

Prologue

1.1 The Neolithic

John Lubbock introduced the term ‘Neolithic’ [Greek Etymology: *Νέος* (New) + *Λιθικός* (Lithic) = New Lithic Age] in 1865 in order to distinguish that archaeological period in which polished stone axes and other stone tools were ground into shape, from the Old Lithic Age [Paleolithic; Greek Etymology: *Παλαιός* (Old) + *Λιθικός* (Lithic)], in which flints were shaped by flaking (Runnels and Murray 2001). Lubbock’s differentiation was based solely on changes in the technology of lithic tools, but later prehistorians further differentiated the two time-periods on the basis of economic practices.

During the first half of the twentieth century, the science of archeology – and the study of the Neolithic in particular – were significantly influenced by the dialectical materialism and the Marxist theory, which were encountered in the work of the leading British archaeologist Gordon Childe. Childe’s (1936) work, which was inevitably linked to his Marxist theoretical leanings, highlighted the regulatory role of the means of production and the material culture to the evolution of human society and had an immediate impact on archaeological science. Childe introduced to archaeology the well-established biological concept of ‘monogenesis’ (*i.e.* a novelty is only invented once, and then transferred from region to region). Plant and animal domestication, writing, irrigation, pottery and tillage are commonly considered as such contrivances today. The transfer of a number of novelties that took place during the Neolithic, is commonly referred today as ‘diffusion’ and it might have occurred in two ways:

1. directly, by moving populations
2. indirectly, by contact, exchange and trade

A frequently mentioned concept with regard to the Neolithic is the so-called ‘Neolithic package’; the concept itself has been attributed to Chris Chippindale while an undergraduate at the Cambridge University in the 1970s (Sherratt 2005). By that time also, the concept of ‘New Archaeology’, which affected the study of the Neolithic in a profound way, was already taking the lead in archaeological science¹. Its proponents argued that the study of archaeological data should by no means be influenced by the various historical and social conditions, but only by the accuracy of the method used to explain the archaeological record (Clarke 1973)².

The ‘Neolithic package’ was first used to refer to the material culture of the period of the Neolithic as a whole, since Neolithic assemblages from South-west Asia, Anatolia and Southeast Europe yielded similar types of finds, and these tended to occur together repeatedly in this vast geographical region (Çilingiroglu 2005; Özdoğan 2001). Today, however, there is a general recognition that the term ‘Neolithic package’ implies something more than technological developments (*i.e.* the use of polished stone axes and querns, stone and adobe brick architecture, the use of pottery and woolen textiles and decorative arts in many materials). The ‘Neolithic package’ is closely related also to the appearance of domesticated plants (wheat, barley, beans and lentils) and animals (cattle, sheep, goat and pigs), sedentism, and the adoption of food production as the basis upon which, both social changes and technological innovations were founded (*cf.* Hodder 1990; Tringham 2000; Whittle 1996; Zvelebil 1998).

All in all, the term ‘Neolithic package’ is generally accepted to encompass the technological, economic, social and ideological aspects of the Neolithic period as a whole. Unquestionably, the beginning of the Neolithic is marked by fundamental changes in the economic mode of life and a dazzling burst of innovations in the sphere of material culture. In addition, the appearance of permanently inhabited farming villages was indeed an important step in human history and brought into existence a way of life that has remained the basis of the human society to the present day (Runnels and Murray 2001).

1.2 The Neolithic of Macedonia

One cannot refer to the research of the Neolithic of Macedonia, without first mentioning the research that was conducted in the Neolithic of Thessaly, which has a longer history. The pioneering work of Christos Tsountas in the first decade of the twentieth century at the Neolithic sites of Sesklo and Dimini shaped much subsequent research into the Neolithic of Greece (Halstead 2006; Theodoridis 1993). Long before any systematic chronological framework was established in other parts of Greece, the archaeological research in Thessaly presented an elaborate chronological system suitable for describing the cultural history of the area (Andreou *et al.* 1996). To some extent, this privileged position of the Thessalian Neolithic is still held today and some of the central issues of the Greek Neolithic in general, such as the beginning of a farming economy and the emergence of social complexity, revolve around research in Thessaly – although questions of cultural

¹ Named shortly thereafter ‘Processual Archaeology’.

² The main objective of the ‘New Archaeology’ (or Processual Archaeology) was to establish a number of scientific methods of

analyzing the archaeological material in order to record patterns of human behavior.

history and chronology are still discussed (*cf.* Andreou *et al.* 1996; Kotsakis 2002; Perlès 2001).

1.2.1 A brief history of the research

Already at the beginning of the twentieth century, the prehistoric period of Macedonia became the subject of research by European archaeologists. The area of Macedonia was considered a key province for the understanding of European prehistory. The widespread view on the significance of Macedonia for the Neolithic in Europe followed the model of Gordon Childe (1936). According to this model, Macedonia was a natural channel for the expansion of the Neolithic into Europe, through the Axios, Morava and Danube rivers. However, a number of scholars recognized also a general tendency of the area of Macedonia to isolation (Andreou *et al.* 1996). The evidence, on which the latter view rested, was rooted in the underdevelopment of the research in the area of Macedonia, and thus, the general scarcity of archaeological information (Fotiadis 2001; Fotiadis *et al.* 2000). This led archaeologists to place and discuss Macedonia in the context of a Thessalian, rather than a local Macedonian Neolithic. It also led to the assumption that the Neolithic cultures of Macedonia were largely derivative from, and marginal to, those of Thessaly (Andreou *et al.* 1996; Perlès 2001). Inevitably, archaeologists studying the prehistory of Macedonia were considering it to be the ‘province’ of Thessaly during the Neolithic (Andreou *et al.* 1996).

This view of Macedonia changed with time, since the considerable number of Neolithic sites that were excavated as early as the early 1960s and 1970s gave important information with regard to the Neolithic of the area. The excavation of the site of Nea Nikomidia (in the prefecture of Veria in western Macedonia), which originally commenced in 1961 (Wardle 1996), yielded the earliest radiocarbon dating (6220 ± 150 BC) and the site represented at that time the oldest dated Neolithic community in Europe. Regardless of the fact that the excavation project of Nea Nikomidia was abruptly terminated³, it marked the beginning of a significant archaeological research in the area of Macedonia and it was followed by the excavation project of another important site, which remains until today a point of reference for the Neolithic of the area: Sitagroi (Renfrew *et al.* 1986).

By the early 1990s onwards, the number of Neolithic sites in Macedonia had increased considerably (Figure 1.1). Sites such as Drosia (Kotsos 1992), Yiannitsa (Chrysostomou 1991), Dispilio (Hourmouziadis 1996), Makriyalos (Pappa and Bessios 1995; 1998; 1999; Pappa *et al.* 1998; 2003), Promachon-Topolnica (Koukouli-Chrysanthaki *et al.* 1997), Dikili Tash (Treuil 1992), Stavroupoli (Grammenos 2002; 2004), Metabgalo Nisi Galanis (Fotiadis *et al.* 2000), Toumba Serron (Fotiadis 1995), Limenaria (Malamidou 1996; 2006; Malamidou and Papadopoulos 1993), Aggitis

cave (Trantalidou *et al.* 2006), Arkadikos (Peristeri 2002; 2004), Vasilika and Dimitra (Grammenos 1991), Servia (Ridley *et al.* 2000), Kryoneri (Malamidou 1997; 2007; 2016), Mandalo (Papanthimou and Papasteriou 1993), Toumba Kremastis (Hondrogianni-Metoki 2001) and Avgi (Stratouli 2004) have provided important information with regard to the Neolithic of the area. A significant number of these excavations were staffed with scholars with different specialisms (*i.e.* anthropologists, zooarchaeologists, palynologists, geoarchaeologists), who had been trained in various European Universities and were introduced to archaeological research in Greece. This according to Andreou *et al.* (1996) had brought:

“...a radically different set of questions and ethos of practice, a scientific humanism that had developed outside the area of the Aegean prehistory” (Andreou *et al.* 1996, 561-62).

The results of the archaeological research of the Neolithic (and Bronze Age) sites in the culturally and geographically distinct region of Macedonia were summarized about 20 years ago (Andreou *et al.* 1996). Their chronological framework, which was established for the Neolithic of Macedonia and northern Greece in general, is systematically used until today and it is presented in Table 1.1; this also includes the division of the Late Neolithic into two stages of development, following Gallis (1996) and Demoule and Perlès (1993).

1.2.2 The Late Neolithic of Macedonia: Promachon-Topolnica in context

In contrast to the preceding Early and Middle Neolithic periods, the Late Neolithic period of Macedonia is characterized by a considerable expansion of the number of settlements. These occupied either areas that were previously uninhabited or areas in which the environmental conditions did not permit risk-free agricultural production (*i.e.* swampy areas) (Hourmouziadis 1996). Examples of such Late Neolithic communities are represented by the site of Dispilio (Hourmouziadis 2002) near the lake of Kastoria and the site of Dikili Tash (Treuil 1992) in the plain of Kavala. On the other hand, a number of settlements, such as Vasilika (Grammenos 1991; Pappa 1993), Stavroupoli (Grammenos 2002; 2004) and Thermi (Grammenos *et al.* 1989; Pappa *et al.* 2000) covered large areas, which in some cases exceeded 20 hectares each (Pappa 1999; 2008). Despite the fact that the excavations in these settlements have uncovered a considerable number of structural features, it seems likely that the number of populations in each settlement did not exceed 100-200 people (Andreou *et al.* 2001; Pappa 2008).

As in the Early and the Middle Neolithic periods, there were two types of settlements during the Late Neolithic in Macedonia: tells (also known as *toumbes* in the area of Macedonia and *magoules* in the area of Thessaly) and open-air (also known as *flat-extended*) settlements (Perlès 2001; Souvatzi 2008). Prehistoric tells in Macedonia –

³ For an overview of the significance of the Nea Nikomidia archaeological project, see also Fotiadis (2001).

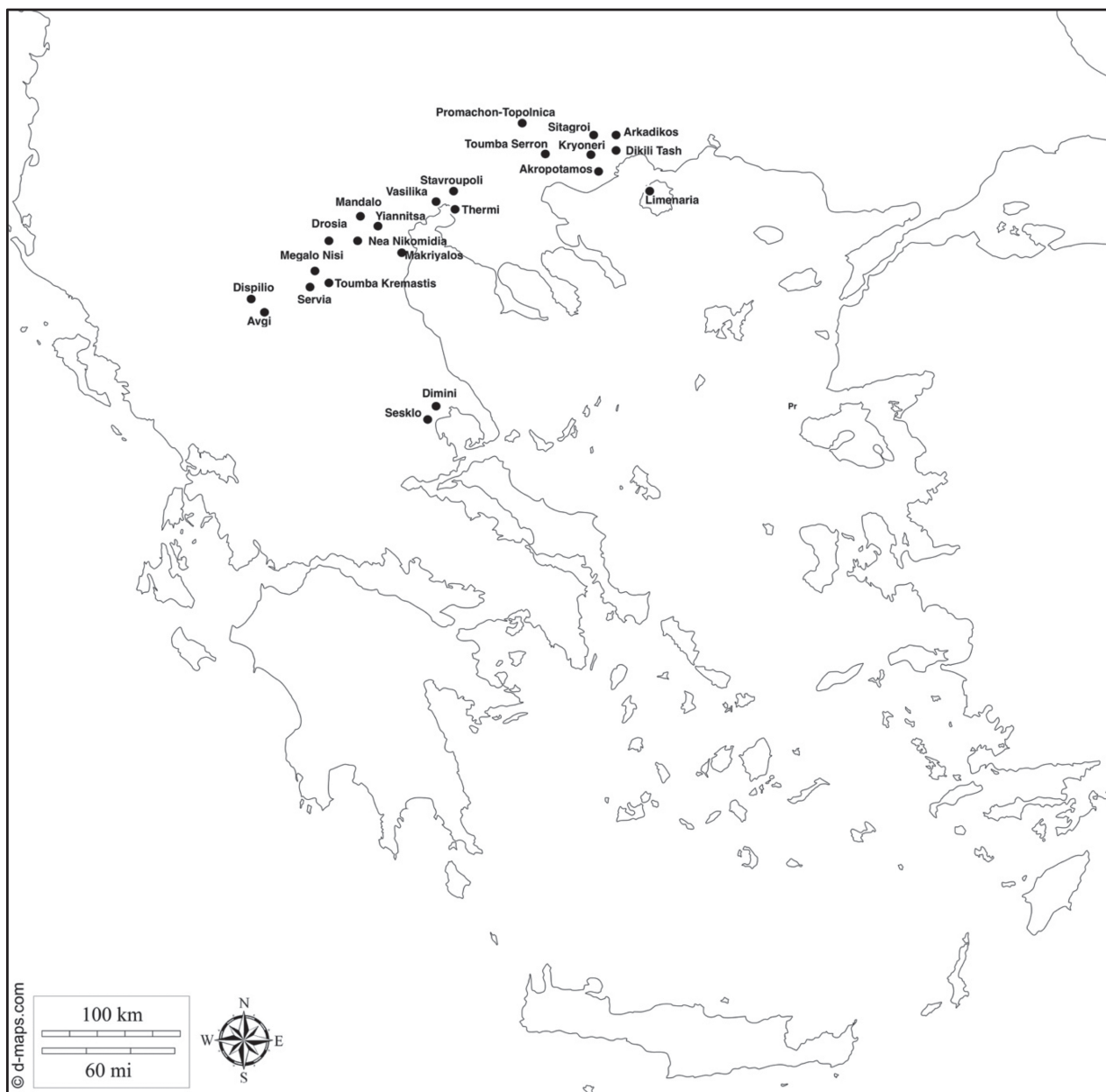


Figure 1.1 Map of Greek Neolithic sites mentioned in this chapter.

often confused with ‘Macedonian tells’, which are funerary monuments of the Hellenistic period – were formed by the accumulation of building materials, since the construction of any new building was based on the foundations of an older (Andreou *et al.* 1996; 2001). This practice ultimately

resulted in the rapid elevation of the settlements and in some cases tells approached – or even exceeded – 20 meters in height. The persistence of the inhabitants to build their new structures on top of the foundations of the older ones, might have been associated either with the

Table 1.1 Archaeological phases and chronology for Neolithic northern Greece.

Cultural Periods	Cal. BC
Final Neolithic (Chalcolithic)	4700 – 4500 / 3300 – 3100
Late Neolithic II	4800 – 4700 / 4500
Late Neolithic I	5400 – 5300 / 4800
Middle Neolithic	5800 – 5600 / 5400 – 5300
Early Neolithic	6700 – 6500 / 5800 – 5600

declaration of the origins and the ‘antiquity’ of the group residing in the building, or with the close ties that this group shared with their ancestors who were perceived to support the longevity and the success of the household (*cf.* Andreou *et al.* 1996; 2001; Bailey 2000; Perlès 2001). In any case, practical considerations such as the availability of space or the easier construction of a new building might have also played a role (Bailey 2000).

In the case of the open-air (or flat-extended) settlements, the new structures were not constructed on the foundations of the previous ones. On the contrary, these were relocated within the framework of a wider area of the settlement, the limits of which, in most cases were defined by a circular trench (as in the case of Makriyalos) (Andreou *et al.* 1996; Kotsakis 1999; Pappa 2008). These buildings were not carefully constructed and they generally give the impression of more ephemeral structures, since they were often nothing more than pits dug into the natural soil (Souvatzi 2008). Like Thessaly, the density of the Late Neolithic buildings in Macedonian sites is extremely low, as there were extensive voids in-between structures – a practice, which is believed to reflect the establishment of the private space during the Late Neolithic (Pappa 2008). However, the large structural features, which are present in Thessalian sites of this time-period (*i.e.* Dimini, Sesklo, Magoula Visviki) – possibly indicating a society with an enhanced hierarchical organization – are conspicuously absent from contemporary Macedonian sites (Pappa 2008). On the other hand, a considerable number of large circular or semi-circular structures, which were dug into the natural subsoil and are considered to represent communal structures with public functions, are present at a number of Macedonian sites (*i.e.* Stavroupoli, Makriyalos, Promachon-Topolniča).

In contrast to the faunal evidence from the preceding (Early and Middle Neolithic) and the subsequent (Early Bronze) periods, the faunal evidence from the Late Neolithic period of Macedonia suggests that wild species had a limited use. The economy during this time-period is mainly based on the breeding and keeping of domesticated animals (cattle, caprines and pigs). Mortality curves suggest a considerable potential for the production of meat, while a small-scale exploitation for secondary products, such as milk, wool and labour is also considered to have taken place (*cf.* Becker 1991; Halstead 1989a; 1996; Papathanasopoulos 1996; Theocharis 1993; Valamoti 2004). Widespread agricultural products are represented by wheat, barley, oats, lentils, vetch, beans and peas, while there is also evidence that Late Neolithic people were collecting wild figs, apples, pears, cranberries, grapes, almonds and acorns (Valamoti 2004). Charred seeds and skins that were found in the Late Neolithic deposits of Dikili Tash provide the first indication for the cultivation of the vine (Valamoti *et al.* 2007). Large storage pits and

storage jars that were found either inside or outside the structures of almost all settlements from this time-period, have been considered to point to the existence of surpluses of products (Halstead 1989b). Evidence of technical expertise is also attested during the Late Neolithic in the area of Macedonia through a number of objects such as obsidian tools, high-quality pottery and marble vessels. The latter are present in a number of sites such as Limenaria in the island of Thassos (Papadopoulos and Malamidou 2012), Servia (Heurtley 1939), Dikili Tash (Treuil 1992) and Promachon-Topolniča (Koukouli-Chrysanthaki *et al.* 2007). Their manufacturing technology and their purpose of use are not yet fully understood, although the evidence from Limenaria suggests that these might have been used as colour containers (Papadopoulos and Malamidou 2012).

The considerable expansion of the number of Late Neolithic sites in Macedonia suggests a dense system of interacting communities that had proceeded from habitation sites to being villages in the functional sense. For instance, the impressive production of high-quality vessels with black paint on red background (also known as black-on-red or simply black-top) (Fotiadis 2001; Grammenos and Kotsos 2001; Koukouli-Chrysanthaki *et al.* 2007) – typical of Eastern Macedonia – have also been found in contemporary settlements from Thrace (Makri) and Thessaly (Pevkakia). In addition, the evidence indicates that a number of Late Neolithic Macedonian sites shared contacts with the wide area of the Balkan Peninsula. For instance, the Late Neolithic settlement of Mandalo in Yiannitsa (Chrysostomou 1991) yielded a considerable number of obsidian tools from the Carpathians (Grammenos and Kotsos 2001) and the well-known Aegean marine shell *Spondylus gaederopus* has been found in sites from Central and Northern Europe (Andreou *et al.* 2001).

Archaeological research has indicated that, in the beginning of the fourth millennium BC, settlements in Macedonia (*i.e.* Mandalo, Thermi, Stavroupoli, Promachon), which had been inhabited for several centuries, were ultimately abandoned (Andreou *et al.* 2001; Grammenos and Kotsos 2004). This constitutes a significant problem for the research of the prehistory of the area, as this means that the number of settlements which span the crucial transitional period between the Late/Final Neolithic and the Bronze Age are scarce.

Among recently excavated Late Neolithic sites in Greek Macedonia, the settlement of Promachon-Topolniča – with its rich array of material culture evidence – yielded a large assemblage of animal bones, which constitutes the focal point of this book.

The site of Promachon-Topolniča is introduced in the next chapter.