). It was perhaps the skull of such a highly esteemed household ancestor (incidentally the only example of a plastered *and* painted skull known thus far from Neolithic Anatolia) that was P Springer

carefully placed (reburied as a grave good?) in the arms of an adult female (same household/lineage member?) buried in the foundations of Building 42 (Fig. 12).

It is not surprising at all that a number of mortuary ritual practices observed elsewhere in the region (such as the removal, modification, plastering and curation of skulls known from the Levantine MPPNB) had quite different functions and contexts of use/meaning at Çatalhöyük. Removed from their original contexts within temporally and spatially distinct traditions (some of which might have formed part of the heritage of the original community of colonists), they had undergone significant transformations. Particular kin groups or communities might have retained some of their more valuable traditions and symbols, albeit very different from their original ones in form as well as context of occurrence. This would explain the reappearance of techniques and traditions whose origins can be traced to different areas and (in the case of the plastered and painted skull discussed above) time periods as well. Such a perspective of Neolithic material culture and associated routine/ritual practices serves to undermine normative culture-historical interpretations. The socio-cultural practices of Early Neolithic communities cannot be viewed solely, or even primarily, as a direct reflection of cultural or religious "origin" and ethnic identity. Their constituent elements developed within particular socio-economic contexts and, for that reason, should be studied and comprehended as such before any meaningful regional comparisons can be attempted. This argument is not meant to obviate the utility of artefact types (such as naviform cores) for constructing viable local and regional typological sequences. Rather it aims at pinpointing the limiting effect these can exert on archaeological interpretation, when dealt with in isolation from their total archaeological context.

## Cyprus

In the case of Cyprus, the introduction of non-native plants (Colledge, 2004) and animals (Guilaine, Briois, Vigne, & Carrère, 2000; Horwitz, Tchernov, & Hongo, 2004) into an insular environment suggests that the maintenance of communication channels probably fulfilled the important adaptive and economic task of keeping up reliable supplies of raw materials. Furthermore, the configuration of these routes of communications (involving maritime transportation) would have required the maintenance of contact points and relations on either side of the sea corridor. Still, as was the case in the Konya plain, in Cyprus too these early phases of intensive interactions were followed by long periods of consolidation matched by low exchange volumes (leaving aside the likely occurrence of earlier visitations to Cyprus in the PPNA; see McCartney, 2004; Peltenburg, 2004a) eventually leading to the establishment of distinct socio-cultural identities. One could argue therefore (based on these case studies) that Neolithic interaction spheres did not exist in abstraction, i.e. as theatres for the enactment of "trade" networks among discrete and homogeneous "cultural areas". Instead, they acquired their particularity from being positioned within specific socio-economic contexts that required the investment involved in sustaining contact networks at this scale. Early colonizations provide some appropriate examples of such contexts, which were furthermore contingent upon region-specific sociocultural histories and geographical realities.

To view this hypothesis from the perspective of the immigrant community, in the case of Cyprus, one might likewise view the continuation of circular architectural forms bearing direct parallels to PPNA prototypes known from the mainland (Peltenburg, 2004b), as the deliberate choice of its early colonists to maintain building traditions embodying concepts of a communally organized segmentary society that was, in a sense, removed from the



increasingly asymmetric social relations gradually developing within mainland PPN communities. As in the case of Çatalhöyük, stylistic and symbolic codes were likely re-arranged within the community of immigrants to the extent that they render any attempt to pinpoint an original "homeland" for the colonists highly implausible and largely futile. This interpretation of the Cypro-PPNB architecture may offer a more probable explanation than rising sea levels for the manifest absence of circular architecture from the Syro-Cilician coast, and is furthermore consonant with views positing that the Cypro-PPNB as a whole formed an integral part of a region-wide cultural and historical continuum (see Finlayson, 2004; for a likely complementary interpretation of the development of the Cypro-PPNB architecture and material culture as reflections of insular adaptive strategies and the gradual emergence of an island ideology see Peltenburg, 2004b).

#### Conclusion

The process of diffusion (in its broadest sense, including both demic and cultural variants) lies at the heart of understanding the establishment and dispersal of the Neolithic way of life within and without Western Asia (Bar-Yosef, 2002; Guilaine, 2003). In this article, I suggest that, more than this, Neolithic dispersals present us with an opportunity for a dialectic approach to issues of Early Neolithic cultural formation and, ultimately, the emergence of regional socio-political ideologies in prehistoric Western Asia. Population dispersals and dislocations probably entailed far-reaching transformations in ecological relationships, the perception of the landscape, the socio-economic organization and subsistence practices of early sedentary communities, and the politics of territoriality and identity formation. An approach emphasizing localities over regions, which aims at the contextual study of the specific societies transformed by migration into new regions, and the adoption of novel modes of production and cultural norms (thus moving beyond the strict confines of the culture-historical paradigm) may prove more informative for understanding the varied political geographies of Neolithic dispersals than are grand regional syntheses and explanatory models. Well-known examples of the latter are the "wave of advance" model of Ammerman and Cavalli-Sforza (1984) and that proposed by van Andel and Runnels (1995) envisioning the rapid displacement of small population groups over long distances, targeting favourable environmental settings away from their ancestral lands. Such models (although of clear value as heuristic devices) can obscure regional and areal variation in favour of abstract evolutionary schemes promoting monocausal explanations (such as environmental change, resource "opportunism", population pressure, etc.). It seems likely that a variety of processes operated across the region, as indicated by, for example, the contrasting patterns of Cyprus and the Konya plain on the one hand, and Cappadocia on the other. Therefore, region- and area-specific studies can usefully complement broad-based syntheses and models, transforming them from universalistic explanations of human behaviour into historically informative accounts of past human lifeways.

The "PPNB interaction sphere" is a case in point. I have suggested herein that interaction spheres might not be best perceived as quasi-static macro-entities or markers of cultural or ethnic affiliation. They should rather be described as region-specific changeable and complex exchange networks between kin groups, factions, moieties or sodalities spread among adjacent areas and communities (Bar-Yosef & Belfer-Cohen, 1989). In turn, the objects of such exchanges cannot be interpreted primarily as desirable "commodities" circulating within opportunistic contact networks. Instead, they probably formed active and \$\Delta\$ Springer

meaningful ingredients in a broad spectrum of social relationships that occurred between and within different groups and communities (for comparative anthropological instances, see Mauss, 1990; Sahlins, 1972, pp. 149-314; Godelier, 1999; cf. Gell, 1992). At the same time, participation in such regionally and temporally contingent networks did not entail Neolithic communities neglecting their collective interests—that is, ensuring their biological, socio-cultural and political reproduction. Both the maintenance of stable interregional alliances and the long-term intensive participation in extensive networks of exchange would per se have required a level of involvement and investment far exceeding the political outreach, inter-societal balances and socio-economic organization of Early Neolithic communities. Conversely, the maintenance of similar contact networks could have been temporarily justified (probably in the form of reciprocal co-operation between groups inhabiting different areas) especially in the face of novel and challenging situations, such as the PPNB colonization and transference of cultivars and animal species to Cyprus. The PPNB world constituted a very fluid universe where, in the absence of a higher order unifying political framework, such alliances could have emerged, peaked and waned in the space of a few generations. Within this fluid and diverse universe, there was a single point of reference with which the Neolithic inhabitants of Western Asia would have identified: their own sedentary community—itself an agglomeration of factions, kin and household communities—whose interests, survival and reproduction framed the worldviews of its members.

The question still remains, however, as to how one might undertake a comparative analysis of Near Eastern Neolithic societies from an historical perspective without at the same time falling prey to extreme particularism. As noted above, despite all the recent emphasis on regional and local diversity, most scholars recognize a number of underlying common elements that characterize an entire region undergoing more or less concurrent major socio-economic transformations during the PPNB. I think that one avenue through which prehistorians may maintain a desired unity of narrative is by accepting the analytical challenges posed by diversity, and trying to disentangle the distinct facets of local and regional collective identities, habitual practices and ideologies as expressed at the individual, household, gender, faction and community level.

A number of established and largely Levant-centred theoretical views present Epipaleolithic Natufian sedentism as the pinnacle of the development of sedentarizing complex hunter-gatherers. It is further seen as an adaptive prelude to their transformation into village communities of farmer-herders, followed by their expansion (sometimes seen as akin to conquest) across the region. Contrary to such views, the picture now emerging from the archaeological record is more complex and less linear and, thus, requires interpretative tools that can accommodate this complexity. Reconstructions of archaeological "cultures" are believed to correspond to "ethnic" groups and are often matched with generalized models of population displacements or flows of people and goods moving across the landscape in unspecified socio-economic and spatio-temporal contexts. This may accommodate to some degree the diversity of the archaeological record and fit it within established culture-historical taxonomies, but it has limited explanatory value. The Early Neolithic was a formative threshold in the history of humanity. Human societies were faced with complex patterns of cohabitation, competition and cooperation, which arose from the social implications of novel and continuously evolving subsistence practices, and the restructuring of resource ownership and kinship patterns. Such essentially political realities permeated every aspect of Neolithic lifeways, from production and consumption to ritual and symbolic expression. In turn, Neolithic living strategies did not develop in a vacuum or merely as adaptive responses to changing economic realities. Instead, they



probably represented the material and social outcomes of a whole spectrum of tensions operating at multiple levels and among multiple agents: between mobile hunter-gatherer and settled cultivator-herder or pastoral lifestyles; between households as loci of production and reproduction, and communities as corporate units; between group ancestors venerated in community ceremonies and emergent "private" family genealogies (Asouti, 2005).

From such a viewpoint, one might also entertain the possibility that the appearance of "mega-sites" towards the end of the PPNB could have embodied inter alia an attempt to contain similar socio-political paradoxes that, in all probability, formed a recurrent and defining characteristic of Early Neolithic social life (Asouti, 2005; Forest, 2003). Communities of this size point to unprecedented levels of inter-personal and group interaction, and attendant adjustments in negotiating diverse strategies of resource ownership and exploitation. From this perspective, I consider arguments promoting mutually exclusive interpretations (such as the PPNB world being (semi)sedentary hunter-gatherers, or its opposite that there were fully fledged agropastoral economies) as intellectually partial and potentially misleading. Such arguments project (post)modernist dualisms and preconceptions onto the prehistoric past. Comparative analysis of the diverse political economies and habitual practices characterizing the Early Neolithic societies of Western Asia is necessary not only as a device for constructing plausible historical narratives and theoretically accomplished arguments, but also as a requisite for a meaningful understanding of Neolithic ritual/symbolic expression, social and territorial organization, and subsistence/ craft production in their local and regional contexts.

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