

ESTABLISHED PARADIGMS, CURRENT DISPUTES AND EMERGING THEMES: THE
STATE OF RESEARCH ON THE LATE NEOLITHIC IN UPPER MESOPOTAMIA

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A HITCHHIKER'S GUIDE TO LATE NEOLITHIC CHRONOLOGY

For the sake of writing an introduction to this book, let us simply proceed with the formal definition: the Late Neolithic was a period also known as the Pottery Neolithic, and lasted for almost two thousand years from 7000 to 5300 cal. BCE when it developed into what is known as the Early Chalcolithic Northern Ubaid tradition. This is a long period – about as long as it took from the Roman Empire to the world of today, or from Hammurabi's dynasty to the start of the Common Era. One major result arising from the recent wave of new research on the Late Neolithic is a much more nuanced, significantly more fine-tuned understanding of its internal temporal divisions. Virtually every chapter in this book employs culture-historical terminology that refers to some chronological framework. However, there is no broadly shared consensus on periodization. As editors we felt the need to review the main chronological terminologies, if only to offer our readers a sort of 'time map,' a 'hitchhikers guide' to the chapters that follow. As we had already anticipated, we ventured straight into a vast terminological swamp, a bewildering jungle where even experienced travelers quickly find themselves lost. Qualifications such as the "terrifying complexity of Halaf chronology" (Cruells and Nieuwenhuys 2004:49) are certainly no academic understatement.

Partly, this complexity is simply a matter of 'lack of data:' not enough well-excavated sites, insufficient publication, a lack of radiocarbon sampling – the sort of issues we may reasonably expect to be solved in a pretty straightforward manner with ongoing work. There are a series of conceptual issues at stake, however, that deserve to be made explicit.

Perhaps the main issue concerns the basic culture model adopted by many of us working in the region, in particular its normative assumptions (Pollock, this volume). While probably none of us would accept the rigid monothetic variety of the culture concept as espoused long ago by Gordon Childe (1956:123), some would perhaps feel more comfortable with David Clarke's (1968) polythetic variety. In Clarke's view, the geographic distributions of specific artifact types typically show nested, overlapping patterns, but it is nonetheless possible to identify regionally bounded, archaeologically distinct 'core areas,' areas in which members are perceived to have shared similar cultural traits (Clarke 1968:311-315).

However, there is more to culture history than merely classifying and dating finds (Shennan 1994; Stark 1998; Carter and Phillip 2010). The desire to render the new knowable by classifying and categorizing it produces taxonomies and terminologies that develop their own life and power relations (Lévi-Strauss 1962; Foucault 1970; Jones 1997). The pitfalls of various kinds are well known, and some merit mention here. First, a dominant but implicit idea accompanying such an approach is that cultures, archaeologically present as material cultures, were the external manifestation of pre-existing ideas in the heads of past peoples; hence we encounter sometimes the notion of people as 'carriers' of a culture. A good example is the term 'Halafians' (e.g. Copeland and Hours 1987). Such a conceptualization is part of the silent inheritance of 19th century German idealism in the development of 20th century archaeology. The result is a strong tendency to conceive cultures in normative ways (Bernbeck 2012).

Further, a normative notion of 'cultures' has a tendency to engender simplified histories. The focus is on similarities between a number of sites, rather than the differences between them. It prioritizes homogeneity within and highlights boundaries between cultures. For prehistoric periods, the classification of objects and architectural forms into 'cultures' turns ancient social groups into internally unified and externally sharply bounded entities

(Campbell 1999).¹ Names such as ‘Halaf,’ ‘Hassuna,’ or ‘Samarra’ in connection with the word ‘culture’ arrest temporal change and set up regional boundaries in the archaeological mind. Such chronological terminologies have ideological implications far beyond formalities of definition (Bernbeck 2008a). Definitions of culture function all too often as discursive tools for the production of ‘order.’ They replace the multifariousness of a dynamic past, perceived as chaotic, with an artificial, static coherence (Bernbeck and McGuire 2011). Once printed as geographic distribution maps, prehistoric cultures tend to resemble modern political structures such as nation-states.² These spatial imaginations tend to take a bird’s eye view, a distanced glance that is unable to assess the complexity of local conditions. Such a ‘Google-ized Late Neolithic’ furthers a strongly objectivist research strand that considers the attempt to understand past peoples’ motivations for their practices as irrelevant for history at large.

Accepting this perspective obviously has implications for conceptualizing the past: the result is constructs of cultural homogeneity and intercultural distinctiveness. We argue that the increased level of detail offered by the new wave of research now allows us to explore instead a ‘difference archaeology,’ which treats the *a priori* assumption of material-cultural similarity with healthy skepticism.

The Late Neolithic ‘Halaf culture’ in Upper Mesopotamia is arguably the most famous archaeological example of a cultural ‘package’ long perceived to be externally bounded and internally homogeneous (e.g. Matthews 2000). Recent fieldwork in the region has ‘unwrapped’ the package. As illuminated at Tell Sabi Abyad and other sites across the region,

¹ One is of course reminded of Kossinna’s infamous dictum that “sharply defined archaeological culture areas corresponded unquestionably with the areas of particular peoples and tribes” (Kossinna 1911:3; see also Klejn 1974).

² Often, such concepts adhere to a Newtonian notion of spaces as containers (Tuan 1977; Löw 2001:24-44). In the relevant maps, space is simplified into a neutral background for human activities, rather than a landscape partly created by human groups themselves and used selectively.

its constituent elements have been shown to have roots in times long before the introduction of Halaf pottery (Campbell 1992; Akkermans 1993). The supposed cultural homogeneity of the Halaf culture has not remained unscathed either. After the initial development of a rough time-space grid of cultures, established by Ann Perkins (1949), the main task for subsequent generations seemed to be the assignment of newly found sites and objects to one or the other of the pre-defined entities. Since this very often led to unsatisfactory results – sites do not match any such pre-defined culture – a solution has consisted in the butchering of cultures: they are chopped up into ever smaller pieces of increasingly fine time-space goulash, resulting in an increasing terminological fuzziness (see below).

The deleterious effects of normative concepts have bothered some scholars so much that they abandon the word ‘culture’ altogether. Stuart Campbell wrote to the editors of this volume: “I actively avoid the word ‘Culture’ with the Halaf because of the implications it carries. I actually like the use of the Halaf as a noun (as with the Ubaid, the Uruk) as a way of ducking the issue of what it means.” But is ‘the Halaf’ a better option? We are not sure, and would rather opt for ‘Halaf tradition,’ ‘Hassuna tradition,’ etc., provided that ‘tradition’ is understood in a non-essentialist way. In the words of Pauketat (2001:80), “traditions ... are always in the process of becoming They exist as ‘real’ entities only in practice.” Several contributions to this collection present exciting ways of demonstrating such flexible dynamic understandings, for example in the production of Halaf painted ceramics, long seen as prototypes for stylistic homogeneity (Castro Gessner, Hole, this volume).

These issues of terminology and chronology are further twisted by the argument that archaeological categorizations may not capture the deeply ambiguous and fuzzy nature of Late Neolithic peoples’ lifeworlds. Pollock and Bernbeck (2010a) argue for a re-thinking of categorization as a fundamental mechanism for the definition of analytical entities. Clear-cut building blocks, extracted from the often chaotic material evidence, run the risk of being re-

assembled for chronological and other purposes in a way that renders ambiguities and many important interstices invisible, interstices that made up a substantial part of Late Neolithic life.

As reflected in many contributions to this book, scholars working on the Late Neolithic explicitly engage with the expectations and limitations of the traditional culture-historical model and attendant terminology (Campbell and Fletcher, Cruells et al., Forest, Le Mière, Nieuwenhuys, all this volume). The richer data sets now at our disposal allow us to move beyond simply plotting the geographic distributions of particular pre-defined culture areas, exploring localized processes of reception, rejection, and reinterpretation of cultural practices such as those associated with the Halaf tradition (e.g. Özbal and Gerritsen, Odaka, this volume).

A related problem is that our current terminological frameworks were not designed all at once, but developed gradually in the course of a long, tortuous history of research conducted across different nation-states by researchers professing different paradigms and goals for research. Terms that order new discoveries were and are created in a *bricolage* mode: every new generation adds some new bricks to the developing construction, all the while improvising and tacitly acknowledging the weaknesses of the whole thing. Bricolage leads to practical, short-term solutions for problems at hand that are perfectly clear initially but that, with the benefit of hindsight (Mottram, this volume), may appear confusing to the non-initiated and lead to practical problems.

For example, it is common practice in Near Eastern prehistoric research that a newly-discovered stage preceding some well-known stage X is given the prefix ‘Proto-’ or ‘Pre-.’ Often such terminology begins as no more than a convenient shorthand for describing earlier levels at some site, then grows into something far bigger, losing much of its original

meaning.³ The Late Neolithic time map includes a number of such ‘Pre-X’s’ and ‘Proto-X’s.’ For instance, the levels preceding the Halaf period at Tell Sabi Abyad were dubbed Pre-Halaf (Le Mière and Nieuwenhuys 1996). Soon gaining currency far beyond this site, the term has grown into a spatio-chronological entity applied to much of northern Syria (Le Mière, this volume). ‘Proto-Hassuna,’ a term first proposed to denote levels older than those attributed to the earliest Hassuna stage at Yarim Tepe and Tell Hassuna (Bader 1975, 1993a), followed a similar trajectory. Today, the term means a broad time-space block in northern Iraq and northeastern Syria (Bader 1993b; Le Mière 2000; Bader and Le Mière, Le Mière, this volume). If such terms accumulate, they may result in terminology truly bewildering to the non-initiated. For instance, Mandy Mottram (this volume) describes material from Nineveh stratum 2a as ‘Pre-Proto-Halaf.’ In northeastern Syria and northern Iraq, the discovery of material assemblages earlier than the ‘Proto-Hassuna’ has led to the construction of a ‘Pre-Proto-Hassuna’ stage (Bader and Le Mière, this volume). As fieldwork continues, might we expect an even earlier ‘Proto-Pre-Proto-Hassuna?’

To give a further example, recent work on Late Neolithic chronologies in the region has identified a number of new phases intermediate between already known culture-historical entities. This often leads to the adoption of the word ‘Transitional’ for the new phase. As a result, we now have at least three ‘Transitional’ periods in Late Neolithic archaeology: between the Pre-Pottery Neolithic and the Early Pottery Neolithic in the Turkish Euphrates valley (Arimura et al. 2000; Özdoğan 2009, this volume), between the Pre-Halaf and the Early Halaf in the Balikh valley (Le Mière and Nieuwenhuys 1996; Nieuwenhuys, this volume), and between the Late Halaf and the Ubaid in northeastern Syria and northern Iraq (Davidson 1977). This is confusing to those unaware of the broader context: which specific Transitional

³ A mirror mechanism occurs at the opposite end of chronological reifications in designations of layers as ‘Post-X’.

stage is the author referring to? Evidently there is much to be gained from elaborating on pre-existing terminologies, simply to avoid misunderstandings. We do not advocate the replacement of existing terms just for the sake of new terminology; we merely wish to draw attention to the need for careful definition of what is meant with each term. Furthermore, period terminologies such as ‘transitional,’ ‘proto-X’ and ‘post-Y’ suggest that whole periods are peripheral to others, resulting in an inadvertent and unjustified weighing of their historical importance (see footnote 1).

A further concern is that comparative material studies – on which our culture-historical framework ultimately rests – depend on the character of documentation, analysis, and publication of finds. Especially the older excavations often fall below current standards, as they offer little quantitative data and are skewed towards unique items such as nicely painted pottery and well-preserved ‘goodies.’ In particular, ceramic-technological studies generally did not form part of research projects in the past. Cruells and Nieuwenhuys (2004:62) point out the consequences: “One of the most depressing problems we currently face is the need for a better terminology when it comes to defining our ceramic categories.” Similar terms may refer to wholly different pottery types in the Upper Mesopotamian Late Neolithic; conversely, the same type may be known by a variety of names. For example, it has become common to speak rather carelessly of ‘Halaf pottery;’ this may either mean something like ‘pottery assemblage from the Halaf period’ or, more narrowly, ‘painted Halaf Fine Ware.’ The Dark-Faced Burnished Ware, too, means very different things to specialists working at different sites. The geographic distributions and attendant social, economic, and ideological interpretations of this ceramic type obviously depend on what definition of DFBW one prefers (Odaka, Özdoğan, this volume). It is therefore essential that future work on Late Neolithic chronologies incorporates sound ceramic-technological studies (Gregerova et al., Nilhamn and Koek, this volume).

Keeping these caveats in mind, let us start our guided tour close to the heartland of Mesopotamia, in northeastern Syria and northern Iraq. Here many of the key early sites are situated in addition to more recent excavations, and generations of scholars have wrestled with Late Neolithic chronologies (Figure 1.3). The most famous Late Neolithic excavation in Upper Mesopotamia is probably the Halaf site of Tell Arpachiyah, first explored by Mallowan (Mallowan and Rose 1935) and later re-excavated by Hijara (Hijara et al. 1980, Hijara 1997). Mallowan's work gave us the now classic tripartite division of the Halaf period into Early, Middle and Late stages. The tripartite division has been with us for a considerable time (Perkins 1949; Mellaart 1975; Gustavson-Gaube 1981) and is still followed today, as some authors in this volume testify (e.g. Sarialetun). The excavators of Tell Aqab in the Khabur headwaters of northeastern Syria (Davidson 1977; Davidson and Watkins 1981) and those working at the cluster of sites at Yarim Tepe in the Sinjar region of northern Iraq (Merpert and Munchaev 1987, 1993a, 1993b) presented their work in terms of Mallowan's scheme. While they kept his tripartite terminology, they added a transitional stage between the Late Halaf and the northern Ubaid, the so-called Halaf-Ubaid Transitional (HUT)⁴ (Figure 1.3).

More recent scrutiny, however, has made it clear that this neat scheme masks a number of complications. First and foremost, there are vast overlaps between the various material assemblages from successive phases, to the degree that chronological distinctions within the Halaf period are extraordinarily diffuse, not to say impossible to recognize. This problem plagues particularly the Middle to Late Halaf distinction (Campbell 1992; Cruells et al. 2004). This differentiation rests mainly on the introduction of polychrome painted Halaf Fine Ware ceramics in the later Halaf. However, these aesthetically stunning vessels do not

⁴ Recent papers (Campbell and Fletcher 2010; Karsgaard 2010) have dealt a blow to the assumption of a region-wide existence of a 'Halaf-Ubaid transition' and the presumption of chronological precedence of southern Mesopotamian developments.

appear to be present at all Late Halaf sites: their distribution may have been restricted to specific social groups or may have had particular, exclusionary symbolic meanings (Watkins and Campbell 1986; Campbell 1995; Campbell and Fletcher, this volume). In an important review, Stuart Campbell (1992) therefore proposed to side-step this issue by reducing the Halaf sequence to only two main phases, which he termed Halaf I and Halaf II (Figure 1.3). Campbell distinguished two sub-phases within each main phase, but emphasized the highly problematic character of their temporal boundaries.⁵

One of the main advantages of Campbell's simplified scheme is that these larger chronological units are based on more robust absolute dates. With rare exceptions, unfortunately, radiocarbon dates for the Halaf period are scattered and of poor quality (Campbell 1992:93, 2007; Akkermans 1993; Cruells et al. 2004:267). Pulling together the available ¹⁴C data, the Halaf I may with a fair degree of accuracy be dated to between 5900 and 5700 cal. BCE (Campbell 1992:93; Akkermans 1993, 1996). The Halaf II remains more problematic, as very few internal ¹⁴C dates are available. The transition to the Ubaid period should be based on a *terminus ante quem* for the Halaf II, but remains poorly understood; this transition may have started anywhere between 5300 and 5000 cal. BCE (Campbell 2007; Campbell and Fletcher 2010). The Halaf period as a whole, then, may be dated to between 5900 and 5300 cal. BCE (Akkermans and Schwartz 2003).

Campbell's reformulation has been put to good use by a number of scholars analyzing regional survey and settlement data (Nieuwenhuys 2000; Becker, this volume). However, it has hardly laid the discussion of Halaf chronology to rest. Walter Cruells has recently proposed a slightly modified division of the Halaf period, distinguishing a 'Formative phase,'

⁵ His Halaf IIA and Halaf IIB phases roughly correspond to the traditional Middle and Late Halaf, respectively. The Halaf IB represents Mallowan's Early Halaf. The new Halaf IA phase represents the even earlier Halaf stage that preceded Mallowan's traditional Early Halaf, first documented at Tell Sabi Abyad (Operation I, Levels 3-1) and subsequently also recognized in northern Iraq at the site NJP 72 (Campbell 1992; Akkermans 1993).

or Halaf A, and a 'Developed phase,' or Halaf B (Cruells 2006, 2009; Cruells and Molist 2006). In a radical move to do away with the problematic distinctions between Mallowan's three phases, Cruells prefers to lump them all together into a single main stage, his Developed Halaf B. Adding yet another level to the complexity of Halaf chronology, Cruells proposes a new terminology for the Halaf sequence (Cruells et al., this volume). In chronological order, this new scheme distinguishes between Proto-Halaf and Very Early Halaf for the Halaf A stage, and Intermediate Halaf and Late Halaf for the Halaf B stage (Figure 1.3).

If readers find Halaf chronology complex, they should be forewarned before turning to the 7th millennium. In spite of some important advances made recently, the culture history of the time that precedes the Halaf period in the eastern parts of Upper Mesopotamia remains extraordinarily complex, very poorly understood, or both. Well-published excavated sites from the 7th millennium are even scarcer than for the Halaf period. Moreover, many of the key sites were excavated a considerable time ago, before the establishment of current standards for recording finds. As a result, scholars have battled vehemently with regard to the relative-chronological relationships between various find contexts (Lloyd and Safar 1945; Mortensen 1970; Merpert et al. 1981; Merpert and Munchaev 1987; Campbell 1992; Bader 1993b; Merpert 1993; Bernbeck 1994:98-131; Gut 1995; Le Mière 2000). The ¹⁴C record for the 7th millennium – which might offer a more objective temporal framework – remains highly problematic in this part of Upper Mesopotamia, and the available radiocarbon dates do not always corroborate the relative chronologies proposed on the basis of ceramics.

For northern Iraq, a broad consensus has emerged with regard to the chronological order of the main culture-historical units in the 7th and early 6th millennia: from what has been called Proto-Hassuna through Archaic Hassuna to Standard Hassuna and Samarra. In Campbell's (1992) reformulation, the latter three stages have been termed Hassuna I, II, and

III, respectively (Figure 1.3).⁶ In addition, the recent excavations at Tell Seker al-Aheimar (Phase 4) and a re-analysis of earlier excavations by the Soviet mission at Tell Maghzalia in northern Iraq have led to the identification of an even earlier stage of the Pottery Neolithic. This stage has provisionally been termed Pre-Proto Hassuna (Bader and Le Mière, this volume). Both the Proto-Hassuna and its predecessor have still to find their niche in Campbell's (1992) scheme.

At present it does not seem to be possible to give firm absolute dates to any of these Pre-Halaf cultural-temporal units in northern Iraq. The radiocarbon dates available suggest that the Proto-Hassuna stage in northern Iraq ended at about 6300 cal. BCE or slightly earlier (Campbell 1992:96-97). This would date the start of the Archaic Hassuna stage (Campbell's Hassuna I) to the same time. Confusingly, the situation in adjacent northeastern Syria may differ: here no separate Hassuna period has been identified so far, and the Proto-Hassuna stage seems to be followed directly by Proto-Halaf (Le Mière, this volume). The latter corresponds closely to the so-called Transitional stage in the Balikh region, which has been securely dated to between 6100-5900 cal. BCE.

Moving west, work in the Balikh Valley of northern Syria has resulted in a complex chronological framework that continues to be refined with each campaign of fieldwork (Figure 1.4). This began in the early 1980s, when the excavators of Tell Hammam et-Turkman decided to number the traditional, pre-existing culture-historical units with Roman numerals. Thus, the Pre-Pottery Neolithic became Phase I, the Pottery Neolithic became Phase II, while the Halaf period became Phase III (Meijer et al. 1988:14). This chronological skeleton was subsequently given flesh and blood by the excavation of several archaeological

⁶ Time travelers should be aware that Archaic Hassuna pottery and the incised variety of Standard Hassuna pottery are types that have so far not been recovered from northern Syria; their regional distribution may have been limited to northern Iraq and, quite possibly, the upper Tigris valley in Turkey (Gut 1995; Tekin, this volume).

sites. The Pre-Pottery Neolithic (Balikh I) is exemplified by the site of Tell Sabi Abyad II (Verhoeven and Akkermans 2000). The Pottery Neolithic (Balikh II) and Halaf period (Balikh III) became represented by the materials and layers of Tell Sabi Abyad I, Tell Damishliyya, Tell Assouad and Khirbet es-Shenef (Cauvin 1972; Le Mière 1979; Akkermans 1988a, 1993; Akkermans and Wittman 1993; Le Mière and Nieuwenhuys 1996; Akkermans et al. 2006; Nieuwenhuys et al. 2010, van der Plicht et al. 2011). Summarizing, the Late Neolithic sequence starts with the adoption of pottery in the Initial Pottery Neolithic between ca. 7000 and 6700 BCE, followed by the Early Pottery Neolithic (6700-6300 BCE), Pre-Halaf (6300-6000 BCE), Transitional (6000-5900 BCE) and Halaf stages (Figure 1.4).

Important to note, the empirical coverage for the Balikh sequence is not equally consistent for all its phases. The earlier stages of the Late Neolithic sequence in the Balikh – Balikh II to IIIB – have been particularly well endowed with material evidence and have been given firm absolute dates (Akkermans et al. 2006; Van der Plicht et al. 2011). For the entire 7th and the early 6th millennium – from the adoption of pottery into the Early Halaf – the Balikh valley now offers a continuous, detailed sequence that is of immense value for a much wider region. In contrast, the later stages of the Halaf period stand on a less firm chronological footing. The Middle Halaf (Balikh IIIC) and Late Halaf (Balikh IIID) assemblages from, respectively, Tell Damishliyya and Khirbet es-Shenef remain isolated and their absolute dating remains less secure (Akkermans 1993). A local transition from Late Halaf into northern Ubaid has yet to be documented in the Balikh valley.⁷ The Sabi Abyad team has hesitated to use the Balikh sequence terminology in recent years, and instead relies

⁷ The Northern Ubaid ceramics from the earliest levels in the prehistoric sounding at Tell Hammam et-Turkman – known as Balikh IVA – yielded Ubaid Fine Ware painted with what appear to be Late Halaf design motifs (Akkermans 1988b).

again on the more traditional culture-historical terminology as shown in Figure 1.4.⁸

Recent excavations at several sites in the Syrian and Turkish Euphrates valley, close to the Balikh region, have strongly re-invigorated Late Neolithic chronology building. In Syria, the key site is Tell Halula. Excavations there resulted in a well-documented local sequence that covers about the entire Late Neolithic (Molist et al., this volume). The sequence has been conveniently summarized by a team led by Walter Cruells (Cruells et al. 2004:261-282). For this region they adopted the traditional, Mesopotamian, tripartite division of the Halaf period into an Early, Middle and Late stage, plus the Proto-Halaf stage, and add crucial new evidence for the preceding 7th millennium (Figure 1.5). In terms of culture-historical terminology, Cruells' Euphrates sequence closely mirrors the one from the Balikh valley, at least for the 6th millennium.

When it comes to the 7th millennium, the Halula team has adopted the term 'Pre-Halaf' to cover the *entire* 7th millennium preceding the introduction of painted Fine Ware ceramics in Halula Phase IV. They introduced major sub-divisions within this very long period by referring to Halula Phases I to III (Figure 1.5). Dedicated time travelers would of course notice that this usage of the term Pre-Halaf differs from the way in which Marie Le Mière (2001:190-195) employs the term in her discussion of the pottery from the later 7th millennium levels at Kosak Shamali and Dja'det al-Mugara. For Le Mière, the term refers to a much shorter period only, which by and large corresponds with the Pre-Halaf stage in the Balikh region, or with Halula Phase III.

Interestingly, while most archaeologists would acknowledge that the modern Syro-Turkish border would have been largely irrelevant as a cultural boundary in Late Neolithic

⁸ The excavations at Tell Sabi Abyad have led to the identification of several stages that do not yet have their place, formally, in the chronological terminology of the Balikh Sequence. These include what has been termed the Initial Pottery Neolithic and the transition from the Early Pottery Neolithic (Balikh IIA) to the Pre-Halaf (Balikh IIC).

times, presently it corresponds to a major shift in terminology for the 7th millennium. Across the border in the Turkish part of the Euphrates Valley, the two key sites are Mezraa Teleilat and Akarçay Tepe (Arimura et al. 2000, 2001; Karul et al. 2000; Balkan-Atlı et al. 2002, 2004; Özdoğan 2003, 2009; Özdoğan et al. 2011). An accumulating set of radiocarbon dates has begun to provide absolute dates for the relative chronology (Balkan-Atlı et al. 2002:310; Özdoğan 2009:28). At both sites the 7th millennium is called 'Pottery Neolithic.' Both teams have sub-divided this period into several stages on the basis of structural changes in architectural plans and associated material culture, but they differ in their terminological preferences (Figure 1.5).

At Mezraa, the 7th millennium corresponds to Phases II-III in the stratigraphy of the site. The excavator distinguishes between Early Pottery Neolithic (Phase IIC), Middle Pottery Neolithic (Phase IIB) and Late Pottery Neolithic (Phase IIA). On the basis of the ceramics, the latter two may correspond chronologically to the traditional Mesopotamian entities of Proto-Hassuna and Proto-Halaf, respectively (Özdoğan 2003:37), but in the Turkish Euphrates valley these terms cover a regional material assemblage rather than a one-to-one copy of the Mesopotamian entities. At Akarçay, the corresponding phases for the 7th millennium are Phase I and Phase II (Figure 1.5). Further, both teams adopted the term 'Transitional' for layers stratified between the Pre-Pottery Neolithic and the Pottery Neolithic levels (Mezraa: Phase III; Akarçay: Phase III).

Finally, entering the mountainous coastal ridge that shelters our region from the Mediterranean rains, what is otherwise known as the northern Levant is generally held to be culturally distinct from Upper Mesopotamia proper during the Late Neolithic. As a consequence, scholars devising terminologies to frame the Late Neolithic of this region have been less inclined to walk in the footsteps of the traditional Mesopotamian classifications. Instead, they favor localized, regional, and site-based chronologies. Of course, this began

already with the ground-breaking work of the Chicago team in the Amuq valley in the 1930's (Braidwood and Braidwood 1960): Amuq Phases A and B traditionally cover the 7th millennium, while Amuq Phases C and D correspond chronologically with the Halaf period (Figure 1.6). In the late 1970s James Mellaart, too, adopted a regional chronology for presenting the Late Neolithic materials collected during the Qoueiq survey in northwestern Syria (Mellaart 1981).

Recently, after several decades with almost no work on the northern Levantine Late Neolithic, scholarly interest has reinvigorated in this region too, stimulating a resurgence of terminological exercises. This work is ongoing; although a broad consensus seems to be emerging with regard to the general outline and terminologies, much disagreement remains when it comes to the details (Tsuneki and Miyake 1996; Tsuneki et al. 1998, 1999; Iwasaki and Tsuneki 2003; Balossi Restelli 2006; Nieuwenhuys 2009; Campbell and Healey 2011; Bartl, this volume). It is safe to say that the twin terms Late Neolithic and Pottery Neolithic have become generally accepted for the 7th millennium, while most scholars have no hesitations using the term Halaf Period for the 6th millennium (Figure 1.6).

Particularly important in this regard are the excavations at various sites in the Rouj Basin, which gave rise to the Rouj chronology (Tsuneki et al. 1999:1-3). Phases Rouj 2a to Rouj 2d cover the Late Neolithic; Phase Rouj 3 corresponds chronologically to the Upper Mesopotamian Halaf (Figure 1.6). The work at Shir in the Orontes basin (Bartl, this volume) and at Yumuktepe on the Cilician coast (Balossi Restelli 2006) are yielding crucially important sequences for the 7th millennium. Excavations at Domuztepe (Campbell and Fletcher, this volume) and at Tell Kurdu (Özbal and Gerritsen, this volume), finally, shed light on the local formation of cultural practices traditionally associated with the Upper Mesopotamian 'heartland' during the Halaf period. The work at Domuztepe in particular has exposed a long, continuous cultural sequence that covers much of the 7th and 6th millennia.

At the time of writing the Domuztepe team distinguishes five phases that seem to have real meaning in terms of major changes in the ceramics (Stuart Campbell, personal communication, July 2012). Two of these, the Early and the Late Ceramic Neolithic, are very distinct, as is, most interestingly, a ‘Transitional’ Phase between Ceramic Neolithic and Halaf. For the 6th millennium, Campbell distinguishes between what he calls an ‘Earlier’ and a ‘Later’ Halaf: his phrasing of ‘Earlier’ and ‘Later’ is deliberate, and serves to differentiate these terms from the more traditional Upper Mesopotamian terms.

When all is said and done, is it possible to come up with a broad, generally acceptable chronological outline that synthesizes the various terms and chronological stages for the whole of Upper Mesopotamia, the ultimate hitchhiker’s guide to Late Neolithic chronology? A tentative framework seems possible, but it will almost certainly not receive general consensus at this stage. For the purposes of this book, and as a guide to the chapters that follow, our best recommendation would be the partial schemes presented here for the eastern parts (Figure 1.3), the central parts (Figures 1.4 and 1.5) and the western parts (Figure 1.6) of our region. These should allow quick access to the heterogeneous terminologies used in this book by the various authors.

Yet, in an attempt to stir some discussion, we could not resist the temptation to offer a generalized framework, knowing full well that it is followed by none of the authors in this book. Absolute dates in this general scheme must remain tentative, as we emphasize that different parts of Upper Mesopotamia almost certainly had distinct temporal trajectories. The framework is not meant to replace earlier, more localized normative schemes with an even more ambitious, pan-Upper Mesopotamian one, but merely aims to point out some general tendencies (Table 1.1). We acknowledge the one-sidedness of this classification: chronological subdivisions rely solely on ceramics, while shifts in lithic production (Borrell et al., this volume) or faunal exploitation (Astruc and Russell, this volume) may yield different

temporal divisions. Our goal with such a terminology is to provide a temporal classification that is independent of ‘cultural affiliations,’ precisely because these latter definitions of ‘Proto-Hassuna’, ‘Pre-Halaf’, or ‘Pre-Proto-Hassuna’ are apparently more local than authors first believed when they proposed them.

In order to be able to talk with each other about the basic principles of ordering Late Neolithic layers and objects in time, we suggest a general terminology for seven major phases in Late Neolithic chronology, which we term here Late Neolithic 1 to Late Neolithic 7 (Table 1.1). Readers will note that the several hundred years of Halafian tradition are not differentiated into many sub-stages. We expect much further regionally specific chronological differentiation emerging from ongoing fieldwork, particularly with more absolute dates and a rigorous application of Bayesian statistics for their evaluation (see Campbell 2007; Van der Plicht et al. 2011).

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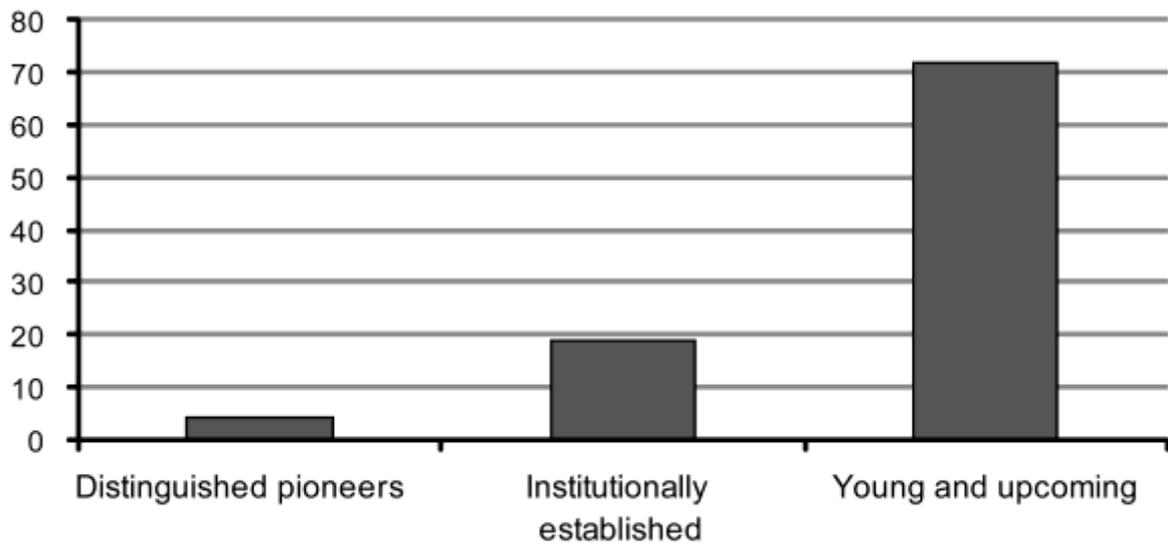


Figure 1.1. Institutional status distribution of participants to the Leiden conference *Interpreting the Late Neolithic of Upper Mesopotamia* (2009).

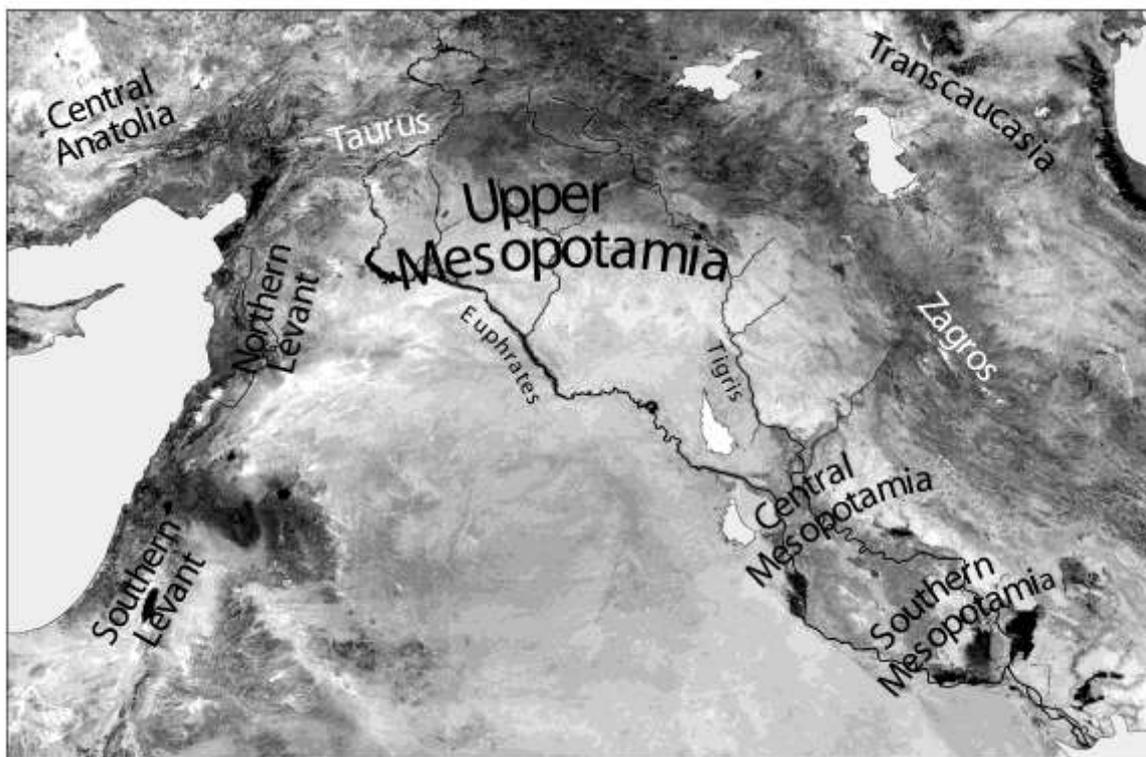


Figure 1.2. Map of the ancient Near East, showing the geographic context of Upper Mesopotamia.

Date cal. BC	Balikh Phase	Period	Tell Sabi Abyad I - operations					Assouad	Damishiyya	Shenef
			I	II	III	IV	V			
5300	IIID	Late Halaf								■
5400					level D					
5500	IIIC	Middle Halaf								
5600										■
5700	IIIB	Early Halaf	level 1		level C1					
5800			level 2							
5900	IIIA	Transitional Proto-Halaf	level 3	level 1	level C2/8					
6000			level 4	level 2						
6100	IIC	Pre-Halaf	level 5	level 3	level B1		phase III			
			level 6	level 4	level B2					
6200			level 7	level 5	level B3					
6300	IIA	Early Pottery Neolithic	level 8	level 6	level B4					
			P15 - 8	level 7	level B5		phase II			
6400			P15 - 9		level B6					
6500			P15 - 10		level B7					
6600					level B8					
6700					level A1					
6800					level A2					
6900					level A3	level 1	phase I			
7000			P15 - 11		level A4	level 2				
					level A5					
					level A6					
					level A7					
					level A8			■	■	
					level A9					
					level A10					
					level A11					
		Initial PN			level A12					
					level A13					
					level A14					
					level A15					

Figure 1.4. The Late Neolithic of Upper Mesopotamia: absolute and relative chronologies for the Balikh valley of northern Syria.

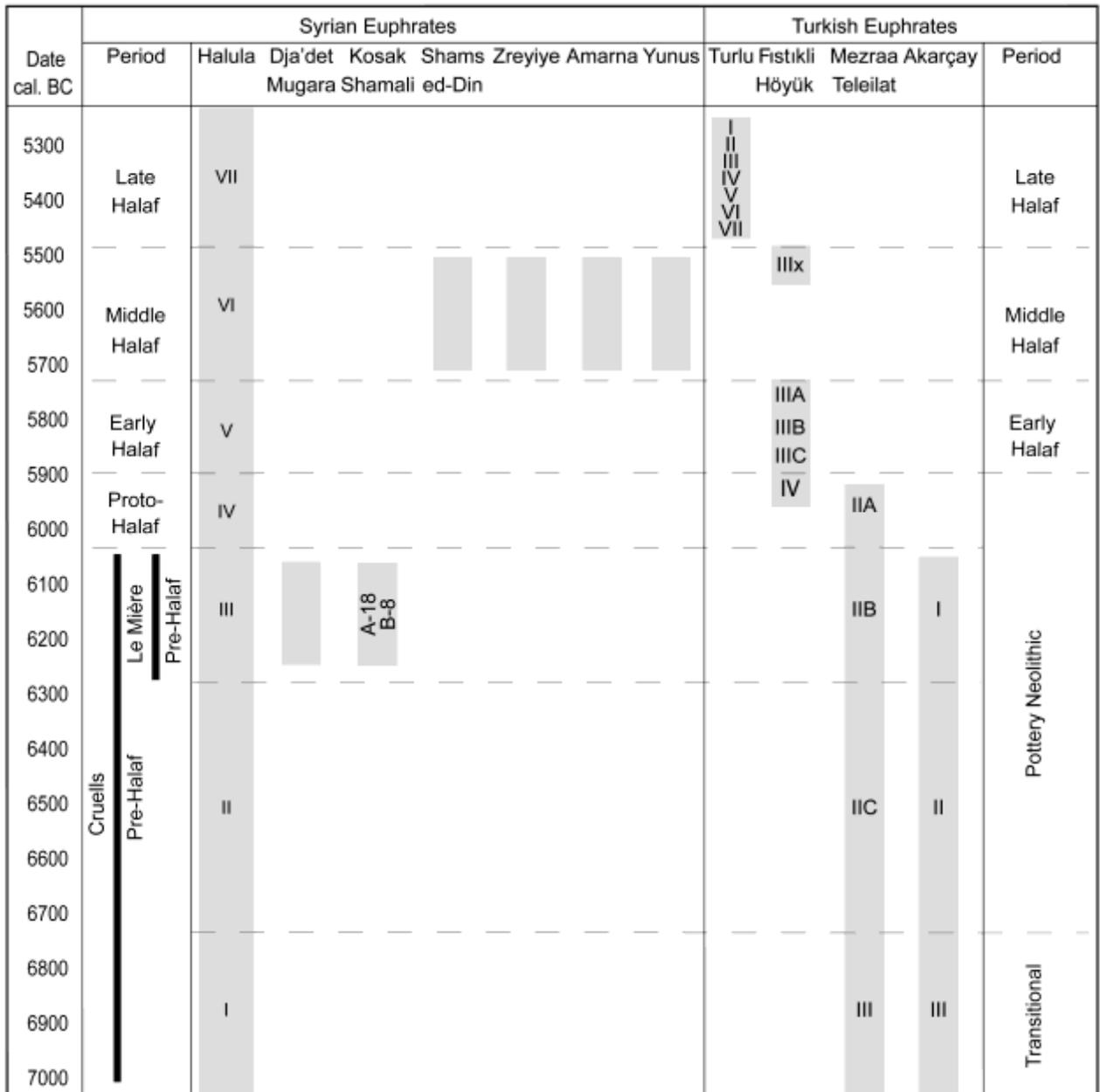


Figure 1.5. The Late Neolithic of Upper Mesopotamia: absolute and relative chronologies for the Syrian and Turkish bends of the Euphrates.

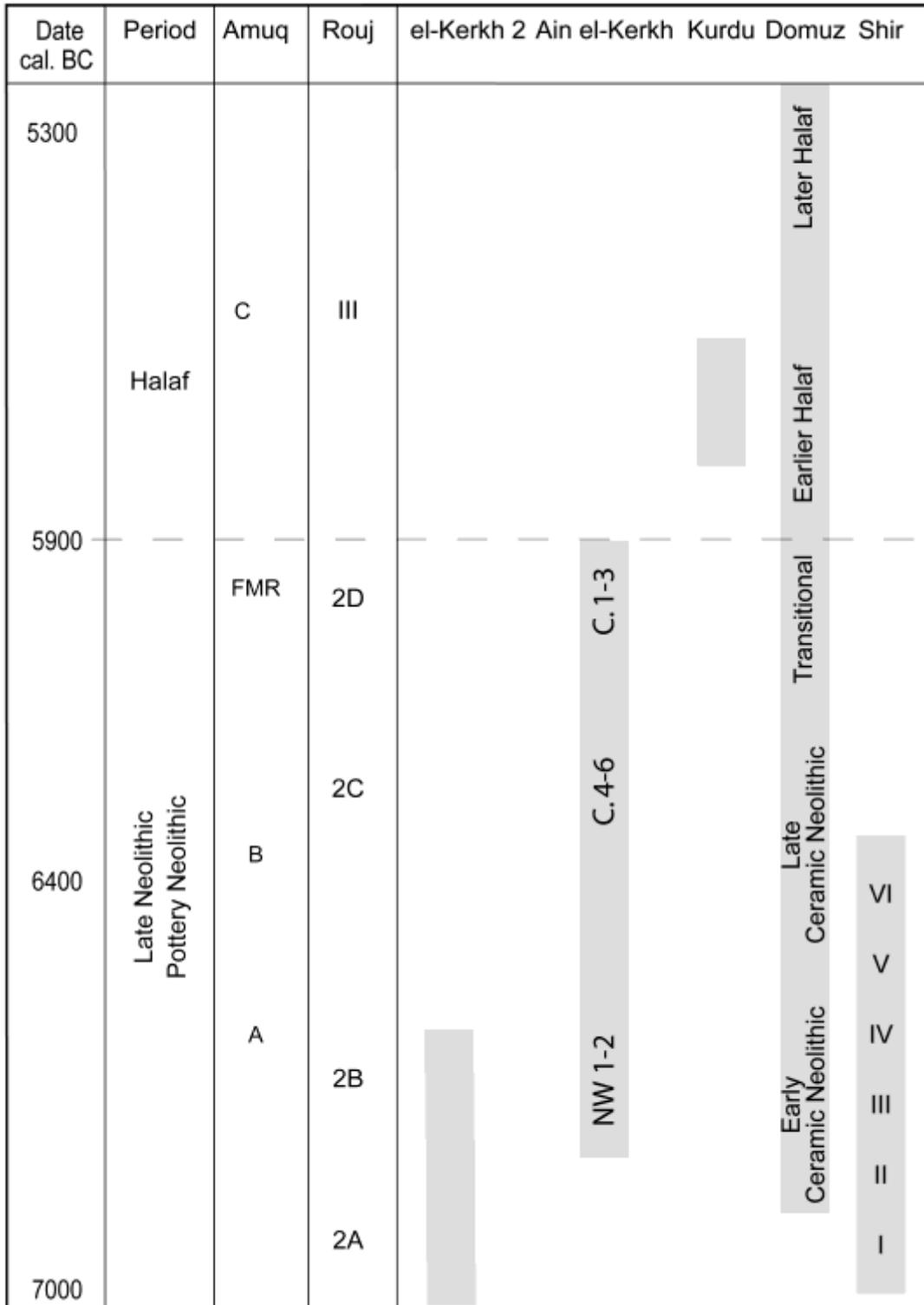


Figure 1.6. The Late Neolithic of Upper Mesopotamia: absolute and relative chronologies for the northern Levant.

14C	Stage	Archaeological periods	Broad ceramic characteristics
5300 - 5100	LN 6	Halaf-Ubaid Transition	Gradual demise of painted Fine Ware ceramics; general consensus on a gradual transition yet very poorly understood.
5900 - 5300	LN 5	Earlier Halaf – Later Halaf	Ceramic assemblages dominated by painted Fine Ware ceramics; strong stylistic similarities over large distances, yet also increasing evidence for localized practices in production and consumption; various chronological sub-divisions certainly possible yet poorly understood.
6000 - 5900	LN 4	Hassuna/Samarra (northern Iraq); Proto-Halaf (northeastern Syria); Transitional (Balikh); Mezraa IIB (Turkish Euphrates); Halula IV (Syrian Euphrates)	The ascendance of various painted Fine Wares; coalescing stylistic horizons in the painted Fine Wares, yet localized practices in production and consumption.
6300 - 6000	LN 3	Archaic Hassuna (northern Iraq); Proto-Hassuna (northeastern Syria); Pre-Halaf (Balikh); Mezraa IIA (Turkish Euphrates); Halula III (Syrian Euphrates); Rouj 2D (Northern Levant); Transitional (Domuz)	Ascendance of decorated ceramics; increase range of uses for pottery vessels; gradual disappearance of White Ware.
6700 - 6300	LN 2	Proto-Hassuna (northern Iraq, northeastern Syria); Early Pottery Neolithic (Balikh); Halula II (Syrian Euphrates); Mezraa IIC/Akarçay II (Turkish Euphrates); Rouj 2b-c, Shir I-VI (Northern Levant); Ceramic Neolithic (Domuz).	Pottery becomes firmly establish; diversification and increase of range of uses for ceramic vessels; emergence of plant-tempered pottery; emphasis on plain pottery vessels; local variation but emerging similarities; stone vessels and White Ware in addition to pottery.
7000 - 6700	LN 1	Pre-Proto-Hassuna (Khabur, northern Iraq); Initial Pottery Neolithic (Balikh); Transitional (Turkish Euphrates); Halula I (Syrian Euphrates); Rouj 2a (Northern Levant)	Introduction of ceramic containers; pottery vessels few in number and (presumably) limited to a restricted set of uses; emphasis on pottery with a mineral temper; significant regional variation but also emerging supra-local groupings; stone vessels and White Ware in addition to pottery.

Table 1.1. Provisional Late Neolithic chronology for Upper Mesopotamia, outlining broad ceramic developments.