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Communities in transition: some remarks on aspects of Neolithisation, long-term perspective and change

We live in a world where great incompatibles co-exist: the human scale and the superhuman scale, stability and mobility, permanence and change, identity and anonymity, comprehensibility and universality. Kenzo Tange, Japanese architect (Boyd 1962, 113)

6.1 Introduction

The previous chapters (4 and 5) demonstrated that the wetlands and their margins form a distinct landscape region, with respect to both taphonomic processes and methodological approaches as well as regarding the (Mesolithic) communities that inhabited them. In this chapter and those that follow the cultural continuum of communities inhabiting this area will be further examined from a diachronic perspective. This involves the Late Mesolithic, Swifterbant culture, Hazendonk group and Vlaardingen culture. The emphasis will lie on the characteristics of these communities, as resulting from their interaction with the wetland landscape and conditions. This may also inform us on the stance of these groups towards change, eventually related to Neolithisation.

This chapter details the theoretical perspectives chosen. They interrelate and overlap and in combination provide a theoretical frame of reference that may offer new ideas regarding the regionally specific particularities of these communities and their position within the process of Neolithisation. In Chapters 7 and 8 these ideas will be used in the interpretation of different aspects of these communities and their occupation of the wetland area over time.

Towards new questions

The communities in the wetlands and their margins in the LRA have historically been studied intensively as far as material, functional, ecological and economic aspects of their existence are concerned, often incorporating and combining different disciplines (e.g. Louwe Kooijmans 1993^a; 1998^a; Peeters 2007; Out 2009; Raemaekers 1999; 2003; Van Regteren Altena 1962/1963; 1964; De Roever 2004). These studies in combination with recent site reports (Louwe Kooijmans 2001^{a,b}; Louwe Kooijmans 2006^a; Peeters/Hogestijn 2001), provide a solid basis for understanding these groups, their culture and their position in a period of transition. Building on this, new and different questions may be asked that particularly address the socio-ideological identity of these groups and that may offer new perspectives for understanding these communities and their position in the process of Neolithisation. This does not mean that previous research

approaches, be they material, economic, functional or ecological, have become obsolete – in fact the approach chosen here would not be viable without them – but it does mean they answer different questions. This requires brief elaboration.

With respect to the process of Neolithisation in the LRA, the analysis of the evidence hitherto available has quite robustly sketched the development of the transition to agriculture as well as the general outline and sequence of the different stages therein (e.g. Louwe Kooijmans 1993a,b; 1998a; 2007a; Raemaekers 1999; 2003; Vanmontfort 2007). It has provided answers as to what changed, when it changed and to what extent it changed. It tracked Neolithisation with respect to actors, technological innovations, objects, subsistence and sedentism, measuring or analysing both contribution and timing and it placed these within a broader European perspective. As a result, the transition to agriculture in the LRA could be characterized as slow, gradual, involving a long phase of substitution (cf. Zvelebil 1986^{a,b}) and a broad spectrum economy that was 'extended' with domesticates and cultigens (Louwe Kooijmans 1998^{a,b}). This groundbreaking work provides the basis to answer different questions, and opens a window on different approaches and new theoretical perspectives. These address questions of 'how' and 'why' instead of 'how' and 'what', and focus on the communities in transition themselves, rather than on the elements that were introduced and their timing. Some new questions have been posed, for instance regarding the agency factor and socio-symbolic aspects (e.g. Louwe Kooijmans 2009; Raemaekers 2002/2003), involving new frames of reference, yet there is potential for a more elaborate and encompassing approach. In this study an approach has been selected that emphasises socio-ideological aspects and emphasises these as important long-term factors in (regional) behaviour and community choices. The approach is rooted in analyses of these social and ideological aspects as engrained in the interrelationship between groups and their natural surroundings, without becoming 'ecologically determinist'.

A theoretical context

Such a new approach requires a theoretical framework that deals with these groups from a 'situated', 'emplaced' perspective and focuses on issues of experience and identity, particularly in the long-term. It should be stressed that while such a 'post-processually' oriented theoretical framework may highlight valuable, informative characteristics of these communities, any proposed new ideas and hypotheses need future testing. One cannot therefore declaim a new 'truth'. With this in mind, the central elements in this part of the thesis can be summarized as follows:

- To what extent can the particularities of the various successive communities studied, such as aspects of subsistence and settlement system (mobility), be understood as rooted in the long-term interactive relationship between these groups and the wetland landscape? How were this landscape and environment perceived? And how may this have shaped community identity and mentalité?
- How did the long-term involvement of these groups with their surroundings shape their socio-cultural and ideological characteristics and what perspective does this offer on Neolithisation?

The present chapter forms an interpretative background for the approach described and a theoretical context for studying these communities in relation to the particularities of the region they inhabited. Three aspects will be dealt with consecutively. The first is of a general nature and involves the interpretative connotations of Neolithisation and the importance of defining our position with respect to them. It particularly deals with the need for a non-dualist approach towards 'Mesolithic' and 'Neolithic' in this study. Secondly the potential and particularities of a diachronic perspective are discussed, since the study of the continuum of communities involved may benefit from an approach that detects and stresses persistent traits and characteristics. Finally 'Neolithic' changes should be understood in relation to the manner in which the communities involved dealt with them. Conservative elements and new decisions will be studied by analysing the mechanisms of decision-making and change and the way these relate to the manner in which communities inhabited and dealt with their surroundings. It is especially the 'relationality' between people, landscape, places and environment that is of importance in relation to the changes which 'becoming Neolithic' may have brought about.

6.2 Interpreting Neolithisation

Ever since Lubbock's subdivision of the Stone Age into a Palaeolithic and a Neolithic era (1865), the character of the latter and the transition between the two have constantly witnessed various efforts to define a distinguishing and unique criterium (see Chapter 3). After the materialistic scope of the pierre polie, pottery and houses, Childe's advancement of food production (1976 (1925); 1958) has remained the most important determinant for the Neolithic and Neolithisation (Zvelebil 1998^b, 3, 26; see also Raemaekers 1999, 13; Chapters 2 and 3). According to Zvelebil and Lillie (2000, 59) it remains the only process which is relatively clearly defined, geographically widespread, and archaeologically detectable, which allows it to act as a key feature. From a *post-hoc* perspective this is of course true; eventually there was a pan-European shift to agriculture. However, although they note some problematical aspects themselves, the arguments defined by Zvelebil and Lillie are not as convincing as they may initially seem. First of all a shift to (agro-pastoral) farming is not a process that is relatively clearly defined. The incorporation of an agricultural way of life can take many forms and is a reversible process, especially in its incipient stages (e.g. Habu 2002; Layton 1999; Layton et al. 1991; Rowley-Conwy 2001). In ethnography and archaeology it has been documented that quantitatively, farming can both form an essential activity in subsistence modes as well as a minor element within a broad-spectrum economy (e.g. Louwe Kooijmans 2007a). This varied scale of involvement with agriculture furthermore takes place within societies that are classified materially and socially as ranging from hunter-gatherers to farmers (Gehlen 2006; Kelly 1995; Kent 1989^{a,b}, Raemaekers 1999, 118-120). Besides, the use of agriculture as a defining criterium is qualitatively hampered by the currently popular concept of 'management' of the environment and its resources. In relation to this it may be viewed as one of several risk-reducing strategies or techniques such as storage, accumulation, intensification and fire-ecology (e.g. Ingold 1988; Hayden 1990; Jeunesse 2003;

Mellars 1976; Terrell *et al.* 2003; Zvelebil 1994). Subsistence mode should thus not be defined as an evolutionary concept and at least questioned as the main characteristic of the Neolithic.

6.2.1 Beyond terminology

The considerations mentioned above impede a spatially significant documentation of agriculture and question its impact as a determining principle. It is therefore difficult to distinguish between who is farming and who is not, and to what extent evidence of farming equates to 'being Neolithic'. One should also take into account taphonomic problems (see Chapter 4; Rowley-Conwy 2004). As such, research into these issues focuses on the degree to which a process of Neolithisation and its trajectory can be detached from defining Mesolithic and Neolithic (communities), what the appropriate correlates are for the latter's characterization, whether there is a (single) successful distinguishing criterion and to what extent this is useful regarding the spatio-temporal variability of the many transitions involved (e.g. Pluciennik 1998; Tringham 2000^a).

Defining an approach

From a post-processual perspective there has been criticism of the primacy of subsistence and a singular economic perspective on Neolithisation. Bender (1978), Hayden (1990) and Jennbert (1988), for instance, specifically emphasized social aspects as crucial in adopting agriculture, while for example Thomas (1991) and Whittle (1999) stressed the importance of conceptual and ideological change. The problem with these alternatives is that they too search for one unique feature and fail to incorporate other aspects of becoming Neolithic. Furthermore they are probably even harder to distinguish archaeologically, since they deal with motivations regarding 'becoming Neolithic' and less with distinguishing features. Others have therefore advanced a more polythetic characterization of the process of Neolithisation accentuating its spatial and temporal variability and different ingredients (e.g. Czerniak 1998; Pluciennik 1998; Tringham 2000a). This approach has been criticized for 'deprivation of a common central characteristic', and accused of degrading Neolithisation to a 'vague and vaporous neologism', obliterating concrete meaning (Zvelebil/Lillie 2000, 60).

Both the monothetic and polythetic approaches are problematic. Defining one principal component within the process of Neolithisation, be it economic, technological or ideological, is more than anything else a contemporary appreciation of past reality. A change in subsistence mode involving agriculture can never be a change in subsistence mode only. It will have had repercussions beyond the economic domain and may, moreover, have received its incentive from outside the realm of economy. Arguing that there were many different Neolithics (cf. Pluciennik 1998), on the other hand, demotes a search for common characteristics to a redundant time investment and makes it difficult to trace Neolithisation temporally and spatially.

While the problems sketched above may not be easily solved, one may choose a perspective that avoids these issues by shifting attention from labeling and categorisation to the communities themselves. Several elements are of importance here. First of all the focus needs to shift from the dual perception of what defines or differentiates Mesolithic and Neolithic to the characteristics of the regionally

specific process of Neolithisation itself (see also Pluciennik 1998, 79). The most important step is to appreciate that this process is never only about a change in subsistence, although the transition to agriculture may be one of its most salient characteristics. A second step involves an abandonment of the concept of Neolithisation as a process of evolutionary progression, in favour of historicity.² Neolithisation is not about a directional development from forager to farmer through mechanisms of diffusion and acculturation. Instead, rather than being gradual and unilinear it is characterized by trial and error, by incorporating new and perhaps alien concepts in familiar practice and by processes of bricolage (as defined by Lévi-Strauss 1962). This emphasises the importance of an intensive study of the communities involved, their continuous and changing characteristics, as well as the manner in which they dealt with new elements, over an attempt to fix certain concepts like 'Neolithic' and 'Mesolithic' into place through defining criteria which are of a relative nature (see also Whittle/Cummings 2007, 2). Such a (long-term) study of the communities involved should be positioned within a meaningful regional framework. Within this framework emphasis should lie on analysing the interrelationship between communities, landscape and environment. Coming to terms with what it meant to live in certain areas may shed light on both practical as wel as socio-ideological aspects of society and in turn on the way communities may have dealt with new elements and change.

6.2.2 Against dualism

The focus on communities is at the same time a focus on continuity and change. It deals with aspects of society that remain the same and interprets change not as an extraneous development, but as the result of implementation in existing community structures. Since the communities involved in the process of Neolithisation in the LRA wetlands and their margins may be perceived as culturally subsequent (e.g. Louwe Kooijmans 2007a), the element of continuity and maintenance of societal stability (e.g. Bourdieu 1977; Sommer 2001) will have been an important factor. It further underlines the idea that we should understand both the developments taking place and the communities involved from the same perspective. This should be stressed because many studies into the topic of Neolithisation work within a certain framework of fixed assumptions and hypotheses that are often based on a dualist perspective. The main premise often boils down to the idea that during the transition to agriculture there is an overall decrease in mobility related to an increase in settlement permanency. This is combined with population growth, increased territoriality, and aspects of social differentiation and structuring of the landscape. The nature of the discussion surrounding these parameters is often encased in an atmosphere of unilinear directional development and progress. Becoming Neolithic is then also defined as the developmental changes within these areas, most of which generally overlap with the different subsystems defined by Clarke (1977). In table 6.1 several of the presumed changes have been highlighted.

Both the above-mentioned characterization of the Mesolithic and the assumed changes related to the Neolithic are a generalisation of a situation that is far more complex. Nevertheless many of the elements mentioned are more or less accepted *a priori*, within and beyond the LRA (*e.g.* Clark 1977, 116, but see also discussion in Price 2000^a, 5; Price/Gebauer 1995, 8; Thomas 1999, 16; Whittle 1999, 6-7).

Themes	Mesolithic situation	'Neolithic changes'
subsistence		
economy	hunting and gathering	reliance on domesticates and cultigens
procurement strategy	'living off the land'	producing
material culture		
tools and equipment etc.	predominantly mobile (microlithic) toolkit, bone, antler, wood	site furniture, pottery, polished stone axes
dwelling and investment	light-weight, temporary dwelling structures, tents, huts, little planning	sturdy structures, houses, outbuildings, complex technology, fixed design
settlement system		
mobility	residential or logistical mobility	decreasing mobility, permanency
territory	flexible, possibly 'moving' territories	decrease in size, fixation of territory
(intra)site organisation		
	fairly random, shifting use of space at a location	increased spatial organisation
	predominantly primary refuse	increased secondary refuse
	(hearth-oriented) activities	creation of a domestic sphere
	huts, burials, activity areas	houses, cemeteries, fields, workshops
	open accessible structure	enclosed inward structure, property?
social aspects		
	small groups	increase in group size
	(nuclear) families, bands	(extended) families, households
	generalized/egalitarian, some complexity	increasing complexity, differentiation
	fixed male-female tasks	shift in composition of tasks, decreasing female mobility
	intrinsic mobility and down-the-line exchange	emphasis on exchange and prestige
ideology		
	no or limited deposition	strong increase in deposition
	limited (geometric) decoration	increase in (geometric) decoration, decoration on pottery
mortuary practice		
	incidental burial	cemeteries

In recent years there has been an increasing awareness of this dualist approach and, partly inspired by the re-appreciation of hunter-gatherers an increasing criticism of thinking in classic Mesolithic-Neolithic dichotomies has been voiced (see *e.g.* Barnard 2007; Czerniak 1998; Pluciennik 1998; Strassburg 2003; Whittle/ Cummings 2007; Zvelebil 1989).

Table 6.1 Assumed character of the Mesolithic and of 'Neolithic change'.

Hodder and the concept of 'domus'

A good example of the problems related to a dualist perspective may be given through a discussion of Hodder's perspective on Neolithisation. His approach towards the process of Neolithisation has been built up around a socio-symbolic and ideological appreciation of the transition to agriculture. Fundamental is the domestication or transformation of the natural and the wild (and also individuality) into culture and society. The control over the wild acts as a mechanism and synonym for control of society and shifts the emphasis from material and economic 'cause and effect' of Neolithisation to a consequence of ultimately social incentives. According to Hodder (1990, 31) domestication in the social and symbolic sense may have occurred prior to domestication in the economic sense, indicating that the agricultural revolution may have been an

epiphenomenon of deeper changes. Central to this argument is the concept of the domus. Domus in its broadest sense means home. It not only involves the house and its associated activities, but also encompasses tombs and monumental sites such as enclosures. According to Hodder (1990, 38, but see also Hodder 1998) the domus provided a way of thinking about the control of the wild and the greater oppositions between nature and culture, social and unsocial. In this way it became the conceptual and practical locus of social transformation and it was here that the origins of agriculture were conceived. The domus thus acted both as a metaphor and mechanism of change, the former by embodying the drama of emotions inspiring the drive to sedentism and intensification and the latter by forming the locus of production, reproduction, storage, processing and control of the relations between people within society (*ibid.* 41-42).

The concept of the domus provides an interesting way to approach the transition to agriculture. It steers clear of traditional explanations based on ecological or economic factors and focuses on a difference in mentalité. This to a certain extent empowers the indigenous groups to adopt or refrain from adopting such a new mentality and its associated concepts. However, while abandoning many of the classic distinctions between the Mesolithic and Neolithic sketched above (see table 6.1), Hodder's work is hampered by its strong structuralist undertones. Hodder juxtaposes many different aspects of the domus (e.g. man-woman, life-death, inside-outside, light-dark, wild-domestic etc., pp. 27, 69, 199, 300 et passim). These boil down to the main contrast in his work, that between domus and agrios, i.e. culture and nature. In Hodder's efforts to interpret Neolithisation on a pan-Europe scale, the evidence is categorically forced into this more or less neo-Cartesian dichotomy. This forms an important shortcoming, in view of the fact that there is a rich body of mainly ethnographic accounts indicating that many groups do not at all rigidly separate nature and wild from culture and society (e.g. Descola 1996; Descola and Pálsson 1996; Ingold 2000; Pollard 2004; Jones 2007, 92; Bird-David 1992b). Often there is much more of a continuum in which typically cultural and natural aspects of life are interwoven into one seamless web. This means that the worldview or *mentalité* of past communities, including aspects such as myth may not at all have accommodated the suggested contrast between wild and domesticated. The introduction of a Neolithic way of life might by consequence not have entailed a drastic ideological reorientation to the extent sketched by Hodder. This is also important in the debate concerning the concepts of Mesolithic and Neolithic (see also Chapters 2 and 3, Strassburg 2003; Thomas 1988; Zvelebil 1989). In the LRA wetlands and margins we are distinctly dealing with 'hybrid' groups that successfully combined wild and domestic characteristics over a long period. This is why this study centers on a reserved attitude towards opposing the Mesolithic and the Neolithic and adopting dualist perspectives for the area, period, groups and process studied.

Some considerations

The above review leads to several important considerations for this study. First of all, the communities studied are perceived as demographically and culturally continuous and are therefore studied from an unchanged perspective. This means that the presence or contribution of Neolithic elements should not lead to a different approach, or an emphasis on different aspects. Secondly, since these communities can be perceived as successive and taking into account the absence of any clear break or distinct moment of change it may be argued that the original perception of the environment, rooted in the Late Mesolithic and the *mentalité* involved with this, will have remained a strong element in these communities (*e.g.* Barnard 2007; Bird-David 1990; 1992^b). This contrasts to, for example, the development of the Neolithic in England or southern Scandinavia (*e.g.* Larsson 2007^c). The absence or limited importance of a distinction between nature and culture provides a different perspective on how Neolithisation developed and how 'Neolithic elements' were understood and incorporated. Thirdly, understanding the socio-ideological aspects of the communities involved may enhance our perspective on Neolithisation in this area. In order to do so the way in which these Neolithic elements are rooted in the interrelationship between communities, landscape and environment should be studied. Furthermore, the approach that needs to be chosen is a diachronic one.

Based on these perspectives this study aims to document the communities in the wetlands and their margins and the continuity and changes that characterise them from a long-term perspective and in relation to the environment. Regarding terminology the incorporation of domesticates and cultigens may be used to classify communities as Neolithic, but this in itself is not (necessarily) informative on the characteristics of the process of Neolithisation and not informative on the perception of, and implementation in the communities involved.

6.3 A long-term perspective

The perspective employed in this thesis to study these changes and their temporality is diachronic and long-term. This is inherent to the scope of a study incorporating the process of Neolithisation in the LRA, encompassing roughly 3000 years. It is also a necessity since site-formative processes operating over the intervening millennia have left us with an incomplete dataset (see Chapter 4). The taphonomically induced absence of certain categories of material, the uninformative character of many upland sites and the sparse well-excavated wetland sites prevent, not including some exceptional cases (e.g. Jadin 2003; Lüning 1982^b; Vanmontfort 2004; Verhart 2000), an adequate appreciation of contemporaneously functioning sites and settlement systems. The main reasonto adopt a long-term perspective, however, lies in the fact that we are dealing with continuous communities in an uninterrupted cultural succession. While the scope is long-term, the emphasis is on continuity in the light of the changes taking place.

6.3.1 Adopting a long-term perspective

The use of a long-term perspective is usually considered one of the major advantages of studying prehistory and 'deep time' (see Bailey 2007; Barrett 2004, 11-12), and in this sense ideally suited to comprehending something as extensive as the process of Neolithisation (in the LRA). What is often lacking in resolution and detail at any one moment is thought to be compensated for by the ability to see and document processes, changes and possibly causality. While this may be true, there are also some problems to be considered. One of the most important concerns the conception of time as chronology that underlies many of these studies. This is problematic since it presents time as a linear and uniform phenomenon divisible into mutually exclusive units and incorporating a certain internal logic.

Time in this totalising directional sense is imbued with explanatory potential. It carries very definite evolutionary implications (Lucas 2005, 9-13). An emblematic example is the study of the spread of agriculture over time by Ammerman and Cavalli-Sforza (1971; 1973). The directionality and simplicity of this 'wave-ofadvance' model has been justly criticized (e.g. Zvelebil 1986^{a,b}; 1998^{a,b}), its main fallacy being the lack of appreciation of the internal complexity of interaction and change. Other more recent examples of using a long-term perspective within a purely chronological framework are Gkiasta et al. (2003) and Dolukhanov et al. (2005). Yet less obvious examples also influence our ideas on Neolithisation, for instance spatio-temporal schemes (e.g. Louwe Kooijmans 2007a, fig. 2) or general cultural overviews. These, often necessarily, focus on definition and succession instead of processes and dynamics. In reaction to this perception of time, the Marxist historian Althusser (1969, in Lucas 2005, 13-14) argues that there is no single continuous time, or universal time frame or reference but, rather, different temporalities, which produce different histories. Any kind of history that attempts to be universal in its coverage, such as a periodization, reproduces the same linear assumption about time. In line with Tringham's thoughts on Neolithisation (2000a) as a regional mosaic, we are also dealing with different co-developing temporalities.

Interacting time-scales

In recent years, several contributions have dealt with time and its perception (Bailey 2007; Lucas 2005; Murray (ed.) 1999; Rosen (ed.) 2004^a; Shanks/Tilley 1987; Thomas 1996^{b,c}). Two important non-linear approaches have their origins outside of the field (see also Lucas 2005, 15). The first, catastrophe theory (and related chaos theory), was developed within the natural sciences. These theories gave rise to useful archaeological applications such as complex systems and complexity theory (Bentley 2003, 8-14). At the core of both chaos and catastrophe theory however, is a perception of society as a system characterized by discontinuity and instability. The emphasis is thus on a societal disequilibrium as an explanation for sudden change.3 Societies are perceived to be in 'active stability', until change occurs 'in rapid events of perturbation' (see Gould 1999, xx-xxi). This perspective and the disequilibrious nature of communities as perceived in chaos theory, fail to accommodate for the gradual transition to agriculture documented in the LRA (e.g. Louwe Kooijmans 1998^{a,b}). There we are faced with LBK and successive communities characterized by a complete and potentially available set of Neolithic elements ranging from pottery production, architecture and polished stone tools, through domesticated animals and crop plants to sedentism and even a changed mentalité. Out of this potent reservoir only some elements were initially drawn and incorporated in hunter-gatherer society. Intensification was slow, it was variable, but it was present. Instead of perceiving indigenous communities as mechanical and instable systems with a threshold level above which collapse or transformation takes place, it is, for the LRA, more appropriate to focus on the rationale behind the choices that were made; to question their impact with respect to stability and understand the gradual nature characteristic for the area. In this sense another non-linear approach to time, developed within the historical Annales school by Braudel, might provide a better framework.

In order to deal with both continuity and change Braudel (1966) divided time into three different scales, the longterm (longue durée), the medium and the short term. The longterm scale deals with slow processes such as environmental change. In combination with the medium term, focussing on conjunctures (cycles) of for instance a social, economic, ideological or demographic nature, they form social or structural history. The small time scale refers to events (événements), and concerns actions of individuals or groups. The reflection of the medium-term and long-term scale upon the archaeological record might make them more appropriate within the study of prehistory (cf. Raemaekers 1999, 21), however it is exactly the dialectical relationship between the different scales that provides insight into the dynamics of change, stasis and transformation (Bintliff 1991; Braudel 1966; Lucas 2005, 15). Since all scales influence each other, it is the articulation of the different scales with respect to each other which is important. Short-term events may therefore form the fabric of long-term developments, but should themselves also be understood from this context (see Foxhall 2000).

For the study of the transition to agriculture in the LRA all three scales are important. The long-term scale is most prominently represented by the changes in environment. These incorporate for instance the rise in sea and related groundwater levels and their subsequent stabilisation around 4000 cal BC and gradual decrease (e.g. De Mulder et al. 2003), or the impact of the Atlantic forest upon habitation possibilities in the Northern Netherlands (Niekus 2006).4 It should be realised though that landscape and ecological changes may also be sudden. Transgression for instance represents a series (trend) of extraordinary high tides (events). There is thus a certain embedded relationship between the different time scales. The next level of conjunctures could accommodate for a whole range of trends such as the material and economic changes involved in the transition from the Late Mesolithic to the Swifterbant culture, the development and nature of exchange networks or the technological and stylistic development and relations of pottery. The scale of événements finally seems appropriate for approaching burials or deposition, but for instance also covers the initiatives leading to the adoption of elements of 'the Neolithic package', or relate to the variability present within one contemporaneous cultural group. The examples above are dependent upon the time perspective chosen to study them, but serve to show that different time scales can be fruitfully applied. What is even more important here is that these time scales are a historicist means of acquiring a grip on the past, but that they interact, are embedded and influence each other's outcome. It is an enhanced understanding of the interrelationship between these temporal scales that offers a clearer perspective on the groups studied here. Since we are dealing with continuous communities it is worthwhile to understand both their short-term as well as longer term characteristics from an interrelated perspective (see Foxhall 2000; Gerritsen 2008).

6.3.2 From time to temporality to memory

While the above might indicate the importance of a long-term perspective and even argue for a *Braudelian* framework, time in itself is non-explanatory. While a diachronic perspective opens a window onto perceiving the characteristics of

historicity and interpreting them in terms of societal change, additional insight may be gained form understanding the way the perception of time may have been embedded in the communities involved.

Important in this respect is the addition of another dimension to the archaeological material record. The dichotomy between past dynamic communities and the static nature of the material record resulting from the processual Binford-Schiffer dialectic (see Chapter 4) falls short when trying to interpret the activities of past communities from a temporal perspective. At the heart of this problem is the so-called Verfremdungseffekt characteristic for our usual interpretation of the past as 'a foreign country'. The past is seen as something static and objective which is distinctly different and separated, both from the present from which we study the past as from any other 'present' before that. This distinction between the past and the present and its influence on archaeology has prompted some archaeologists (e.g. Gosden 1994; Thomas 1996b) to draw on the work of Heidegger and his ideas on Dasein to come to a different perception of time. This phenomenological approach sees time as actively situated in life and events. Human beings re-encounter and re-evaluate their material surroundings, perhaps alter their significance and reincorporate and reposition them in society, creating a continuous motion of handing itself down to itself (Thomas 1996^b, 60-61).

The importance of this point of view lies in the fact that it does add temporality to the past and so makes it of importance to past communities and their characteristics over time. According to Lucas (2005, 37-38) the past is a multi-temporal event and can be considered a palimpsest. Palimpsest here thus has a positive connotation. Landscapes, sites and even objects consist of these multiple temporalities which, instead of forming a single event or a sequence, are all (inter)active at the same time. In this sense another resolution is added. The site of Bergschenhoek (Louwe Kooijmans 1978; 1986) might serve as an example of this temporal complexity referred to by Bailey as a temporal palimpsest (2007).⁵

Visiting Bergschenhoek

Bergschenhoek was located on the peaty shores of a lake in the coastal area north of the Rhine-Meuse estuary. The small site, consisting of a living platform (12 m²), a hearth and several fishtraps, is considered to represent a fishing and fowling station. Yet despite the extraordinary clarity of the evidence, the site is also a palimpsest of temporalities. Most striking in this respect is the microstratigraphical sequence of renewed hearths found at the site. In total 38 layers were recovered relating to renewal episodes. These could be grouped into ten to eleven phases of hearth use, probably covering the like number of years (Louwe Kooijmans 1986, 10).

The living platform was renewed at different time intervals. It was reinforced by local products such as bundles of reed and young trees as well as wooden boards, some of which may have had a long previous use-life in a different context (for example as a canoe). The site also yielded evidence for a hut or small construction, yet no renewal phases could be reconstructed. The four fishtraps that were found at the site were probably made locally and may not have functioned as long as the entire use-life of the site. Tools such as leister prongs, antler axes and awls may have been used and carried around for several seasons before being discarded at Bergschenhoek. The baked clay weights and the pottery were not locally made, but

originated in other locations. They may have been discarded there and designated for use at the fowling station. The fragment of a stone axe and the scarcity of flint indicate the level of care and curation vested in these lithic objects. They may have lasted a long time before being discarded, while the axe may have accompanied the group of hunters for several generations. Most of the faunal remains indicate a regular presence in winter, while some may point to (shorter?) visits up to May or from October. This again contrasts with the find of several articulated skeletons of young puppies which may have ended up in the water during an unguarded moment.

From time to temporality

Many of the temporalities at Bergschenhoek probably mattered and were meaningful to the group of inhabitants in deep winter. They structured their activities at the small station and they in turn were structured by the material aspects of previous visits (e.g. the hearth, hut and platform), at the same time introducing new objects, discarding others and changing and renewing what was there. Bergschenhoek is thus a palimpsest of coexisting time scales, repeated practices and different rates of durability and renewal. Incorporating this multilayered temporality instead of perceiving the past as static broadens our appreciation of what happened in the past and provides a deeper understanding of how people in the past dealt with time and memory (see Ingold 1993, 171; Thomas 1996^b, Chapters 2-4; but see also Louwe Kooijmans 2000, 324). The appreciation of this variety of time scales as well as directing apposite questions at the right temporal scales, has been referred to as time-perspectivism (Bailey 2007; Lucas 2005, 43).

While perception of time is culturally specific and historically contingent (Gell 1992; Munn 1992), an important handle on time may be implicit in the way material culture is organized. The way in which a society views the world is inextricably linked to its material relations with that world which encapsulate conceptual, symbolic or cognitive aspects of society as well as technology or economy (Lucas 2005, 67). In this sense the temporal structure in which past activities (e.g. building, harvesting, rituals, mobility, burial) are embedded and recur is also informative on past perceptions (ibid. 68-69). The repetitive character and mnemonic aspects of these activities (and related objects, structures, performances and material culture; see Jones 2007; Rowlands 1993), although not easily inferred from the material record, bring us closer to social memory and its role in cultural reproduction over time. In reference to this the example of the site of Bergschenhoek might again be illustrative.

Revisiting Bergschenhoek

The location of Bergschenhoek was probably embedded in cyclical cultural practices as the site was visited for several consecutive winters. These will have been expeditions involving quite some preparation, materialized in practices which were typical for the winter. Being involved in these practices might have been emblematic for and have triggered memories of the lean season, a potential time of hardship. It might have evoked memories of previous years and deceased? individuals and have formed the incentive for rituals.

The frequent renewal of the hearth at the site is related to the daily or weekly repertoire of activities. Renewing the hearth could have marked the beginning of the stay and it formed the centre of repetitive activities such as the curation of

tools and the processing of hunted animals, activities which had a temporality and repetitiveness of their own. The hearth might also have formed the focus for the telling of stories and myths about the past or ancestors and thus for a less tangible construction of time related to cosmology.

Activity at Bergschenhoek was not endless, however. The decision to abandon the use of this location may have been down to deteriorating local circumstances (cf. Schlanger 1992). It might also have related to a repetitive shift in mobility, involving a large-scale move of the entire settlement system every couple of decennia (see Binford 1983(1983), 379-386). The memory of the use of the Bergschenhoek location or one of its episodes could thus in this sense be linear and regain an aspect of cyclicity at the time the location was visited again (which ceased when the site was abandoned for good). In the same sense the axe fragment was probably part of an object that went through similar cycles of storage, use and curation, eventually ending in broken fashion at the site; again, a linear sense of time. At the same time, however, the 'end of the axe' might have fueled the need to acquire a new one, which was probably dependent on the frequency of exchange relationships and the acquisition of axes through these.

From temporality to memory

It is through the repetition of habitual practice ranging from rituals to ordinary physical tasks that the structure and fabric of society is handed down to and over consecutive generations (see Bourdieu 1977; Jones 2007; Rowlands 1993). Whittle (2003, 22), drawing on Giddens (1984, 50), in this sense speaks of the 'ontological security' embedded in routines. At the same time this repetition and the nature in which both linear and cyclical time are dealt with becomes informative on the character of social memory.

Social memory and a past sense of the past can thus be created and continued both through (often subconscious) habitual practices or deliberate commemorative events (e.g. Gerritsen 2008, 144). The character of (social) memory can be complicated and diverse (see Whittle 2003, 107-118). A better understanding of the communities involved is arrived at when we try to perceive and understand the continuity and the change in these repetitive practices (cf. Lucas 2005, 83-92). This calls for an appreciation of the past as an active influence instead of a static backdrop (Barrett 2000, 67; Brück 2005) to the various activities and practices performed (including construction, sacrifice, abandonment etc. as well as skills exercised; Rowlands 1993, 146). The physicality of the past in this respect, the material 'traces' that are preserved, may form important references of past events and locations for the orientation of repetitive practice (Jones 2007, 18-23). By triggering memory and forming a focus for actions, objects, structures and places tied people to their past, while repetitive practices formed a strong reiteration or reference between past and present (ibid., 55), forging a sense of identity (see Whittle 2003, 22; see also Thomas 2000^a).

The addition of this temporal aspect might be informative on the constellation of conservative and progressive elements within the studied communities, something that is elementary in trying to understand the gradual process of Neolithisation in the Lower Rhine Area and the choices for the adoption of certain elements. It emphasizes the relationship between short- and medium-term practices and longer term trends and as such opens a window onto the discovery of long-term *habitus* and a characterization of these communities over time.

6.4 Structure, agency and continuity

'men [sic] make their own history, but they do not make it just as they please, they do not make it under circumstances chosen by themselves, but under circumstances directly encountered, given and transmitted from the past.' (Marx 1963, 15 (1869), cited in Dobres/Robb 2000, 5).

The changes and temporality characterising the transition to agriculture in the LRA wetlands need to be understood within the perspective of the (succession of) communities involved. This means a focus on the mechanisms of change and stability in society and the way in which these enabled the incorporation of elements from the Neolithic repertoire. To understand these processes it is useful to focus on the concepts and interplay of structure and agency and their role in societal change.

I will not use structure and agency as synonyms for process and event. While the latter terms help to understand the structure and temporality of history as outlined above, they are not informative as to the dynamics underlying that structuring. In the same manner processes cannot be seen as conditional or causal for events because events cannot be seen as consequential of processes since the latter are generated *through* the working of events. Causes cannot be their own consequences (Barrett 2004, 12-14). From an archaeological perspective this means that a long-term sequencing of material culture cannot be regarded as the structuring of history, since it does not account for the moments in which the structuring is actually realized (*ibid.*). In line with the argument of time and temporality outlined above, Barrett (2004, 15) therefore speaks of a structuring of history *from* which temporalities are formed. As such, process becomes the map of patterns of continuity and changes in events through time (*ibid.*, 20). It is in the dynamics underlying this patterning that structure and agency may provide some perspective.

For most of the previous century, archaeological argumentation for and explanation of societal change has often been based on the 'will of the collective.' Both 'Childean' culture-historical approaches and processual archaeology propagated a top-down perspective of society in which human behaviour and its material reflection were interpreted as socially determined and embedded in various (heuristic) subsystems and normative rules (cf. Clarke 1978 as well as Bourdieu 1977, 83). Change, from this perspective, was instigated and directed by adaptive structures within the social system or ecosystem (see Barrett 2001, 144-146; Johnson 1999, 104-108). This means there was little attention for the actual individuals or groups within these systems and the way their actions and choices shaped the structure of society and thus the material patterns we document. To compensate for this lacuna archaeology (mostly within a postprocessual paradigm) reverted to the concepts of 'agency' and 'structure' developed within sociology and anthropology.

Social dialectics

The profuse and often indiscriminate use of the terms 'structure and agency' in archaeology until now presents a problem however (see also Dobres/Robb 2000, table 1.1, p. 9; Jacobs 1993, 336). Structure and agency have often been used as

convenient labels and as synonymous with society and the individual. Agency in this sense was used as an explanatory 'way out' for sudden change or particular phenomena, a reading which has little in common with its original conception.

At the basis of 'agency theory' are the works of Giddens (1984) and Bourdieu (1977). Both focus on the *embedded* role of individuals within society and the dialectic relationship between the structures agents both exist in and which they (re)produce. This humanized, dynamic perspective on the relationship between individuals and communities focuses not so much on agency and agents, as it does on practice (Viveiros de Castro, in: Barnard/Spencer 2002, 514-522; Bourdieu 1977, 79-83; Dobres/Robb 2000, 4-5; Giddens 1984, 2). In this sense, understanding stasis and change is thus not so much about 'who', but about 'how'.

The main contribution of Giddens lies in his effort to overcome the pervasive dualism between the totality of society and the experience of the individual by focusing on the relationship between them in the form of 'social practices ordered across space and time' (Giddens 1984, 2, cf. supra). These practices are of a recursive nature, meaning that 'in and through their activities agents reproduce the conditions that make these activities possible' (ibid.). Structure in this sense can be characterised as recursively organised sets of rules and resources which are bound neither to time nor space. These are embedded within social systems which involve 'knowledgeable activities' of situated human actors or agents (*ibid.*, 25). This perspective is useful when adopting the long-term approach advocated above. According to Giddens the duality of structure lies in the fact that 'the structural properties of social systems are both medium and outcome of the practices they recursively organize' (Giddens 1985, 25). Structure should thus not be seen as constraining, but rather as facilitating (Barrett 2001, 150, drawing on Giddens 1984, 25). In the same manner agency does not stand for the intentions of individuals (for a contrasting opinion see Hodder 2000, 25-26) but for their capability for realizing these (cf. Giddens 1984, 9).

Although Giddens acknowledges that the outcome of practised routines may have unexpected consequences (1984, 26-27, 90) his emphasis is on the *knowledgeability* of the actors involved (Jacobs 1993; Baert 1998 cited in Whittle 2003, 10-11). Agents are capable of acting, and possess knowledge of social conventions enabling them to 'go on' (Giddens 1984, 26). In this sense they both reproduce and transform structure. This knowledgeability can be *discursive*, incorporating practices which are objectified and expressed verbally, or through other means (see Rowlands 1993). An example of the latter would be rituals or certain aspects of mortuary practice. Most knowledgeability is however founded upon practical consciousness (*ibid.*). Bourdieu (1977) focuses to a significant extent on this practical non-discursive knowledge as expressed through *habitus*:

'The habitus, the durably installed generative principle of regulated improvisations, produces practices which tend to reproduce the regularities immanent in the objective conditions of the production of their generative principle, while adjusting to the demands inscribed as objective potentialities in the situation, as defined by the cognitive and motivating structure making up the habitus' (1977, 78). The habitus controls the actual practice (praxis) through which it is defined.⁸ In this sense it is a 'structuring structure' based upon imitation and socialisation (see Jacobs 1993). Bourdieu's habitus is dialectically bound to 'fields' (see Bourdieu 1977, 95). These can be defined as social theatres marked by their own sets of rules and codes which

regulate what is perceived as sociable behaviour. In this way the field structures and is structured by the *habitus* (see Jacobs 1993, 340). Intuitive 'know-how' enables agents to 'attune' their *habitus* to the demands of the field enabling them to become successful participants.

Both Giddens' and Bourdieu's ideas are in concordance concerning the recursive nature of the relationship between structure and agency, although Bourdieu has a more restrictive perception of the knowledgeability and intention of agents (see Jacobs 1993). It is the emphasis on social practices, however common or 'domestic', in the recursive interplay between individuals and communities that shapes and consolidates social systems.

6.4.1 Agency and archaeology

It is thus possible to interpret the developments characterising the transition from the Mesolithic to the Neolithic from the perspective of agency. This opens up an opportunity for a bottom-up perception of the process of Neolithisation in the LRA. In addition to documenting the material reflection of processes and events and correlating those to 'cultures' and 'groups', this approach focuses on the dynamics behind becoming Neolithic and subsequently the way agency influenced this process. This is not yet informative on the character and scale of agency, nor on the way archaeology might be able to deal with it. The latter issue has been of concern to archaeologists. The use of agency theory in archaeology has been hampered by the lack of application in the form of case-studies and by the abstract terms used (cf. Whittle 2003, 11-13). While case-studies remain limited, Barrett's programmatic papers on agency in archaeology (2000; 2001) provide some useful handles, notably in the form of structural conditions and structuring principles (see fig. 6.1). By structural conditions Barrett (2000, 65-66) implies all conditions which agency may once have 'inhabited', such as certain landscapes, environments, material structures, resources, available technologies and systems of symbolic order. These conditions have their own historical development and significance, generated through (often repetitive) practices and implicitly meaningful to the participants. Although these (archaeologically perceivable) conditions ordered the world agents lived in they themselves did not do anything. Structuring principles on the other hand are the means or ideas that developed over time for successfully 'inhabiting' or 'negotiating' these structural conditions. They are based on the knowledgeability of the actors to work on their conditions in order to reproduce their identities and conditions of existence (ibid.). Structuring principles might thus be seen as the knowledge, motivation, skill and level of self-determination enabling agents to reproduce (or sometimes change) the structure within which they operate. Within this setting an acceptance or boycott of (divergent) habitus is dependent upon the reaction of the community, either enabling or rejecting change. The influence necessary to establish this comes from control over resources and influence over others. It is the ability to objectify the conditions within a certain field and discursively and strategically act upon them (see Bourdieu 1977, 184, but also Barrett 2001, 154 and Giddens 1984, 14-16). Giddens (ibid.) refers to this as the capability of agents to 'make a difference' within a 'dialectic of control'. Barrett (2001, 161) further mentions that fields and their resources might be vertically differentiated and therefore involved differentially empowered

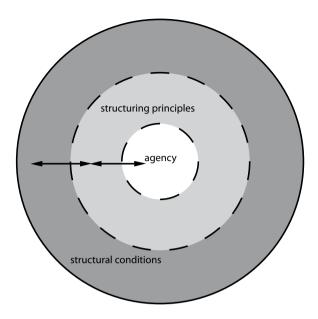


Fig. 6.1 A visualisation of the recursive relationship between structural conditions, structuring principles and agency.

agents. Since this study deals with largely egalitarian small-scale communities the existence of stratification and differentially empowered agents should not be overestimated.

Structural conditions comprise the inhabited and historically significant spaces and facilities which are both medium and outcome of agency (Barrett 2000, 65-66). These facilitated certain social practices and can be documented archaeologically. The archaeology of structuring principles (or fields of social practice, cf. Barrett 2001, 158) is more complicated however, since it involves the way in which structural conditions were inhabited. We cannot excavate structuring principles but have to infer them by analysis of the data. This might, for example, involve enquiries into a mobility cycle, a chaîne opératoire or mortuary practices, but also encompasses other ways in which agents might have perceived or dealt with their structural conditions and especially how they perpetuated them. These perspectives border on phenomenological approaches (see Barrett 2001, 158) and become more speculative when their archaeological footing becomes less clearcut. A long-term perspective, however, from which characteristics at different time scales may be analysed, combined and related, may provide a more solid basis for documenting structuring principles, because of the longer scope available to document recurrent patterns and continuity.

6.4.2 Agency and scale

While the above indicates how change may take place, the discussion on agency theory has so far not discussed the level at which change is instigated. Agency has often been used from the analytical perspective of the individual and the body (see Dobres/Robb 2000; Hodder 2000; Nilsson Stutz 2003). Although legitimate, this approach is also partly problematic since it is based upon a western perspective of individuals and individualism (Whittle 2003, 52). A considerable body of ethnographic case studies shows that our western androcentric perception of a largely autonomous individual is just one of many possible perspectives (e.g. LiPuma 2000; Strathern 1996). The way in which individuals are perceived in their societies' cosmovision and their relation with for example the natural

world (e.g. Descola 1994) therefore nuance our idea of individuals and hence the appropriate perspective of agency and idiosyncratic behaviour. It is thus questionable to what extent agency theory should focus on the level of individuals. The perspective of structure and agency is on practice, on the 'how', and the way in which society gives leeway, enabling agents to perpetuate or change and establish new habitus. It is also about how a sense of 'groupness' is constructed, negotiated and transformed (Dobres/Robb 2000, 11). It is a communal process (Barrett 2005, 118). If we also consider the fact that acceptance (cf. supra) is a major constitutive element of change then it might be more important to focus on the progressive and conservative aspects of groups and the way in which they promote or boycott change. Several scholars have worked with group level agency (e.g. Wobst 2000; Sassaman 2000; Chapman 2000; Louwe Kooijmans 2009) and although their scope is variable it provides an apposite approach for further research.

Group agency

The reason for addressing the issue of scale is related to the groups involved in this study. Without wanting to touch upon the issue of complexity in huntergatherer and early farming communities here, most evidence pertaining to the structure of Late Mesolithic and subsequent communities suggests they may be characterised as small-scale and largely egalitarian (e.g. Louwe Kooijmans 1998^{a,b}; Raemaekers 1999). There are no unambiguous indicators of hierarchy or rank in the archaeological record of the communities involved. 10 Differentiation was probably not entirely absent, but potent individuals such as chiefs or Big Men are unlikely to have been a feature. Power and influence might rather have been linked to specific age groups such as elders, to gender or skill in for example hunting. The fact that adopting domesticates and cultigens requires information and contact through e.g. exchange, raids and the like, implies a strong role for mobile members of the community, most likely the younger adult males. They can be seen as potentially influential players within their 'field' of interaction and exchange and as such structure which foreign elements were introduced. This is however not informative on the mechanisms of sanctioning of these new elements and changing habitus within the community. Women may have had an important hand in this (see Dusseldorp/Amkreutz in prep.). Overall however the egalitarian character was pervasive, which has led some to propose primitive communism as an appropriate model for society (see Raemaekers 1999; Tilley 1996).¹¹

Presuming an absence of dominant agents on the level of the individual, a conceptual approach of structure and agency might be more effective at the encompassing level of the group or community involved. Through the sanctioning of *habitus* and structuring principles, (new) structural conditions, which can be documented archaeologically, are created within those already present. These in time, recursively, condition behaviour within the groups involved. By comparing and contrasting the temporality and nature of change and the degree of stability and continuity within, and between the cultural groups in the Late Mesolithic and Neolithic, a more detailed perspective of their involvement in, and perception of, the transition to agriculture may be given. This is furthermore informative as to the way in which the behaviour of these groups contributed to the character of Neolithisation in the LRA.

The ideas presented above provide a perspective on the structure of communities and the way in which a dialectic within groups perpetuates their socio-ideological characteristics and structuring principles. However, in order to understand these mechanisms, they need to be placed within their historical, long-term context, under structural conditions.

6.5 Towards a dwelling perspective?

A major critique of agency theory is the difficulty of its application (e.g. Brück 2005; for an exception see Sassaman 2000). This is partly due to its abstract character, which requires a historical (temporal) and physical (spatial) context. The workings of habitus, individual or group knowledge and their recursive character have however been made more comprehensible through the notion of the 'dwelling perspective'. This perspective is grounded in the phenomenological approaches of Heidegger and his work Sein und Zeit (see Berghs 1997, 165-179) as well as Merleau-Ponty and his Phénomenologie de la Perception (Merleau-Ponty 2002 (1945); Reynaert 1997, 321-336). The ideas expressed in these works gradually found application in archaeology (see Ingold 1993; Thomas 1996 b; Tilley 1994). Thus, the reflective and reflexive aspects of Heidegger's Dasein (being-in-time) have been used by Thomas (1996b, 41) to stress the fact that individuals, while gaining self identity and classifying their surroundings, become increasingly aware of the fact that they are 'thrown' into an already existent world, enmeshed in (historical) series of social and material relationships.

While the influence that this realisation has on the disposition of the individual (or group) is comparable to Bourdieu's *habitus* (*cf. supra*), it is the reflexivity and self-awareness of *Dasein* which adds a specific temporal aspect to its existence. The individual is aware of past, present and future, and of their unified role in the here-and-now (Heidegger's ecstasies and *Zeitigung*, see Heidegger 1967, 388-390, 394; see also Berghs 1997). *Dasein* is to a significant degree informative on the way in which people perceive of and deal with the world surrounding them and as such forms an important aspect of the dwelling perspective. This offers a potential for studying social dynamics within communities in relation to their life-world, landscape and environment.

Dwelling, attending, moving along

The dwelling perspective focuses on the relational involvement of residing, dwelling, inhabiting and being accustomed to a world (Thomas 2001, 173, referencing Heidegger (1962)). According to Ingold it treats the immersion of the organism-person in an environment or lifeworld as an inescapable condition of existence, implying that '...the world continually comes into being around the inhabitant, and its manifold constituents take on significance through their incorporation into a regular pattern of life activity' (Ingold 2000, 153). Of importance in this respect is that it refrains from employing a dualist perspective in which individuals confront and oppose a world, since it is exactly the (phenomenological) idea of being-inthe-world that makes the world comprehensible. This implies an absence of a distinct Cartesian divide between culture and nature, markedly present in Ingold's discussion of the temporality of the landscape for example (1993; 2000). Instead of perceiving the landscape as either a natural backdrop to human activities, or as

a cognitive ordering of space, the dwelling perspective focuses on the landscape as an enduring record of the activities and material manifestations of past generations (Ingold 2000, 189).

Within the dwelling perspective approach, the human and natural factors are combined. They are part of one (experienced) existence. Nevertheless, their mutual involvement is difficult to characterize. Ingold does so by introducing the concept of 'taskscape' within his dwelling perspective (Ingold 2000, 199). The taskscape comprises the ensemble of activities involved in dwelling in the same manner in which the landscape comprises an array of features. Therefore the taskscape cannot be seen as a constellation of separate (technical) performances, but must be viewed within its social setting. Society in this sense consists of the interplay of people engaged in their tasks and thereby involved with each other. The temporality involved in this array of tasks is therefore essentially social (Ingold 2000, 195), much like the routines described by Whittle (2003, Chapter 2), is perpetual and never static and may comprise the totality of rhythmic phenomena, whether animate or inanimate (Ingold 2000, 200). A crucial aspect of this idea is the fact that both nature and culture merge. The activities of agents, their mobility and their engagement with their environment are not inscribed upon the landscape and upon nature, but interwoven with it (see Ingold 2000, 198-199). In this sense landscape and taskscape are aspects of the same 'current of activity', comprising for example the mobility cycle of foragers, the migratory movements of animals, the changing of the seasons and the time of harvest.

This approach stresses the 'rhythmic' aspects of human life and activity and the way in which these are interwoven with natural cycles. In this continuous relationship, agents do not act upon, but rather dwell within, attend to and move along with a world in which transformation and change develop recursively, instead of just having an anthropogenic origin (*cf. infra*; Ingold 2000; Lefebvre 2004). Dwelling and more specifically the social and natural aspects constituting it are both ongoing and dynamic. However, they also comprise an essential historical aspect, since practice and activities are shaped by the past and have an effect on the future.

Criticism and potential for Neolithisation research

Theoretically the dwelling perspective forms a useful approach, but its potential should be reviewed. Criticism of the dwelling perspective and the taskscape mainly focused on the workability of these concepts within archaeology. The nature of archaeological evidence often seems too incomplete to reconstruct embedded routines, perception of the environment, the recursive cycle of daily life or the incorporation of new elements. Other criticism (Whittle 2003, 14-15) focused on the insufficient attention given to more discursive aspects of society contrasting with being-in-the-world, such as learning, the impact of distinct life stages and *rites de passage*, or collective tradition. According to Whittle (2003, 15), the dwelling perspective is good at giving a sense of the general flow of life, but lacks explanatory potential for diversity, innovation and change.

In line with the criticism discussed above, the introduction of the dwelling perspective is not meant to provide a new framework, but is inspired by the scope that it offers for studying the prehistory of small-scale communities and the transition to agriculture in relation to aspects of environment and time. Three elements are important. The first relates to the abstract concepts of structure and

agency. While these provide a useful approach for understanding the dialectical and recursive relationship responsible for stasis and change, they also provide a mechanistic picture of society and social transformation. They should be reembedded in a dynamic setting. One might argue there is a recursive relationship between the dwelling perspective and *habitus* (*cf.* Bourdieu 1977), event and structure, and the material world (comprising landscape, material culture, bodies etc.) is at the heart of it (Mlekuž 2010, 195). The dwelling perspective situates communities spatio-temporally and captures the complex interaction between structure and agency in relation to the physical environment.

The second aspect relates to time and is important in the light of the long-term approach used in this study. Archaeology is often inclined to think in structured units of time and space, delineating cultures, groups, pottery styles and resource networks. Although these provide a useful framework for studying the character and interaction of past groups and their material culture, they often fail to accommodate for the continuity that exists between them. The dwelling perspective specifically stresses this continuity existing in the relationship between human society and its environment (see Ingold 1993; 2000). It acknowledges the importance of historicity (both in the temporality of landscape and taskscape) and the way in which this influenced behaviour and it is sensitive to the concern and involvement of communities with their past and the way they are, for example, bound to certain places. According to Barrett (2000, 67) each age confronts the debris of its history, material and traditional, as a way of finding a home for itself. In the perspective of the process of Neolithisation this boundedness to the past is an important element to deal with when interpreting stasis and (lack of) change.

The last aspect involves the way in which the dwelling perspective stresses the 'interwovenness' of human action and the natural environment. Instead of perceiving human behaviour as culture within nature the dichotomies are broken down and the connections between the two are emphasised. By refraining from contrasting culture and nature the dwelling perspective enables a nuanced approach of what changed and what did not during the transition to agriculture. In contrast to the domestication of the wild and society as a condition enabling the transition to agriculture (cf. Hodder 1990), such a perspective might be able to document stasis or change without categorically opposing culture and nature. This might be a valuable approach towards understanding Neolithisation from a more indigenous perspective.

6.6 Archaeologies of inhabitation

In his 'Fragments from Antiquity' Barrett (1994, 4, 36) argues that the link between action and its residue which essentially is the object of archaeological enquiry, should be abandoned in favour of questions concerning the ways in which lives were constituted as 'knowledgeable' and motivated. This demands an understanding of how in any particular period the lives of people were created by their engagement with material conditions: 'we move away from asking 'what kinds of people made these conditions', to an understanding of what the possibilities were of being human within those material and historical conditions' (ibid. 5). Barrett (1994; 2005) stresses that archaeology should steer clear of interpreting the motivation of an action by its material outcome. These are usually taken to represent the purpose of action, which then replaces intention as the object of archaeological

enquiry. Behavioural change is perceived as 'problem-solving' and agency as acting 'in response' as attested by the consequences of their behaviour. This *post-hoc* reasoning has also influenced studies into the process of Neolithisation.

Re-addressing questions

Change during the transition to agriculture has often been addressed from an either/or perspective focusing on economic or social motivations (see Chapter 2; Binford 2002; Thomas 1999). This has often been based on the assumption that categorisation of behaviour by its outcome yields different kinds of motivation. According to Barrett (2005, 117), however, neither economic or social, nor any functional type of consequence of behaviour, tell us very much about the motivations of people to do or continue to do certain things. While Barrett may be too rigorous in dismissing the value of more traditional questions for answering how patterning in the archaeological record is structured, his approach is useful in broadening our perspective on Neolithisation and the communities involved. The scope of archaeology is re-adjusted by arguing that there is not a single kind of agency underlying the cause of history, but that human agency develops by being in the world. In this respect things do testify to human existence but the attention shifts to 'the way each kind of humanity was able to emerge by finding a location for itself in a world that nurtures it and upon which it could act' (ibid. 118). Instead of treating humanity and agency as abstract values, this perspective stresses the importance of the 'material reality' that past communities inhabited and we as archaeologists study. History in this sense must not address why people did things, but how the conditions of possibility enabled humanity to constitute itself in historically specific ways (Barrett 2005, 119).¹³

This implies a need to readjust the 'why-question' in studying the process of Neolithisation. Instead of focusing on singular causal aspects of why the transition to agriculture took place over time, increased understanding is gained if we turn our attention to the continuum of small-scale communities involved in this process and the way they 'got on', renewing, reinventing and restructuring themselves. As argued above, to understand the agency behind societal stability or change there is need for its 'embedding' within elements and factors that govern and influence 'structure' over time. This calls for a focus on the material conditions, their dynamics and the way these were inhabited. The dwelling perspective (Ingold 1993; 2000) was introduced as a means to contextualize the way in which these structuring principles 'inhabited' structural conditions (*i.e.* often material conditions) over time. This implies an archaeology, not of abstract dwelling, but of 'inhabitation' focusing on the active and recursive relationship between humans and their (natural) environment (including the landscape) and specifically stressing the 'situatedness' and historicity of this relationship.

6.6.1 Phenomenology, experience and archaeology

An archaeology of inhabitation or 'dwelling' (sensu Ingold 1993; 2000) is rooted in the philosophy of phenomenology. This school and its main advocates (Husserl, Merleau-Ponty and Heidegger) try to understand human existence, or 'being' from the perspective of the subject and the way in which it understands the world and its place in it through active engagement. This latter self-reflexive aspect was mainly introduced by Heidegger (1967) and Merleau-Ponty (2002 (1945)). Both argued

against the existence of an object-subject divide. Heidegger's notion of *Dasein* or 'being-in-the-world' (Berghs 1997; Thomas 1996^b) and Merleau-Ponty's focus on the body and sensuous experience (2002) specifically stress that it is through our embodied actions within an already existing world that we become aware of our own place in it and our role in social and material relations. ¹⁴ Its potential in the field of archaeology, in particular with respect to the topic discussed here, will be assessed in the following.

The importance of a phenomenological approach for archaeology resides in what may be termed a principle of actuality. This specifically refers to the ontological primacy of phenomena, or as Merleau-Ponty (2002, 348) puts it, the 'perceptual constants'. He argues that there is a fundamental relation of unity between perceiver and perceived in all acts of perception. As argued above this transcends a distinction between object and subject and actually enmeshes the perceiver in the world he is part of (Merleau-Ponty 2002, Chapter 3; Tilley 2004). In the act of perceiving there is also a reflection, or effect on the receiver. This is referred to as the reversibility thesis (Dillon 1983). As a result Merleau-Ponty argues that 'flesh' is the most elementary element in perception and more or less forms a constant in time. It enables experiences based on the same premises. The value of phenomenology for archaeology then lies in the consistent and continuous commonality between everything (people, places and objects) of sensory value. Perception, rather than being hyper-subjective, is interpreted as fundamentally worldly. What is perceived is as such invested with humanity, a coition of our body with things (Merleau-Ponty 2002, 373; Reynaert 1997, 329).

Tilley (1994) was one of the first in archaeology to advocate the use of a phenomenological approach with respect to landscape. Instead of an objectification of landscape, he argued for a re-engagement with the qualitative aspects of it, experience mediated through the body (1994; 2004; see also Brück 2005). This would imply that our own being-in-the-world and (physical) engagement with it provides a valuable window upon past perception of landscape, objects and persons. While Tilley (1994; 2004) draws heavily on Merleau-Ponty, others, most notably Gosden (1994) and Thomas (1996b), focus more on the work of Heidegger (1967). This adds a specific temporal and historical aspect to the discussion (see also Brück 2005, 49) in that (portable) objects and structures encountered are conceived of as having mnemonic values and of evoking the past as well as being projected forward into future projects (Jones 2007; Thomas 1996b, 81). Phenomenology and its role in the dwelling perspective are of importance for understanding the approach chosen here, but difficulties in application should be taken into account.

Application, problems and perspective

In recent years archaeological research from a phenomenological perspective has mainly focused on an elaboration of the sensory and embodied approach advocated by Tilley (e.g. Cummings 2002; Edmonds 1999; Watson 2001; Tilley 1996). Several critical observations should however be made. First, there is a tendency to focus on vision-oriented studies. These make it difficult to judge whether certain characteristics noted today in (in)visibility held the same importance in the past (Brück 2005, 51). By extension other sensory aspects like touch and smell (e.g. Tilley 2004) face the same problems of subjectivity. This is also germane to many current studies concerning materiality (e.g. Bradley 2004; Renfrew

2004; Tilley 2004; see also Ingold 2007). As a result phenomenological accounts also often tend to be more descriptive than explanatory, lacking substantiating evidence or a demonstration of regularities. Application is often limited to a few 'convenient' case-studies (see Brück 2005, 53). Other criticism may be levelled at the supposed universality of the human body and its sensory experience. Several authors have stressed that the physical variability in humans may have led to diverging experiences (Brück 2005; Fowler 2004; Hodder 1999). Others, most notably from an ethnographic perspective, have pointed out that the body next to being a universal entity is also very much a cultural product. This differentiation, already pointed out earlier, comprises features such as the 'dividuality', 'partibility' and 'permeability' of people in certain societies (e.g. Busby 1997; Fowler 2004; LiPuma 2000; Strathern 1996; Whittle 2003). The construction of the 'self' is thus also a product of the relationships between people, but may even comprise things, places and events beyond the limits of the human body (Brück 2005, 61; see also Mauss 1990(1950); Thomas 2000b, 151-152; Weiner 1992). Evidently these aspects considerably broaden the array of experiences that may mediate through the body. Moreover these experiences are not universal. From a physical perspective, material aspects of landscape and objects are likely to have changed considerably over time. Brück (2005, 56) stresses that the material properties of landscape, and objects, are often made intelligible within a particular sociocultural context (see also Feld/Basso 1996). This also once more underlines the importance of historicity and temporal connotations (Brück 2005, 56; Sokolowski 2000, 130-143; Thomas 1996^b; 2000, 148).

These observations demonstrate the difficulties associated with adopting a phenomenological approach in archaeology. Thomas (2000b, 149) criticized the use of phenomenological perspectives from a specifically humanist or individual point of view and the existence of an actualistic character to embodied experience. Instead he argues for a focus on the relational. The network of existing relationships forms the most important potential for action that is implicit in the connections among people and between people and things (ibid. 150). Rather than entering into relationships, human beings emerge from a relational background (reflecting their enmeshed historical position). These relationships are furthermore not mere connections among human subjects, but heterogeneous networks that bind people, things and places together (ibid. 152-153; Tilley 2004, 217). The social in this sense is a relational field, not an object engineered by human minds, comprising both human and nonhuman elements in a hybrid fashion (Latour 1993; 2005; Thomas 2000b, 153). One way of studying this relational field and the interplay of its human and nonhuman connections is by developing an archaeology of inhabitation, attuned to the nature of the study area and period.

6.6.2 Relationality and networks

Instead of focusing on the embodied experience of monuments and landscapes from an individual perspective, an archaeology of inhabitation employs a broader scope. Phenomenological approaches are used to understand social relationships and development from the perspective of day-to-day practice. The embedded sensual inhabitation of meaningful landscapes plays a crucial role in the creation of social identity (Brück 2005, 62; Pollard 2000, 363) and an understanding of the engagement in routine practice and the changes therein is central to an

enhanced understanding of past societies. From this perspective there is a distinct focus on the active and recursive relationship between humans and their (natural) environment (e.g. Barrett 1994; Gosden 1994; Pollard 2000; Whittle 2003; see also Descola 1994). Human practice and historic process form main issues within a landscape interpreted as something worked and lived in, stressing the importance of relations between people, places, the material world and the realm of spirits and supernatural powers (Pollard 2000, 363). This has been aptly phrased by Giles (1997, in Chadwick 2004, 9; see also Giles 2000): 'To inhabit the world is to experience the world bodily and to act in the world knowledgeably. Habit itself implies routine and thus reproduction; it is a social process carried out by people who are intricately bound in webs of relationships. Inhabitation must therefore be situated not only within the historical materiality of those lives, but it must also deal with social memory and the way in which identities are reproduced and transformed over time'.

Central to archaeologies of inhabitation is a notion of 'dwelling' (cf. supra), which emphasises these relationships and implies an embodied and embedded engagement of people with and in their world (Heidegger 1967; Heidegger (1962) in Thomas 1996^b, 89). Ingold (2000, 186), refers to a current of 'involved activity' within the specific relational contexts of practical engagement of people with their surroundings. The human condition is immersed from the start in perceptual and practical engagement with constituents of the dwelt-in world, 'apprehending the world is not a matter of construction but of engagement, not of building but of dwelling, not of making a view of the world but of taking up a view in it' (2000, 42). It is thus about the way people 'attend' to their world (Whittle 2003, 14).

From this perspective, meaning and significance come into existence through their incorporation into a regular pattern of life activity (Ingold 2000, 153). Engagement in the form of regular patterns of movement and routine practice becomes the focus of interest. They create the embedded links between people, places and objects and shape identity (see Brück 2005, 62). In this respect networks comprising both human and non-human, living as well as inert components are constructed (cf. Latour 2005). Thomas (1996^b, 237) stresses this notion of relationality and argues that human identity emerges out of this connectedness: 'Human identities, material objects, and places all develop from a background of relationality. Certain social phenomena such as power, agency, care and concern are best considered as attributes of relational networks, rather than as things which issue out of individual isolated intelligences.' This relationality is at the heart of 'dwelling' and thus the main theorem underlying an archaeology of inhabitation. 16 Crucial to this understanding is also a focus upon manners in which the world was 'attended' to. As argued above, these specifically involve patterns of regular movement and routine practice, long-term ways of interaction between communities and their environment. They are a means of understanding these relationships over time.

6.6.3 Rounds, routines, rhythms: adding time

Communities living in a (regional) landscape and interacting with(in) a specific environment achieve a certain 'resonance' based on being 'attuned' to their surroundings and other people's mutually attentive engagement. These repetitive rhythms, daily and yearly cycles may be studied from an interpretative perspective which portrays them as an ecological backdrop, structuring human activity in a timeless manner. However, for answering questions at the level of involved

communities a more active and recursive dynamic may be more apt (see Mlekuž 2010, 193). A long-term perspective focusing on this engagement indicates the existence of a certain temporality characterized by cycles and repetitions with a certain 'rhythmicity' to it.¹⁷ This emerges both from the interweaving and mutual responsiveness of human movement and activity, as well as from the way these movements resonate to cycles of the non-human environment. Ingold (2000, 325) argues that: '...people had to fall in with the rhythms of their environment: with the winds, the tides, the needs of domestic animals, the alternations of day and night, of the seasons and so on, in accordance with what the environment afforded for the conduct of their daily tasks.' The totality of rhythmic phenomena, whether animate or inanimate is involved (ibid. 200). In practice all of these rhythms are enmeshed. Mlekuž (2010, 194) argues that the temporality of the tasks involved is inherently social, since it emerges from attending to and timing our actions in relation to other human and non-human agents. This also means that the environmental rhythms are not imposed from the outside, but become interwoven into the 'melody' of social life (ibid.). Places in this sense become relational webs of meaning and material (Thomas 1996^b, 91). Rhythms converge upon them and they may be documented over time.

This indicates the importance of rhythms. Some, such as the turn of the seasons, migratory movements of animals, or the ripening of the fruits of the land are obvious, although archaeological detection is often conditioned. From the social perspective of the communities we study, rhythm is also very much about the daily and yearly round, about the existence of routines. Whittle (2003, 22) argues that routines comprise the things that have to be done for life to go on, their very repetition creating a sense of 'ontological security'. Many routines, though not all, are probably 'hardwired' into our daily existence which is why they are carried out unwittingly. Their existence and execution lead to reproduction of the existing structures of society (*ibid.*), thus providing a further embedding of the workings of agency and change, touched upon above. According to Edmonds (1997, 108) a better understanding of the tempo and character of these routines (within the taskscape), enables us to explore how concepts of identity, community and authority were carried forward. This is especially important in times of potential change as for example during the transition to agriculture.

Routines comprise a wide array of recurrent activities in different fields and with different frequencies. They may include the seasonal movement of base camps, the annual period of harvest and the communal building of new houses, as well as raids, cattle treks, raw material expeditions, disposal of the deceased and ritual activity. The way in which these routines were 'inhabited' and executed and their 'attunement' to the rhythms of nature provide an interesting perspective on the workings and stability of the communities involved. With respect to the process of Neolithisation the presence or absence of change in the 'rhythmicity' of routines and cycles becomes specifically interesting.

Understanding rhythms

Rhythms form a binding element between community *habitus* (*cf.* Bourdieu 1977; Mlekuž 2010, 195) and the dwelling perspective. It is through rhythmic patterns of involvement between (what we perceive as) the natural and cultural world that the structure of society comes into existence and is handed down through time. Understanding rhythms (as well as routines, cycles etc.) requires an

intimate knowledge of lived space and time and forms an important perspective on the character and constitution of past communities (see Barrett 1994; 2005; Edmonds 1997). One of the foremost scholars working with rhythms from an analytical perspective has been Henri Lefebvre. Lefebvre argues that in life rhythm raises questions of change and repetition, identity and difference, contrast and continuity. Instead of merely documenting rhythms he aims to use them as an analytical tool to examine a variety of issues. In line with thoughts expressed by Merleau-Ponty (2002) Lefebvre sees the body and its perception as the main point of reference, as a contact zone as it were between biological rhythms (sleep, hunger, thirst etc.) and the social rhythms of the outside world (2004, xii). Natural rhythms are also part of this. Lefebvre goes on to dissect some of the rhythms we experience (2004, 8) and distinguishes between cyclical repetition and the linear repetitive.¹⁸ The former originates in the cosmic, in nature and comprises days, nights, seasons, waves, tides, monthly cycles etc. The latter originates in social practice and human activity and involves the monotony of actions and movements. Both are in a reciprocal relation: 'Time and space, the cyclical and the linear, exert a reciprocal action: they measure themselves against one another; each one makes itself and is made a measuring-measure; everything is cyclical repetition through linear repetitions' (ibid.). Both aspects are thus used in perception and making sense of the world. Lefebvre argues that this unity gives rise to compromises and sometimes to disturbances. Many rhythms will not be indefinite and new events may introduce themselves into the repetitive and form a difference (ibid. 6-7). It is likely that at these moments the existing structures of society are questioned and there is an opportunity in the dialectic of structure and agency for change (see above). Novelties may be introduced into society and these in time will also acquire repetition and rhythm. Change in this sense is brought about by the imprinting of new rhythms, the results of which may only be visible after a while (see Lefebvre 2004, 14). Clearly the transition to farming will have instigated many of these changes in rhythm. By studying their impact on existing rhythms and the way they were incorporated and integrated into existing practices we may learn more about how the process of Neolithisation was negotiated from the perspective of the communities involved and the long-term characteristics of their inhabitation of the wetlands and their margins.

Lefebvre's rhythmic typification ties in with the workings of structure and agency. It forms a link between the way *habitus* works and recursively interacts with its surroundings (Mlekuž 2010, 195). It embodies the existence of a network (*cf.* Latour 2005) and the interaction going on within it. As such, it enables an alternative perspective on the changes involved in the process of Neolithisation. Using Lefebvre's terminology, these may disturb (arrhythmia), or be brought in 'attunement' (isorhythmia) with the existing hunter-gatherer rhythms (eurhythmia). Focusing on the presence and absence of rhythmic changes in these communities will increase our understanding of how the various workings of Neolithisation were integrated and perceived in society.

6.7 Converging thoughts: research aim and outline

This chapter has sketched a theoretical outline for dealing with some of the incompatibilities and scales involved in studying the process of Neolithisation. On the one hand the process of Neolithisation is about the suprahuman scale, about

far-reaching societal and economic change involving abstract cultural connotations such as Swifterbant, Michelsberg or Hazendonk. In this sense it covers an enormous temporal dimension, in the case of the LRA up to 3000 years. The study of this process deals with documenting change by mapping and dating the presence and absence of cereals, domesticated animals, or for example Breitkeile, pottery and sickle blades. It focuses on the universal character of transformation in society (we all became farmers) and on the temporality of the changes taking place. Diffusion models such as those of Ammerman and Cavalli-Sforza (1973) or Dolukhanov et al. (2005) are typical examples of this. On the other hand Neolithisation is also very much about the human scale, about the local communities and their differing trajectories. To try and understand their role an alternative approach is necessary that is directed at the structure of these indigenous societies and the way in which they incorporate or refrain from incorporating the new. Archaeology needs to study the historicity of human agency and as such confront the lives of people and communities, since the social systems we recognise have come into existence through their inhabitation of a certain materiality (i.e. structural conditions; Barrett 2001, 157). While both approaches to Neolithisation are worthwhile and complementary, the latter is of more importance to the scope of this study. Instead of focusing on change and transition it deals with the stability and identity of the communities involved and the way in which they perceived their contact and exchange with farmers and structures change while simultaneously maintaining traditions. Elemental in this is trying to understand the indigenous manner of localisation, of making comprehensible and integrating the potential of change available.

Building a framework

This chapter has discussed a number of related theoretical approaches for arriving at such a bottom-up perspective. First, both from a taphonomic and interpretative perspective, the process of Neolithisation in the LRA should not be dominated by an economic approach. The appearance or contribution of Neolithic elements should not lead to a different approach to the study of these societies, or to an emphasis on different aspects. This is based on the idea that the communities involved may be perceived as culturally continuous and should therefore be studied from a similar (unchanged) perspective. This approach refrains from making a clear Mesolithic-Neolithic distinction and primarily studies the communities involved, stressing their (Late) Mesolithic roots. This more indigenous approach also presumes the absence of a strong distinction between nature and culture, which in turn provides a different perspective on how Neolithisation was 'negiotiated' and how Neolithic elements were incorporated.

Secondly, to understand the way these communities dealt with new Neolithic elements and the gradual transition in the research area, the interrelationship between communities, the landscape and the environment should be targeted from a diachronic perspective. The introduction of Braudel's (1966) division of time was intended to stress the recursive relationship between process and event, and by adding the idea of a multitemporal past (Lucas 2005), or temporal palimpsests (Bailey 2007), the complexity of time and memory was emphasized. This is important in understanding the way in which routine practice and ritual perpetuated indigenous way-of-life and to what extent societal structure influenced this. A major benefit is the fact that since we are dealing with cultural

and regional continuity the various characteristics of the groups involved, both concerning short-term as well as longer term behaviour may be understood from within this context. Characteristics of short- and medium-term practices and longer term trends may therefore be related (Bailey 2007; Foxhall 2000; Gerritsen 2008) and informative on each other. This opens a window on the discovery of long-term *habitus* and perception and stresses the importance of repetition and memory (see Jones 2007). This perspective, however, should be integrated with the environmental and landscape context and the workings of socio-ideological and cultural continuity.

Thirdly the concepts of structure and agency were introduced. While the use of these concepts has been manifold, their original basis (sensu Bourdieu 1977; Giddens 1984) continues to offer a good framework and syntax for explaining change and diversity. Elemental in agency theory is the idea that change of habitus can be initiated on the level of the agent. Through subsequent societal sanctioning, idiosyncratic behaviour might thus influence the structure of fields in society. It is important to stress that the main emphasis here is on the recursive interplay between structure and society, not on one-sided individually instigated developments. While individuals, notably influential players within a certain field, have the ability to introduce new elements and habitus, the absence of essentially dominant individuals in the largely egalitarian communities studied here, implies that change and social sanctioning are essentially a 'group thing.' In this sense it was argued that the agency of groups might be the most apposite level to study societal change.

The workings of structure and agency need to be embedded within other elements and factors influencing societal structure and change. Therefore the notion of the dwelling perspective was introduced (cf. Ingold 2000) and eventually the idea of an archaeology of 'inhabitation'. Various factors were introduced that stressed the importance of a bottom-up, situated approach which tries to understand these communities from within their inhabited historical conditions, rather than by the outcome of long-term processes (e.g. Barrett 1994; 2001; 2005). These factors included the incorporation of historicity and the active interaction between humans and their environment (Ingold 2000) as well as the way in which this influenced societal structure over time and should be seen as existing within relational networks that incorporate animate and inanimate entities, landscape, environment, places and communities (Chadwick 2004; Latour 2005; Thomas 1996^b). It is these networks that over time create and form individual and social identity. These hybrid webs, moreover, are not managed by humans, but these are 'thrown' into them. Of importance in this respect is also the spatio-temporal manner in which these networks and their associated structural conditions were inhabited. This stresses the importance of rounds, routines and cycles as ontological, often implicit ways of handing down the structure of society across time. 19 Finally, the work of Lefebvre (2004) and his focus on rhythms and certain states of rhythm was touched upon. Analysing rhythms draws out the importance of everyday non-discursive, routine behaviour. This approach stresses the interaction between the dwelling perspective and habitus. Furthermore, by acknowledging the historicity, temporality and rhythms involved, habitus may be understood and analysed from a long-term diachronic perspective. Rhythm in this sense is the key to understanding the interwovenness of temporalities in many different fields. This also accentuates the fact that Neolithisation may imply

a range of 'rhythmic' changes and that the way communities deal with and attune to these is informative on them and their transition to agriculture. Changes may have been avoided or conditioned to match the already existing beat of society.

Defining perspective

The theoretical framework presented above provides a basis for studying the process of Neolithisation in the Lower Rhine Area from the perspective of inhabitation. It also forms a theoretical background and starting point for the approach adopted in the following chapters. There I will focus on the character and identity of the small-scale communities in the wetlands and wet margins of the LRA, during the process of Neolithisation. This will involve the ways in which material conditions were inhabited and the existence and character of social and economic routines. Changes or stasis in rhythm over time and the nature of their incorporation will be documented in the light of the process of Neolithisation and its local implications. This essentially means a focus on the way these groups were embedded in their environment and how developments may be understood from this 'inhabited' perspective. From this a better understanding of the 'cadence' of Neolithisation in the Lower Rhine Area may be achieved.

The focus in Chapters 7 and 8 will be on mobility, land-use and procurement. It involves 'dwelling' in its broadest geographical sense.²⁰ It is about the structure and structuring of the landscape and its environment over time and the way it was experienced, attended to and dealt with. The analysis attempts to gauge to what degree landscape and environment actively influenced the economic choices and social structure of the communities inhabiting them. This forms a background for a more general and broad-scale analysis and synthesis of both the communities involved in this process of Neolithisation in the LRA (Chapter 9) and the workings of this 'situated' transition itself (Chapter 10).

Notes

- For the LRA this for example ranged from the metric aspects of pig bones (Hogestijn/Peeters 1996), through the meaning of the presence of *Cerealia* pollen and chernels (Bakels 1986) to the credibility of features interpreted as ardmarks (Peters/Peeters 2001).
- 2 Evolution is used here as it is often used outside of current biological or palaeo-anthropological studies, as a logical one-way development from one state to another, *i.e.* from forager to farmer. This anagenetic mode of evolution, also affiliated with culture-historic evolutionism (Lucas 2005,7), contrasts with current developments in the field (see Gould 1999). Evolution merited for its own complex character is in fact much more similar to the process of Neolithisation (*e.g.* Gould 1999; Layton 1999; Sheratt 1996; Simmons 1999).
- This touches upon recent ideas of the application of 'structure and contingency' in the archaeological field (see Bintliff (ed.) 1999). Gould (1999, xvii) rightfully comments that the use of these concepts of structure and especially contingency is strongly dependent upon our perception of the rate of change. What is considered gradual and stable on the level of generations might appear sudden and swift from a chronologically wider perspective. In this sense I would also agree with Simmons (1999, 124) that the actual domestication of plants and animals, and the numerous 'try-outs' leading up to it, might not be detectable in the archaeological record. In the same manner we must undoubtedly fail to grasp many of the intricacies of becoming farmers in the LRA. Although contingency theory and related approaches can be useful, their application seems particularly suitable for spatially and temporally large-scale investigations. Furthermore, their line of reasoning is neo-evolutionistic, i.e. expecting a certain progress and development, and their explanatory value is often of a 'post-hoc' nature.
- 4 If perceived from the perspective of habitation instead of geological time, several of these long-term scale effects might be of a different nature. The tempo of subsidence of several 'donken' for instance could have been a quite dramatic and perceivable event for past communities. The chosen perspective is important for the interpretation and spacing of the Braudelian tripartite scheme.

- Bailey (2007) distinguishes between 'true palimpsests' in which successive layers are superimposed in such as way as to remove most evidence of previous activity and 'cumulative palimpsests' in which layers are reworked but information is still retrievable. The latter is more marked by loss of resolution than loss of material.
- 6 Attaching new meaning to existing objects and places, e.g. the cultural biography of Stonehenge, is referred to by Bailey (2007) as palimpsests of meaning.
- An important subdivision that can be made here is the one between a linear and a cyclical sense of time. Rosen (2004^b, 2, 5) argues that a consciousness of 'self' implies a consciousness of mortality and thus of linear time. This earthly mutability is however situated within the temporal markers of nature, such as seasonality, which are repetitive, cyclical and (often) stable (*ibid.*; Gosden 2004, 30). Similar cyclical structures can also be found in past culture, *e.g.* the seasonal use of a site, yearly rituals, repetitive mortuary practice or the temporal developmental and cyclical structure of households (*e.g.* Barrett 2004; Gerritsen 1999; 2003; Nilsson Stutz 2003). Both linear and cyclical time and the way these are materially accentuated are informative on past time perception and social memory in the past.
- 8 In essence *habitus* is a complicated concept. Often mistaken for the routines of everyday life, *habitus* is actually the articulation of dispositions in social space (Lechte 1994, 47). By this Bourdieu meant a kind of expression of (unconscious) investment in the social space and the elements of power therein. In this sense *habitus* is a grammar of actions differentiating different classes from one another. It thus reflects upon the conditions and diversity of discourse in society (Lechte 1994, 47-48).
- From a Melanesian perspective for instance, individuals are not unique and also embody a generalised reflection of society (see LiPuma 2000; Strathern 1996). Individuals also represent a collectivity and contain both male and female elements; they are mosaically constructed (Busby 1997, 274). In this sense part and whole are the same and Busby relates to this as partible persons. In India on the other hand the individual and the body are intact but permeable. Through substance flow between persons, connections are made and in this sense persons have fluid boundaries (*ibid.* 275). An overarching characterization of these heterogeneous persons has been the concept of 'dividuality'. In contrast to western individuals there are thus also 'dividuals.'
- Except for some amber beads, pendants of jet or animal teeth associated with skeletons in the cemeteries of S2, Schipluiden and Ypenburg (De Roever 2004; DeVriendt 2013; Smits/Louwe Kooijmans 2006; Koot 2005; Koot et al. 2008), or for example the arrow shaft sharpeners, allegedly indicative of status, found at Mariënberg (Verlinde/Newell 2006), there is no evidence for distinct status. Also imported flint, jadeite axes and Breitkeile may point to individually acquired status, but not to any hierarchical system.
- 11 Raemaekers (1999, 189-190), drawing on Tilley (1996) proposed to introduce the idea of primitive communism for the Swifterbant communities. He based this on the conservatism in adopting new elements and the difficulties in establishing complexity in the Swifterbant communities. Raemaekers argues that the social consensus needed to sanction change is a further indication of primitive communism. The latter argument is not directly relevant since these mechanisms also operate in other less egalitarian social constellations (see Bourdieu 1977). According to Maddock (in Barnard/Spencer 2002, 451) primitive communism is a state of affairs which has never really existed. Instead it is much more a (moral, political and social) tool to conceptualise tension in society. Not denying the largely egalitarian character of the Swifterbant communities, there are some indications which might refer to a level of social differentiation. It is evident that Swifterbant communities are for example not entirely on the egalitarian level of, for example !Kung San Bushmen.
- 12 This essentially relates to the structural conditions and structuring principles introduced by Barrett (2000), the former forming the historically continuous background with which agents and their structuring principles engage.
- 13 Needless to say this also has important repercussions for studying the transition to agriculture. Instead of focusing on the processes change and their supposed motivations, it is the historical and multidirectional making of humanity itself, instead of the transmission of agriculture, that becomes subject of investigation. The actual change was not in the adoption of new elements, but in the way the humanity of the period created itself out of the new connections that it established. The Neolithic became possible by a restructuring of these connections through *practice* (see Barrett 2005, 120-121).
- 14 Merleau-Ponty argues that: 'All knowledge takes its place within the horizons opened up by perception (2002, 241).' The body in this sense may take on an important role as a medium through which we perceive this world and as a result also become subject of perception itself (*ibid.* 239). This corporeal aspect of perception thus denies a true distinction between mind and body, and by extension nature and culture, as advocated by Descartes (see Casey 1996; Lechte 1994; Merleau-Ponty 2002 (1945)). There is as it were an integration of body and environment (Casey 1996, 22). The very imbrication of the perceiving organism and its surroundings is what lies at the basis of perception (Lechte 1994, 30). Heidegger's 'Being' or *Dasein* also stresses the idea that experience or

perception rather than being intentional and directed (as advocated by Husserl (see Gosden 1994, 104) is the core condition of *Dasein*, an existentialist aspect as it were. *Dasein* is thrown into an already existing world and in the act of finding its identity finds itself already enmeshed in a series of social, cultural and material circumstances (Thomas 1996^b, 42). This continuous engagement with a world coming into being and the notion that *Dasein* cares about its presence in the world, makes it aware of its past, present and future (Heidegger's ecstasies) and adds a distinctly temporal aspect to the core of its existence (see Berghs 1997) and abstains from a strong dualist perspective between individuals 'opposing' the world and argues much more in favour of an interwoven relationship.

- Tilley (2004, 10) argues that the manner in which an artefact or place is encountered very much depends on the structure of the encounter, on the use of our senses. This approach emphasizes the intertwining of subject and object and therefore denies the possibility of an objective approach. Instead of lapsing into subjectivity, Tilley (2004, 29) argues that 'the groundedness of meaning in the sensuous embodied relation between persons and the world forms an invariant ontological ground for all feeling and all knowing taking place through persons with similar bodies'.
- 16 In light of Heidegger's *Dasein* it is only this combination of being-in-the-world and its caring nature that is able to make sense of the world through these webs of relations (see Berghs 1997, 173). Furthermore, since objects, places and substances form part of a web of relations, these offer archaeological 'windows' for studying those aspects of society that did not materialize. While certain aspects of inhabitation will always elude interpretation, an increased understanding of these relationships will allow us to arrive at a more contextual and substantiated notion of past social identity and livelihood in general (see also Gosden 1994, 194; Thomas 1996^b, 88-89).
- In relation to this Ingold (1993; 2000) formulated the term 'taskscape' to indicate how social relations may have been attended to by an ensemble of mutual interlocking tasks, embedded in 'the current of sociality'. It comprises the array of activities involved in dwelling and as such cannot be seen as static. He argues that the temporality of the taskscape is essentially social, because people in the performance of their tasks also attend to one another (1993; 2000, 196).
- Lefebvre points out the importance of detecting repetition, the interference of linear processes and cyclical processes and the recurrence of birth, growth, peak, decline and end. In so doing he draws upon musical theory for the understanding of time, space and rhythm (see Lefebvre 2004, xi; compare Ingold 2000, 197; Mlekuž 2010, 194). The flow of tasks, routines and cycles can be understood as a melody. Lefebvre identifies certain states of rhythm. Polyrhythmia represent the multitude of simultaneous and diverse rhythms taking place. Eurhythmia represents their association in a normal state of health; the motion of normal everyday life. Arrhythmia represents the state where rhythms break apart. There is no synchronization anymore (evidently the implications of agriculture imply a number of such arrhythmia). Finally there are isorhythmia, which contrast with eurhythmia in that they are rare and stress equivalence between rhythms (Lefebvre 2004, 67).
- 19 In this sense the temporality of structure and agency (and thus society) is interwoven with the temporality of the landscape in a model that transcends the nature-culture opposition. It is exactly this situatedness of the apparatus of societal stasis (and change) that can be informative on the mosaic of the transition of agriculture in the LRA.
- 20 This involves aspects of mobility, subsistence, reclamation, tenure and interaction, but also very much involves the existence and character of the rounds and routines, the day-to-day practice.