

DOMESTICATING THE LAND: THE FIRST AGRICULTURAL COMMUNITIES IN PORTUGAL*

by

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Abstract: This text is the English version of the author's book "Domesticating the Land", 1999 (Lisbon, Grad. Publ.), presented in the context of the 3rd Congress on Iberian Archaeology (Vila Real, Portugal, September 99). Since then, a wider discussion of its contents, allowed by an English version, was thought to be important; in fact, this work corresponds to the critical revision of the synthesis of the prehistory of Portugal made by the same author ten years ago ("New History of Portugal", vol. 1, Lisbon, Ed. Presença, 1990).

Key-words: Prehistory; Portugal; Neolithic/Chalcolithic; Bronze Age.

Resumo: Este texto corresponde à versão inglesa do livro da autora "Domesticar a Terra", publicado em 1999 (Lisboa, Gradiva), e apresentado ao público durante o 3º Congresso de Arqueologia Peninsular (Vila Real, Set. 99). Desde então que se entendeu ser importante uma sua difusão mais ampla, em inglês, até porque este trabalho é a revisão, passados dez anos, da síntese da pré-história de Portugal da mesma autora integrada na "Nova História de Portugal", vol. 1, editada em 1990 pela Ed. Presença, Lisboa.

Palavras-chave: Pré-história; Portugal; Neolítico/Calcolítico/I. do Bronze.

FOREWORD

This paper is an attempt to summarise the later prehistory of what is now Portugal between the 6th and the 2nd millennia B.C. It deliberately avoids the archaeological terminology which divides the period into Neolithic, Chalcolithic and Bronze Age. Rather, the three sections are organised according to chronological parameters, with contents and approaches which vary in many aspects from the classic perspectives.

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Thus, the first section deals with the last hunter-gatherers, who were already using elements of the productive system, and mentions groups traditionally included in the early Neolithic. The second discusses very diverse communities, some dependent on hunting, gathering and the herding of livestock, and others whose economy was already agro-pastoral: what unites them is the building of burial/ritual monuments marking new territories. They correspond, according to traditional terminology, to groups from the mid-late Neolithic. The third section speaks of the first agricultural communities, who built relatively stable territories over two millennia: firstly (in what is currently termed Chalcolithic), through monumental settings, and then (in the early and middle 'Bronze Age') using less obvious formulae, sometimes difficult to detect in the archaeological record.

It may perhaps be useful to indicate what this tripartite division does not aim to be. Firstly, it does not follow any criteria related to the conspicuousness of sites in the landscape: in other words, it does not rely on the presence or absence of territorial markers. If we had followed this approach, the second section would also include the Chalcolithic, covering the 4th and 3rd millennia B.C., a period when markers were most abundant.

Secondly, this sequence does not give exclusive emphasis to the presence or absence (or the signs of development) of a productive economy. Had this been our intention, we could have arranged the available information in only two sections, the first corresponding to the early and middle Neolithic (proto-productive economies) and the second to the Late Neolithic-Chalcolithic-early Bronze Age (productive economies).

In fact, the three sections, while closely following the traditional archaeological periods, are intended to question the classic assumptions of chronological and cultural sequences repeated in countless recent monographs and research articles.

Thus, section 1 deals with the myth of the development of a 'productive system' in the 6th and 5th millennia B.C. During this period, local hunter-gatherers were faced with stimuli of extremely varied origin: they reacted by a process of selective integration which is very difficult to interpret. However, during this period it does not seem that there was any unified 'Neolithic package', nor the development of any Neolithic economic system, that is, a system maintained by cereal cultivation and the herding of livestock.

Section 2 discusses the illusion of a strict correlation between ritual/burial monuments and the productive system in the 5th and 4th millennia B.C. In fact, in the initial phase (and later, in certain regions) we may find monuments which were not built by farming communities. Moreover, burial or ritual sites certainly served different social ends and played a part in a variety of economies, in accordance with their regions. This lack of functional unity of 5th and 4th millennium 'monuments' allows us to speak of the *myth* that the marking of cultivated land by monuments was socially imperative in consolidating all productive systems.

In section 3 we deal with not one but several illusions. The first is that monuments (and the process of monumentalising the landscape) are related to complex societies, and that their absence indicates more embryonic social organisations. The truth is that research shows us that there are many and varied monuments among communities whose organisation and leadership were less elaborate than those of later people who did not express themselves in monumental settings.

The second illusion in this section is the supposed correlation between trade in metal and the accumulation of wealth by some local chiefs. This conviction of some researchers,

that control of trade in copper objects was the source of the growth in power of certain chiefs and of the stability of the groups which they led, has given rise to cultural sequences which establish a breach between the Chalcolithic and the early/middle Bronze Age. However, even in the first phase of the Bronze Age (during the 2nd millennium B.C.), exchanges of metal are always on a small scale, with limited objectives of display within a locally-based system. This section therefore speaks of the *myth* of the social role of metal before the end of the 2nd millennium B.C. (or in the period before the so-called late Bronze Age).

Finally, this third section certainly does not intend to extract contextual meanings from archaeological material. Any analysis on a local scale requires work on archaeological projects, which implies time, money and recognised specialists. It is not easy to study and compare contexts within an institutional framework such as the Portuguese one, in which archaeological investigation is considered of little value. But the choice of large-scale analysis comes at a price: we cannot puzzle about discontinuities which only have a meaning when seen on a medium or small scale. Changes in burial or ritual sites, in multifunctional areas, in places where territorial rights were agreed, etc., may help us to glimpse breaks on a medium or local scale, but they are certainly insufficient or inappropriate for perceiving wider discontinuities.

In this brief overview we shall take the risk of leaving some gaps in the long process of domesticating the land. These do not necessarily coincide with the chronology suggested by the beginning and end of each section, but can be found throughout the text. Sections are, after all, only ways to ‘domesticate’ a discourse, and to keep it open to the searching eye of the reader***.

I. THE LAST HUNTER-GATHERERS IN A TIME OF CHANGE: FROM THE MID-6TH TO THE MID-5TH MILLENNIA B.C.

A look at the present spread of so-called early Neolithic sites (mid-6th to mid-5th millennia B.C.) shows us something which has become obvious in the last ten years: the interior of the country, from the Upper Alentejo north to Trás-os-Montes and Upper Douro, now has a significant number of archaeological sites fitting into this period. Although the majority of them are still not dated, the pattern of their location and analysis of their materials indicate that regionally they must predate the mid-late Neolithic tomb-building phenomenon (beginning in the mid-5th millennium B.C.).

Thus we may confirm what was suspected in 1990¹: that the so-called Neolithic process was not confined to the Atlantic coast, whatever may have been the cultural transmission processes involved in the adoption of ‘Neolithic innovations’ (pottery, polished stone, domestication of animals and plants).

*** The words ‘Portugal’ and ‘the country’ have sometimes been used here to signify the area of land covered by the present country – in other words, as a short form for ‘what is now Portugal’ (translator’s note).

¹ Jorge, S.O., 1990: 159-160.

A second observation concerns the absence of known Neolithic sites near the Portuguese Atlantic coast north of the River Mondego. This absence was already noted in 1970², although it was not followed up in the following decades. On the Galician coast, however, in the Morrazo peninsula (Pontevedra)³ there are pre-megalithic Neolithic sites following on from epipalaeolithic occupation of the coast in the 7th and 8th millennia B.C.⁴. Deficiencies in investigation and/or Holocene sedimentation processes may perhaps be the cause of this blank on the map of Portuguese early Neolithic sites.

1. The group of ‘Neolithic’ sites known so far suggests some further comments.

Regarding currently available absolute chronology, we have used the data published in 1996 and 1997⁵. Few C14 dates are available from sites of this period, and they are concentrated in sites near the coast in the centre and south of the country: Estremadura, the Sado valley and the south-western coast (Alentejo and Algarve). Only three interior sites in the north of the country, in the provinces of Trás-os-Montes and Upper Douro and of Douro Litoral, have provided usable absolute dating.

Given the available data, what we can say for the moment is that the oldest sites date from the middle of the 6th millennium B.C. and are found near the south-west coast (Vale Píncel I, Samouqueira I, Vidigal, Medo-Tojeiro and Padrão I)⁶. These sites, with decorated pottery (with cardial ware in the minority) and microliths in the local Mesolithic tradition, are slightly older than those in the Sado valley and Portuguese Estremadura, where the first dateable settlements cannot be considered as earlier than the last quarter of the 6th millennium B.C. (Cabeço do Pez, Caldeirão [Na2], Correio-Mor and Pena d’Água).

It should be mentioned that there was cardial pottery in all of these last four sites, though in one of the Caldeirão cave burial contexts it was the only pottery found⁷. The remaining dated sites are slightly later (the turn of the 6th-5th millennium and the first half of the 5th millennium B.C.). They are situated in Estremadura (Caldeirão [Na 1], Casa da Moura, Salemas, São Pedro de Canaferim, Algar do Picoto), in the Sado valley (Cabeço do Pez) and in the interior of northern Portugal (Buraco da Pala IV, Fraga d’Aia I and Lavra I). Cardial pottery may be present in Estremadura, although in a minority (as at Salemas): non-cardial pottery with incised and stamped decoration predominates. Cardial decoration has not so far been found at sites in the central and northern interior of the country.

If we look at the correlation between the C14 dates and the presence or absence of cardial decoration on pottery vessels, we soon come to the conclusion that at present only a minority of the pottery from the earliest sites, all near the southern coast of the country, has cardial decoration.

Even if sites as early as those near the south-west coast come to be identified in Estremadura in contexts where cardial pottery predominates, this would not negate a

² Guilaine & Ferreira, 1970.

³ Suárez Otero, 1997.

⁴ Fábregas Válcara *et al.*, 1997.

⁵ Zilhão & Carvalho, 1996; Soares, 1997; Sanches, 1997c.

⁶ Soares, 1997: 593.

⁷ Zilhão, 1992.

hypothesis, which is in fact not particularly new⁸: the co-existence near the Portuguese Atlantic coast of different styles of pottery in which, in an initial phase, cardial decoration may or may not predominate. In a later phase, this technique might not appear at all, a variety of decorations co-existing without recourse to the imprint of the *cardium edule* shell.

This hypothesis of stylistic co-existence suggests the need to reevaluate the cardial paradigm on the Atlantic coast, in the context of the Neolithic process in the Iberian Peninsula.

Our second point is intended to highlight factors of continuity or discontinuity between Mesolithic and Neolithic, and even possible forms of contact between them. This approach covers only Estremadura, the Tagus and Sado estuaries and the south-west coast, since Mesolithic antecedents in the interior of the country are not yet known.

Regarding the location and types of sites, along with the material culture and forms of subsistence, it is essential to separate methodologically Estremadura and the Tagus estuary from the Sado estuary and the south-west.

The interior of the former region presents us with biophysically diverse areas from the beginning of the Holocene onwards. From the coast, through the limestone plateau of Estremadura to the Tagus estuary, we see throughout the 7th and 6th millennia B.C. a diversity of ecosystems which may have influenced the subsistence patterns and social structures of the populations which inhabited the area.

During the Mesolithic, seasonal camps and shell middens have been found near the coast, as well as the famous shell middens of Vale do Tejo (Muge). On the limestone plateau, Mesolithic cave use seems to be rare⁹, which may be a result of changes both in settlement strategies and in the rate of population growth on a micro-regional scale¹⁰. Anyway, this idea of a 'Mesolithic vacuum' may come to be superseded in the course of future research, and the possibility of other Mesolithic contexts, materially distinct from the classic sets of microliths, should not be rejected¹¹. While accepting that the spectrum of the Mesolithic economy connected a network of diverse biotopes, we must admit that at the moment it is not yet possible to see Estremadura and the Tejo estuary as a systemic whole. In fact, despite the small distances involved, especially on the Peninsular scale, we cannot yet state that during the 7th and the first half of the 6th millennia B.C. the same groups moved seasonally throughout the region, from the coast to the Tagus estuary.

From the second half of the 6th millennium B.C. there were various Neolithic occupation sites, in coastal Estremadura, the limestone plateau and the Serra de Sintra to the south, either in caves or in the open, and in a variety of settings. The upper levels of the Tagus shell middens show the influence of certain 'Neolithic innovations' such as pottery. In fact all the sites, whether domestic or funerary, include some signs of innovation, both technical (pottery, polished stone, pieces of sickle blades showing gloss) and economic (sheep, goats and cattle). However, in the better-known domestic contexts we also find signs of a relatively archaic stone industry in the Mesolithic tradition, producing mainly

⁸ Soares & Silva, 1979; Jorge, S.O., 1979; Vilaça, 1988.

⁹ Zilhão & Carvalho, 1996.

¹⁰ Soares, 1995b.

¹¹ Oosterbeek, 1994a, b, c; Cruz, A.R., 1997.

flakes and some bladelets¹², along with the more innovative specialist work producing retouched blades or bladelets for use in sickles¹³.

This variation in artefacts and 'ecofacts', as well as in residence patterns, indicates considerable flexibility in ways of exploiting territory. This is seen especially in ecotones, areas where different biotopes met, either near the coast or on the Estremaduran limestone plateau, where a wide range of land-and water-based resources was available. Further north, the Neolithic sites of the lower Mondego, at the northernmost point on the coast where this material appears (Junqueira, Várzea do Lirio, Forno da Cal)¹⁴, which are either in the hills or on the banks of the ancient Mondego estuary, show extensive exploitation of the territory, in which hunting, gathering, fishing and herding would have been the main subsistence activities. We may ask ourselves, however, if agriculture was practised, and if so, of what kind – this question is relevant not only to Estremadura but to all of what is now Portugal in the period under consideration.

The idea that emerges when we observe the turn of the 7th-6th millennia B.C. in Estremadura and the Tagus estuary is that the biophysical heterogeneity of this region may be related to multiple processes of neolithisation. The specific context of the settlement of Amoreira in the Nabão valley (with macrolithic material, flint microliths and undecorated pottery¹⁵) serves to remind us of the plurality of cultural forms which may be hidden under the generic term 'Neolithic'.

In the area of the Sado estuary and the southwest coast there is less geomorphological variation than in Estremadura and the Tagus estuary: this may have facilitated mobility between the different ecosystems of the region in the 7th and 6th millennia B.C. Movement would have been either along the coast, in areas with more or less similar resources, or between the coast and the interior (or vice-versa), linking biophysically different areas. In the flat sandy lands near the coast during the Mesolithic there were large base camps and smaller, more specialised camps; further inland, along the estuaries of the Mira and the Sado, shell middens vary in their composition and length of use¹⁶. According to Soares (1992, 1995a, b, 1996, 1997), during the 7th millennium B.C. there developed complex hunter-gatherer economies which, moving away from the classic highly mobile 'predator' lifestyle, specialised in the storage of aquatic resources. These economies were based either on the exploitation of a wide range of extensive territories (involving use by the same groups of complementary areas of hills, estuary and coast), or in the exploitation of a narrow food spectrum, with the aim of acquiring or storing water- or land-based resources at certain times of the year. The novelty of these Mesolithic economies, according to Soares (1997), lies in decreased mobility, in economic intensification and in population growth, which would have led at the beginning of the 6th millennium B.C. to "a demographic and ecological imbalance" on the coast. Mesolithic groups on the south-west coast at this time thus had a proto-productive lifestyle which would soon be open to certain 'Neolithic innovations'.

In fact, according to recent absolute dates¹⁷, in the middle of the 6th millennium B.C.

¹² Zilhão & Carvalho, 1996.

¹³ Simões, 1997: 58.

¹⁴ Jorge, S.O., 1979; Vilaça, 1988.

¹⁵ Oosterbeek, 1994a, b, c; Cruz, A.R., 1997.

¹⁶ Arnaud, 1982, 1987, 1990; Soares, 1997.

¹⁷ Soares, 1997.

on the Alentejo and Algarve coast there appeared large base settlements (e.g. Vale Píncel I) and specialised temporary camps (e.g. Medo Tojeiro), showing the introduction of new technologies (pottery, polished stone, sickle blades showing gloss) amongst sets of tools of local Mesolithic type (microlithic or macrolithic). The Sado shell middens also show some technical innovations (especially pottery and polished stone). Animal husbandry is shown only by remains of sheep or goats at Cabranosa and Padrão I. Agriculture, according to the researchers¹⁸, can only be deduced from indirect evidence: the presence of polished stone, of querns and of blades with sickle gloss.

Some key ideas on this period in the region are the following:

- There is a clear continuity in locality, types of site and forms of subsistence between ‘Mesolithic’ groups of the 7th millennium and ‘Neolithic’ groups of the 6th millennium B.C.
- This continuity included a similar logistic strategy for the extensive exploitation of territories, which aimed to obtain not only the traditional water- and land-based resources, but also new ones resulting from animal herding and from embryonic agriculture.
- Herding and agriculture, however, developed in a context of economic intensification which originated in the 7th millennium B.C. and which frequently made use of short-term subsistence activities such as the gathering of shellfish.
- Comprehensive use of estuaries and coastline by groups at this period has not been proved. Research into the balance between the coast and the interior is, however, essential for understanding the spread of ‘Neolithic innovations’ in southern Portugal.

In analysing other factors of continuity/discontinuity between Mesolithic and Neolithic we should mention the physical characteristics of the population and their funerary rites.

In relation to physical anthropology, it has been repeatedly stated¹⁹ that there are no differences between the Mesolithic and Neolithic populations. There is therefore no evidence for the presence of groups coming from outside Portuguese territory in the period of transition from Mesolithic to early Neolithic.

As for funerary rites, there are several particularities. In the Mesolithic contexts of the Tagus and Sado shell middens²⁰, inhumations of adults and children are found near ‘domestic areas’ (might this proximity have been symbolically important?). Structures were fragile, invisible architecturally, and the grave-goods were poor and tell us little. In some Neolithic open-air settlements on the Alentejan coast (Samouqueira I and Vale Píncel)²¹ inhumations have also been found within or alongside ‘domestic areas’, without any visible markers. Lastly, Estremaduran cave burials show a certain innovation, in that, in comparison with the previous examples, they form a separate funerary area. However, these burials are evidently not innovations in general terms (they are one of the oldest known forms of burial), nor do they show any elaborate form of organisation – we may recall, for example, the surface depositions of the cave of Caldeirão²². The grave-goods may include some of the Neolithic innovations already mentioned (e.g. pottery and polished stone) and, in better-known cases (Caldeirão), we may suspect that sheep and goats were

¹⁸ Silva & Soares, 1997; Soares, 1997.

¹⁹ Arnaud, 1982, 1990.

²⁰ Roche, 1972; Arnaud, 1990.

²¹ Soares, 1997.

²² Zilhão, 1992.

also interred. Generally, what we see here are simple burials, without imposing architecture or varied grave-goods, with the exception of the symbolically prestigious role decorated pottery and domesticated animals had in the context of early Neolithic burials.

Finally, absolute chronology and analysis of materials from different contexts shows us that from the end of the 6th/beginning of the 5th millennia B.C. three types of people co-existed in these regions: groups of traditional Mesolithic hunter-gatherers, groups of hunter-gatherers who occasionally used 'Neolithic' artefacts (as in the shell middens of the Tagus and the Sado), and groups of hunter-gatherer-herders who used 'Neolithic' artefacts and became less nomadic in lifestyle. The question remains open as to the degree of contact between these groups, given that they lived in the same regions and exploited similar resources; in certain cases we may suspect that the same groups could have used the sites in different ways, leaving specialised artefacts according to the activities carried out in each place.

A third point is concerned with the nature of Neolithic sites in the interior. In recent years many researchers²³ have tried to date some standing stones and cromlechs in southern Portugal (the Upper Alentejo and eastern Algarve) to the early-middle Neolithic. According to them, these monuments are found near, or even (in the case of the standing stones) inside early Neolithic open-air settlements in the regions of Évora, Reguengos and Pavia in the Alentejo, as well as in the area of the Algarve known as Barlavento. The territories defined by early Neolithic settlements and by standing stones/cromlechs thus seem to coincide. These researchers believe that the cromlechs and standing stones would have been the first monuments connected to groups of agro-pastoralists who preceded the megalithic funerary phenomenon in the Alentejo and the Algarve, and their function would have been to mark symbolically a virgin space intended for occupation.

Some basic questions arise here. The first has to do with the absolute dating attributed to these monuments. Since some C14 dates are for contexts not completely linked with the standing stones and cromlechs, we cannot yet accept unequivocally a dating as early as the end of the 6th and the first half of the 5th millennia B.C. Furthermore, if this dating was accepted, doubts would arise about the economic and social characteristics of those who built these monuments. If we are dealing with populations of hunter-gatherer-herders (occasionally practising horticulture), who gradually took over territories either previously empty or only sparsely populated by hunter-gatherers, then we are faced with two obstacles: a relatively low population density and a way of life based on extensive exploitation of territory (implying considerable mobility), which are not in accord with the social and symbolic principles which governed the first erection of monuments in the landscape. This problem will be dealt with later in our discussion of the period.

Also in the interior of the country we find engraved rocks and engraved and/or painted rock shelters decorated with schematic anthropomorphic and zoomorphic motifs, generally dated to the early Neolithic. We should mention the importance of the complex of open-air rock art in the Portuguese Upper Tagus²⁴, given its proximity to partially contemporary open-air settlements in the Upper Alentejo. In recent years there have also

²³ Calado, 1993, 1997; Calado & Sarantopoulos, 1996; Calado & Rocha, 1996; Gomes, 1994, 1997a, b c; Gomes & Cabrita, 1997; Rocha, 1997; Diniz & Calado, 1997.

²⁴ Baptista, 1981, 1986; Gomes, 1983.

been interesting discoveries in northern Portugal: in the valleys of the River Côa and other tributaries of the Douro, near the present Spanish border, rocks have been found painted and engraved with sub-naturalistic zoomorphic and schematic anthropomorphic shapes²⁵, which may be generally attributed to this phase. Finally we must include the schematic and sub-schematic motifs near to or connected with shelters with C14-dated occupation layers, such as Fraga d'Aia and Serra de Passos²⁶.

All these sites with schematic rock art allow us to picture landscapes still strongly marked by the symbolism of mobile hunter-gatherer-herders. Such monumentalised natural sites seem to model a different concept of space and time from that introduced later by the full-fledged agro-pastoral lifestyle.

Finally we must mention the presence of wheat at the earliest level of a rock shelter in the interior of northern Portugal, Buraco da Pala IV²⁷, a discovery which is surely significant. The context where it was found is dated to the late 6th/early 5th millennia B.C. and contains material which fits perfectly with this dating. It is one of the few dated contexts of the Portuguese early Neolithic, contemporary with the second burial at the Caldeirão cave – as usual in the central and northern interior, cardial pottery is not present – and it is the only context in the country for the period which gives direct proof of agriculture, the others (burials or settlements) only giving at best indirect proof.

This isolated find at Buraco da Pala IV leads us to a basic question: where are there any signs of subsistence practices based on herding and cereal cultivation during the 6th and the first half of the 5th millennium B.C. in Portugal? It is true that there are some half a dozen sites with traces of sheep or goats and some dozens with querns together with blades with sickle gloss, polished axes and pottery. Some sites, seen as a whole, show tenuous signs of permanent settlement and economic intensification. But the basic question remains: what are the direct proofs for a Neolithic (that is, productive) way of life in the so-called early Neolithic in Portugal?

2. Discussion

We believe that there is a basic question as yet unresolved. Are the changes that took place between the 6th and 5th millennia B.C. (the appearance of pottery, polished stone and traces of the domestication of animals and plants) indicative of structural transformations in the way of life of local populations, in other words, of economic and social discontinuity?

This question raises collateral ones: whether or not we opt for cultural discontinuity, how are we to describe the presence and the rate of transmission of these changes? What importance should be given to how early the pottery was (cardial or not) and to other components of the so-called Neolithic package as an index of a cultural transformation process?

All these questions involve two interlinked aspects: the efficiency of some models of cultural transmission as explanations, and the identification in the archaeological record of defining parameters for subsistence systems, especially those found at the interface

²⁵ Jorge, V.O. & Jorge, S.O., 1995; Carvalho *et al.*, 1996; Sanches, 1997a.

²⁶ Sanches, 1997c.

²⁷ Sanches, 1997c.

between hunter-gatherers and farmer-herders.

One group of researchers has answered the first question in the affirmative. Although defending positions which differ from each other in detail, Guilaine & Ferreira (1970), Arnaud (1990), and Zilhão (1992, 1993, 1998) claim that the innovations correspond to cultural discontinuity. For them, the discontinuity followed the arrival on the Atlantic coast, as previously on the Mediterranean coast of the Peninsula, of groups of farmer-herders from the eastern Mediterranean, carrying with them a productive way of life associated with technological and economic innovations. Guilaine & Ferreira (1970) give fundamental importance to technological indications of discontinuity, viewing cardial pottery as an index of the presence and early date of the cultural change. They see non-cardial decorated pottery as corresponding to a later phase of the development and expansion of the productive system in Portugal. Arnaud (1990) and Zilhão (1992, 1993, 1998) emphasise a wider set of indicators of discontinuity, particularly those related to settlement type, forms of subsistence and funerary rites. Recently (1997) Guilaine has reaffirmed his view: the productive system in the Iberian Peninsula was part of a process of coastal diffusion. Only at a later stage was the interior colonised or acculturated, with Mesolithic groups and early farmer-herders then possibly living side by side. Cardial pottery, the sign of the presence of the first 'colonisers', would have spread rapidly along the Mediterranean and Atlantic coastlines, while not appearing in the north-west and in Cantabria. It can be noted that Guilaine (1997), despite being in agreement with the model of population expansion of Ammerman & Cavalli-Sforza (1984), disagrees on the speed of the diffusion of cardial pottery (and hence of the productive system) along the Iberian coast. In fact the spread seems considerably faster than they suggest, a fact which cannot apparently be explained by the premisses of their culture-historical model.

Some fairly recent publications²⁸ give details of the colonisation process of what is now Portugal, that is, of most of the western, Atlantic façade of the Iberian Peninsula. This process fits into a demic model in which change is linked to the movement of populations, in this case originating externally.

The essence of these papers is that at the end of the 6th millennium B.C. an 'enclave' of agro-pastoral people established itself in Portuguese Estremadura, as another such enclave had already settled further east, in the region of Valencia²⁹. These populations, bringers of the productive way of life, found a practically depopulated region, or one with an almost non-existent Mesolithic presence. This facilitated their rapid settlement, and they soon expanded in various directions. To the south, at the turn of the 6th and 5th millennia B.C., they made contact with the hunter-gatherers of the Tagus, the Sado and the south-west coast. From these contacts there followed a progressive absorption of the Mesolithic peoples and a colonisation or acculturation of large parts of southern Portugal. In this process, cardial pottery, initially predominant and stylistically 'baroque', became decreasingly important, being replaced by other decorative forms. The local Mesolithic populations only adopted the Neolithic package through contact and interaction with Neolithic groups, and there is no possibility that local hunter-gatherers could have accepted any of the elements of the package independently.

²⁸ Zilhão, 1992, 1993, 1998.

²⁹ Bernabeu, 1989; Bernabeu & Martí Oliver, 1992.

This model of the ‘colonisation’ of the Atlantic seaboard broadly follows the same theoretical presuppositions as those used in explaining the appearance and development of the Neolithic enclave in the east of the Peninsula. However, there are important obstacles to the acceptance of this model as applied to Estremadura. We shall list the most obvious:

1) This colonial model of the neolithisation process is based on the analysis of only one excavated site, the cave of Caldeirão³⁰, situated on the Estremaduran limestone plateau. Other sites in Estremadura have been studied, but have not yet provided conclusive data³¹. A really thorough examination of these sites is therefore necessary in order to test the hypotheses based on the isolated study of the Caldeirão cave.

2) The Caldeirão site, in the relevant period and context, functioned as a burial place (it may also have been a temporary shelter). Thus, not only is the interpretation of the neolithisation process in Portuguese Estremadura structured around just one site, as mentioned above, but that site needs to be read in the light of restrictions imposed by the nature of its specialised funerary function. Points to be considered include interpretation of the presence/absence of cardial pottery and of domesticated animals and plants, characteristics of other grave-goods, and deductions about the diet of individuals from human bone analysis³².

3) The archaeological discontinuity at Caldeirão, between the late Palaeolithic occupation and the Neolithic burials, is interpreted as resulting from a sedimentary hiatus³³. This hiatus would explain the absence of Mesolithic materials in the cave, and if it happened generally in other caves in Portuguese Estremadura it would constitute evidence in favour of a discontinuity of occupation between the late Palaeolithic and the early Neolithic, thus supporting a theory of a ‘depopulated region’ in the Mesolithic. Estremadura would only be occupied again by the Neolithic colonisers of the late 6th millennium B.C. However, geochemical study of the sedimentary filling of the Caldeirão cave does not prove any sedimentary discontinuity between layers Eb (Magdalenian) and Ea (early Neolithic with cardial pottery)³⁴. It therefore seems premature to use the argument of a sedimentary hiatus as support for a hypothetical break in occupation between the late Palaeolithic and the early Neolithic not only in Caldeirão but in the whole of Estremadura. And even if this break were to be confirmed, we could not infer from it that the early Neolithic was intrusive and ‘foreign’. A hypothetical depopulated land could be settled by local populations from neighbouring territories, bringing with them Neolithic innovations, and not necessarily by ‘colonisers’ from the Mediterranean.

4) The burials at Caldeirão are dated between the end of the 6th and the beginning of the 5th millennia B.C. We now have more C14 dates for the early Neolithic in Estremadura³⁵, but these are no older than those of Caldeirão. Meanwhile, on the south-west coast, early Neolithic sites are dated around the middle of the 6th millennium B.C., and here cardial pottery is less common than other forms³⁶. It is therefore difficult to continue to use an early date for Caldeirão to justify a possible Neolithic enclave in Estremadura. Zilhão has recently

³⁰ Zilhão, 1992.

³¹ Zilhão, 1992; Oosterbeek, 1994c; Zilhão & Carvalho, 1996; Cruz, A.R., 1997.

³² Zilhão, 1992.

³³ Zilhão, 1992: 185.

³⁴ Cruz, A.J.C., 1993: 365-366, 416-417.

³⁵ Zilhão & Carvalho, 1996.

³⁶ Soares, 1997.

(1998) tried to overcome this difficulty, casting doubt on the exclusive Neolithic nature of some dated sites near the south-west coast, especially the settlement of Vale Píncel I which, he believes, was in fact first occupied in the Mesolithic. The argument seems unconvincing in many aspects, since the recent theory of various discontinuous enclaves on the Atlantic coast (in Estremadura and the Algarve) appears to lack an archaeological basis.

In fact there are no sites on the Portuguese coast which point to the arrival of distant peoples bringing a productive way of life, seen archaeologically in the simultaneous occurrence of domesticated animals and plants, pottery, polished stone and permanent settlements. Zilhão's paper (1998) raises the scientific and ethical question of whether one should propose a radically different interpretation of sites excavated and analysed by other archaeologists, without previous debate in scientific circles – a question deserving proper discussion elsewhere. The article does nothing at all, however, to advance discussion of the problem which interests us here: it provides no new data to shed light on the author's colonial model.

5) Indeed we know nothing of the settlements connected with the Caldeirão burials. Where is the particular place (not even 'village') on the coast of Estremadura where these farmer-herders from the Mediterranean settled permanently? There is a theory that this may have been to the south, near the rich alluvial soils of the River Nabão³⁷. However, the hypothesis can be rejected, since the soils, though fertile, are very heavy, requiring an agricultural technology which these groups at the time did not possess³⁸. The truth is that neither in Estremadura nor elsewhere in the Peninsula do we know of fixed settlements, as in the eastern Mediterranean, to indicate that Neolithic villages or a village way of life were established in the west³⁹.

6) The absence of cereals and of other direct evidence for agriculture cannot in itself show, as Zilhão himself says⁴⁰, that agriculture did not play a part in the economic system of those who used the cave, because of the specialised nature of this use. However, the funerary argument can point to the opposite direction: what we may see here are burials of hunter-gatherers who left with their dead the pottery which they had obtained by exchange (the role played by domesticated animals in the burials is not clear), the new artefacts having exceptional prestige in the context of local groups who were not yet economically dependent on herding or agriculture, nor socially linked to a village way of life.

In summary, if we rely on the theoretical support of the classic diffusionist model⁴¹, based on population expansion and the establishment on the Atlantic coast of enclaves of herder-farmers from the Mediterranean, then we have to admit that there is no archaeological evidence to uphold it. There are no signs of discontinuity of population in terms of physical characteristics, nor any evidence of depopulation in Estremadura in the post-Magdalenian period which can be related to a subsequent influx of Neolithic groups from elsewhere. The archaeological data (the study of only one site, which by its specialised nature does not allow us to draw conclusions about the economic and social system of the groups who used

³⁷ Zilhão, 1993: 26.

³⁸ Cruz, A.R., 1997: 33.

³⁹ Lewthwaite, 1986a, b; Vicent García, 1997.

⁴⁰ Zilhão, 1993: 26.

⁴¹ Vicent García, 1997.

it during this period) does not validate any cultural discontinuity: there is no direct evidence of agriculture, domesticated animals are very rare, there are few traces of fixed settlements, and above all there is no sign of the whole early Neolithic package (cardial pottery + domesticated animals + cereals) which according to the classic theory supports the credibility of the colonial model in the Iberian Peninsula⁴².

We may add that the model of Atlantic enclaves, especially in Estremadura, was constructed at a time when, for various reasons, the primacy of the Valencia 'enclave' was beginning to be seriously questioned. The first response to this was made at about the same time in Spain and Portugal, both by a revision of the dating of Levantine sites⁴³ and by a rhetorical exercise on the settlement of colonisers in Portuguese Estremadura⁴⁴.

In 1982 Arnaud presented two alternative models for the region of the Sado estuary and the Alentejo coast, in an attempt to explain the appearance of Neolithic innovations in the area. One of these models follows the colonial diffusionist theory; the other suggests an autonomous position, supporting the theory that local Mesolithic people adopted innovations which slowly became incorporated into their way of life. In this article, however, Arnaud chose neither of these models, but instead demonstrated clearly that the same facts could support entirely different constructs.

Throughout the 1980s C.T. Silva and J. Soares tried to show that the changes on the coast of southern Portugal should not be seen as signs of cultural rupture, but rather of a continually evolving process⁴⁵. They believed that it is not just that the same groups adopted certain innovations, but also that these innovations were integrated into complex subsistence systems which were ready to receive them. Pottery and herding were assimilated into proto-productive economies involving the storage of water-based resources. Such innovations were accepted earliest near the coast and later spread to the interior of southern Portugal.

The process whereby innovations are received and then transmitted is known as acculturation. But in the 1980s the social patterns which allowed pottery, polished stone, goats, sheep and cereals to arrive on the Alentejo and Algarve coast were not yet clear. Similarly, it was not easy to explain how a new way of life was slowly introduced into the interior of southern Portugal. The word 'influence' was much used to signify the process of contact between local groups and what came from outside.

During the 1990s there has been a significant qualitative leap: theories of local evolution have been strengthened, and now form the basis for interpreting early Neolithic settlements in practically the whole country, especially the interior, from the Upper Alentejo as far as Trás-os-Montes and Upper Douro.

In the south of the country, C.T. Silva (1993) and J. Soares (1992, 1995a, b, 1997) are responsible for several projects aimed at learning more about the continuity between Mesolithic and early Neolithic. According to their explanation of the models of cultural transmission which led to the adoption and spread of innovations in the mid-6th millennium B.C., information circulated between neighbouring groups through processes involving

⁴² Vicent García, 1997.

⁴³ Bernabeu, 1989; Bernabeu & Martí Oliver, 1992.

⁴⁴ Zilhão, 1992, 1993.

⁴⁵ Silva & Soares, 1981, 1982, 1987; Silva, C.T., 1989.

notions such as ‘osmosis’ and ‘percolation’. J. Soares mentions explicitly (1995, 1997) that “there would have been a regular and relatively rapid flow of information between neighbouring groups, without population movements, and this was processed according to the selectivity of the social units involved”⁴⁶.

As for the interior of the Alentejo, Diniz (1994, 1996), Diniz and Calado (1997), Calado (1997), and Calado and Rocha (1996) are some of the researchers who have dealt with the origin and cultural framework of the first known Neolithic settlements. While apparently accepting that the region was inhabited for the first time in a more or less continuous way by people living in settlements such as Valada do Mato⁴⁷, they have tried to explain the appearance of Neolithic innovations as part of a process whereby information from various origins was circulating. Seen thus, the Upper Alentejo would have been a region where different streams of information converged – from the Alentejo coast, the Tagus and Sado estuaries, and particularly from the region of Andalucia. Diniz (1994, 1996) gives particular importance to the ‘land routes’ originating in what is now Spain, which would have brought information from the Andalucian coast.

It is clear that these papers still do not explain the process which, in the absence of any known Mesolithic background, would have caused this region to be the setting for various occupations in the 6th and 5th millennia B.C. It should be emphasised that while these authors allow for an exchange of information coming from different sources, J. Soares and C.T. Silva still understand the neolithisation of the interior of the Alentejo as a process of cultural diffusion from the Atlantic coast.

In the interior of central and northern Portugal (Beira Alta and Trás-os-Montes and Upper Douro) a Mesolithic background is practically unknown. Nevertheless, recent excavations at the site of Prazo (Portuguese Upper Douro) lead us to believe that there was a local background without pottery, which could have preceded the first Neolithic occupations of this site and in the region generally (personal information from Sérgio Rodrigues, the excavator of this important site). Anyway, those who have written on the Neolithic process in northern Portugal⁴⁸ accept that the distinct forms of settlement should be interpreted in the context of a complex combination of inter-group contacts, without the need for large-scale population shift.

As has been mentioned, the early date for the rock shelter of Buraco da Pala IV, in a context with decorated non-cardial pottery, polished stone and cereals, seems to contradict two earlier preconceptions. One is that cardinal pottery was necessarily earlier than other Neolithic types in the interior of Portugal and of the Iberian Peninsula as a whole – in fact, different pottery styles may have co-existed throughout the Peninsula, even at the very start of the Neolithic. The second assumption assigns an essentially late date to the development of an economy based on cereal-growing in the north of the Peninsula, whereas in fact it is possible that the diffusion of certain innovations called Neolithic may have been very rapid in some regions. Furthermore, this diffusion or transmission may not have been homogenous, discontinuities being due to selective acceptance of innovations and other presently unknown constraints.

⁴⁶ Soares, 1995a: 134.

⁴⁷ Diniz & Calado, 1997.

⁴⁸ Jorge, S.O., 1996, 1998; Valera, 1997a; Sanches, 1997a, c.

In general it can be said that the Neolithic process in the centre and north of the country could have resulted from the transmission of ideas and artefacts brought from the Mesetas, from Estremadura and sometimes from southern Portugal⁴⁹.

All the perspectives we have mentioned, based on endogenous, autonomous evolution, have had some difficulty in dealing with two interconnected aspects: how to explain the processes of cultural transmission from the eastern Mediterranean to and then within the Iberian Peninsula, and how to describe in economic and social terms subsistence systems which included, at different times and places, new artefacts, sheep, goats and cereals.

It seems there is a dilemma: if it cannot be denied that some components of the Neolithic system, particularly domesticated animals and cereals, are of eastern origin, how can a diffusionist model be refuted? But, on the other hand, how to relate a diffusionist model to aspects which contradict the acceptance of the 'Neolithic package' in the Peninsula? – absence of the whole of this package (cereals, domesticated animals and pottery do not appear together, at the same time and everywhere), technological and economic continuity between many Mesolithic and Neolithic contexts, absence of permanent settlements associated with a stable 'village way of life'. If we know more or less what was transmitted, we still have some difficulty in understanding the actual mechanisms of transmission from the eastern Mediterranean to the Atlantic coast of the Iberian Peninsula, and the specific forms by which the innovations were disseminated once they had arrived.

This difficulty brings us inevitably to the question of the identification of a 'true productive economy' in the Iberian Peninsula in general and on the Atlantic coast in particular.

As a rule, traditional diffusionist models, both those positing population movements⁵⁰ and those which, while rejecting this, allow for selective transmission of elements of the agro-pastoral system along the Mediterranean⁵¹, agree on one point: the means of diffusion or genetic transmission was from east to west, following an 'axial' or 'arterial' model⁵². On arrival in the Peninsula, the genetic information was spread from the coast to the interior along various 'land axes' which reproduced the 'arterial model' on a regional scale. This perspective, even when it does not accept population movements, presupposes a spread of information which is directional in space and time. This gradual dissemination is ultimately rooted in a belief in the cultural ascendance of the productive system over hunter-gatherer economies⁵³.

Many of the present autonomistic perspectives on the Neolithic process in the Peninsula, while denying that the coast was occupied by outside groups, are in fact quite close to the axial diffusionist view, proposing directional transmission of components of the productive system from the coast to the interior⁵⁴. Furthermore these 'Neolithic innovations', expanding into the interior, allegedly used so-called 'land routes', that is, directional axes for diffusion and assimilation of information. This contamination by the axial diffusionist view has weakened any alternative arguments about exactly how pottery,

⁴⁹ Sanches, 1997a, c; Valera 1997a.

⁵⁰ Ammerman & Cavalli-Sforza, 1984.

⁵¹ Lewthwaite, 1986a, b.

⁵² Vicent García, 1997; Rodríguez Alcalde *et al.*, 1995, 1996.

⁵³ Zvelebil, 1996.

⁵⁴ Soares, 1995a, b, 1997.

sheep, goats and cereals reached various sites in the Peninsula.

Researchers⁵⁵ have recently tried to explain the appearance of components of the productive system in the Mediterranean in alternative terms. They too deny any population movement, and interpret genetic transmission through what has been called a 'capillary model'. According to this, information was processed within the specific social relations of Mesolithic hunter-gatherers. With these groups, reciprocal relationships would be natural conductors of information, channels for the flow of products (means of production or symbolic objects), and in this way networks of interaction beyond local level would be established. Such networks, it is believed, were isotropic in character, that is, the flow spread quickly all over the network at almost the same time, and only certain linguistic, ethnic, symbolic or political constraints, and some physical barriers, could impede this continuous flow of information. Discontinuous flow would thus be due to different social rhythms of acceptance or rejection of the products in circulation. Exogamous practices between Mediterranean Mesolithic groups may be seen as helpful in spreading components of the agro-pastoral system.

From this capillary or percolative model⁵⁶ we can draw some interesting ideas. Firstly, interaction between Mesolithic groups facilitated movement of products whose significance is highly contextual (nothing can be inferred from their simple presence other than that they were there, regardless of their economic and social use). Secondly, movement of products within the framework of isotropic relationships is conditioned by what we may call contingency of reception – the presence or absence of, for example, pottery or domesticated animals in a particular context is a result of the social needs shown by that context. It was the Mesolithic groups themselves who controlled the entry and rate of spread of the elements of the exchange network. Thirdly, it naturally follows that the date of arrival of certain elements, particularly components of the productive system, may vary according to factors inherent in the unpredictable nature of information transmission.

We should emphasise certain basic ideas:

1. According to this model, the components of the productive system were introduced within a local framework that was mainly social rather than exclusively technical or economic.

2. Components of the productive system circulated in Mesolithic contexts between the 6th and 5th millennia, although it is impossible to prove even the early stages of an agro-pastoral economy at this time. Vicent García (1997) acknowledges the non-functional, symbolic character of cardial pottery, giving the impression that a status of rarity and prestige could initially also be given to the domestication of animals and plants.

3. The capillary model invalidates the notions of 'route', 'path' and 'axis' as ways for transmitting information. In a certain region, products could circulate in many and opposite directions, depending on different speeds of social acceptance, dissemination or rejection of the products. This model underlines the contingent character of human evolution.

Finally, let us return briefly to the dates of the standing stones and cromlechs of the Alentejo and the Algarve. If we follow the traditional functionalist line, and if we accept

⁵⁵ Rodríguez Alcalde *et al.*, 1995, 1996; Soares, 1995a, b, 1997; Vicent García, 1997.

⁵⁶ Rodríguez Alcalde *et al.*, 1995, 1996.

that we have here a context of hunter-gatherers using 'non-productive' elements, then such monuments would not be necessary for the symbolic 'marking' of the landscape. This line of thought is only valid if we agree that some populations in the interior of the Alentejo and the Algarve date from the late 6th/early 5th millennia B.C. and fit into a pre-productive way of life, typical of the early Neolithic.

It is generally agreed that the first funerary or ritual monuments appeared in Portugal from the second half of the 5th millennium B.C., and had a very precise role: to mark, identify and socially qualify a territory which was beginning to be more intensively exploited, especially during the 4th millennium B.C. Horticulture and herding were initial indicators of this change in this later phase, around the turn of the 5th and 4th millennia B.C.

Nevertheless, despite all the above, we do not believe that this question is finally resolved. Apart from the need for a definite absolute dating for the structures, we need to reflect, without preconceptions, on the notion of 'monuments' and their social function in late prehistory. In fact if there is no direct evidence for such early dates for the standing stones and cromlechs in southern Portugal, the suspicion that they may have been built by hunter-gatherer-herders in the 5th millennium B.C. presents us with a very interesting problem. It is a problem which touches on a critical point in Iberian prehistory, the possible correlation of the first monuments with the productive system, which is the main theme of the next section.

II. MONUMENTS AND TERRITORIES: FROM THE MID-5TH TO THE MID-4TH MILLENNIUM B.C.

1. Traditionally it has been accepted that the first inhumations under barrows, in small closed stone chambers for individual burials, appeared in the Upper Alentejo even before the middle of the 5th millennium B.C.⁵⁷ If this were to be confirmed, the so-called 'megalithic phenomenon' would be remarkably early in this region, contemporary with the Mesolithic shell middens of the Tagus and the Sado and with various 'Neolithic' sites along the coast and in the interior of the country. Recently, new C14 dates for a standing stone and short-passage graves on the River Sever, near the Tagus in the Upper Alentejo⁵⁸, place the beginning of the megalithic phenomenon in the region extraordinarily far back, between the 7th and 6th millennia B.C. Obviously we would have to discuss the significance of these dates in the particular context of the monuments; also we know that there are monuments in the northern Sub-Meseta, in Spanish Extremadura⁵⁹ and others in the Upper Alentejo⁶⁰ which some researchers have placed very early. Nevertheless it seems to us a basic precaution for the moment not to attach too much importance to such dates for the building of the tombs. If we were to do so, we would have to question the whole development process of burial monuments, not only in the Upper Alentejo but in the whole of the south-west of the Peninsula. Nevertheless, despite reservations about such early

⁵⁷ Jorge, S.O., 1990; Silva, C.T., 1993.

⁵⁸ Oliveira, 1997b.

⁵⁹ Delibes & Rojo, 1997; Delibes *et al.*, 1997; Bueno, 1994b.

⁶⁰ Calado, 1997; Gomes, 1994, 1997d.

dating, some authors believe that the Upper Alentejo was the part of the country where monumental burials first appeared.

By the middle of the 5th millennium we know of cists under mounds, probably containing individual burials, in several places along the Alentejo coast and the Lower Alentejo, and a few in the western Algarve⁶¹. In the Upper Alentejo the first short-passage graves appear, of the Poço da Gateira 1 type⁶², now with collective burials. The population connected with these monuments was still unstable, with little sign of a settled lifestyle. Although there may possibly have been some small burial mounds in the Serra da Aboboreira, north of the Douro, at this period⁶³, such early monuments have not yet been found in the interior of central Portugal⁶⁴. However, this is probably due to lack of research, and in fact it is likely that this phase – the mid-5th millennium B.C. – corresponds, in most regions of the country except the Upper Alentejo, to the systematic construction of the earliest burial monuments. We do not know if there were standing stones or cromlechs anywhere at this time⁶⁵.

As we shall see, there is much discussion at the moment on the multiplicity of social functions performed by these various monuments in the different regions at this initial stage.

It is worth mentioning that the rock art sanctuaries of the Tagus, the Côa and the Douro were probably ‘reused’ throughout the 5th millennium B.C.⁶⁶, although nothing is known about the relationship between them and the builders of early megalithic tombs in nearby regions.

In Estremadura there seem to have been no innovations in burials during the middle of the 5th millennium B.C. Individual burials in caves, either simple inhumations or surface depositions edged by alignments of small stones, continued⁶⁷. There seems to be no discontinuity here between this phase and the settlements and burials of the first half of the 5th millennium B.C.

During the second half, and particularly at the end, of the 5th millennium B.C. (middle-late Neolithic), a huge number of burial or ritual monuments were built throughout practically the whole of what is now Portugal. With the exception of Estremadura, where a relatively conservative phase seems to have continued, from south to north we find necropolises of burial mounds and in some regions standing stones and cromlechs (as for example at Almendres II in the Upper Alentejo)⁶⁸, showing the first large-scale monumentalisation of the landscape. As we shall see, the type of landscape thus created varies from region to region, and we cannot generalise about the social function of monuments in territories – that is, it is difficult to believe, in such diverse contexts, that burial mounds, standing stones and some cromlechs could, even on a macro-analytic scale, have served the same social needs. We shall also try to think about whether the monuments are reliable indicators of the same levels of economic intensification and the same forms of territorialisation.

⁶¹ Jorge, S.O., 1990; Silva, C.T., 1993, 1997; Gonçalves, V.S., 1997.

⁶² Silva, C.T., 1997.

⁶³ Jorge, V.O., 1991.

⁶⁴ Cruz, D.J., 1995; Valera, 1997a; Sanches, 1997c; Jorge, S.O., 1998a.

⁶⁵ Gomes, 1994.

⁶⁶ Baptista, 1981, 1986; Gomes, 1983; Sanches, 1997c.

⁶⁷ Jorge, S.O., 1990; Oosterbeek, 1994a, b, c, 1997; Zilhão & Carvalho, 1996; Cruz, A.R., 1997.

⁶⁸ Gomes, 1994, 1997b.

Moreover, in almost all areas we see in this phase an architectonic enlargement of tombs, which now contain a larger number of inhumations, or collective burials. Once again the Upper Alentejo was the first to have large graves with long or very long passages, such as the emblematic Anta Grande do Zambujeiro; fixed settlements were connected to these great burial mounds, especially in the area of Évora-Reguengos⁶⁹. In other areas there was more variety: simple closed burial chambers, open ones under large barrows (such as Outeiro de Ante 1 in the Serra da Aboboeira in the north)⁷⁰, and chambers with long or short passages. These passages are in some cases clearly differentiated from the chamber, while in other cases both spaces form an architectural continuum⁷¹.

The possibility that passage-graves appeared earlier in the south than in the centre and especially the north of the country raises various questions which will be discussed later. We should point out here the chronological gap involved (maybe no more than 400-500 years) between different regions – those where open burial chambers and passages were already being regularly reused, and others where the tombs were built at the time when the individual or group was buried and probably closed soon afterwards – which indicates a geographically-based difference in ritual.

Finally, at the turn of the 5th and 4th millennia and in the first half of the 4th millennium B.C. (conventionally known as the late Neolithic) an earlier large-scale trend grew in importance: the apparent unification of agro-pastoral landscapes, linked by burial/ritual monuments which varied considerably at local level.

Overall we may list the following aspects:

– In practically the whole of Portugal, passage-graves of varying lengths, with forecourts, were built or reused⁷². Inside, dozens, sometimes hundreds, of skeletons were deposited, according to rituals performed and understood by only a small number of ritual leaders. It is in this general period that various cults in honour of the ancestors were practised, requiring an organised setting inside and outside the ‘tomb-temples’. In some regions, especially in the centre and north⁷³, these tombs were built in existing necropolises, making a scenic unity with older tombs nearby⁷⁴. Furthermore, megalithic art, which goes back to the 5th millennium B.C. and is particularly common in tombs in the centre and north (though also found in the south), was simply the visible expression of the degree of patterned complexity which must have accompanied collective burials in these monuments⁷⁵. The main motifs, according to V. O. Jorge (1998), are not anthropomorphic or zoomorphic, but more abstract, with skin skeuomorphs or sub-quadrangular shapes, framed by zig-zags or wavy lines, which tend to completely cover the surfaces of the painted or engraved slabs which form the interior of the tomb. The patterning, based not only on repeated themes but also on the position of the motifs and their relationship to each other and to the back-stone

⁶⁹ Gonçalves, V.S., 1997.

⁷⁰ Jorge, V.O., 1989, 1991; Jorge, S.O., 1998a.

⁷¹ Jorge, S.O., 1990; Silva, C.T., 1993; Senna-Martinez, 1994; Cruz, D.J., 1995; Oliveira, 1997a; Valera, 1997a; Gonçalves & Sousa, 1997; Sanches, 1997c.

⁷² Jorge, S.O., 1990; Silva, C.T., 1993.

⁷³ Jorge, S.O., 1990; Senna-Martinez, 1994, 1994-1995; Cruz, D.J., 1995; Valera, 1997a; Sanches, 1997c.

⁷⁴ Jorge, S.O., 1998a.

⁷⁵ Jorge, V.O., 1998.

and nearby areas at the end of the burial chamber, suggests an extremely elaborate codification, likely to be understood only by certain members of the society.

– In addition to megalithic passage graves, in the south there were other, less architecturally visible burial places, such as the simple inhumations or ossuaries in caves in Estremadura⁷⁶ or the Alentejo⁷⁷. But in this phase there also appeared collective burials in completely new structures, like the hypogea (rock-cut chambers) and *tholoi* (corbel-vaulted tombs) found in Estremadura⁷⁸. Here, only the *tholoi* are at all monumental, although they were made of small stones and were thus architecturally very different from megalithic monuments. It must be stressed that these sites – caves, hypogea and *tholoi*, – were used for very complex, and very different, collective burial rites. Recent studies in ‘burial caves’ in Estremadura⁷⁹ and the Alentejo⁸⁰, as well as in hypogea in the Algarve (these however dating from the second half of the 4th millennium B.C.)⁸¹ make us realise that there were many different forms of ancestor cults, and that they did not always take place at scenic monumental sites like the great megalithic passage-graves. Even in the regions where such large graves existed, there were other monuments with a different internal layout from the ‘classic’ megalithic tombs, such as funerary and/or ritual pits under barrows, found near conventional megalithic tombs, or non-monumental, flat graves under mounds, mainly in northern Portugal⁸². This architectural and ritual polymorphism seems to be the main characteristic of late Neolithic burial sites. The diversity is so marked that even allowing for various ‘megalithisms’⁸³ contemporary with other funerary arrangements in caves, hypogea or *tholoi*, it is obvious that rituals were extremely varied and difficult to summarise neatly in general terms. It is unfortunate that our terminology tends to homogenize what was, in fact, very diverse.

– It was during the late Neolithic that standing stones and cromlechs were most common and widespread. As we have seen, some researchers believe that in the south these monuments may have been considerably older, but most also accept that they could have been reused or, in the case of the cromlechs, restructured architecturally and functionally in the 4th millennium B.C. or even later⁸⁴. The function of marking territory, they believe, would not have to clash with that of astronomical observation within the set of rituals for building and reinforcing community identity. Furthermore, the architectural complexity of the late Neolithic cromlech of Almendres⁸⁵ is associated with the appearance of stelae as part of the enclosure. In the Évora region (Upper Alentejo) at Almendres and Portela de Mogos, standing stones transformed into stelae appeared at this time, showing on one side eyes, nose (?) and a moon-shaped motif among other features⁸⁶. The researchers describe these as true ‘statue-menhirs’.

⁷⁶ Oosterbeek, 1994a, b, c; Duarte & Arnaud, 1996; Zilhão & Carvalho, 1996; Cruz, A.R., 1997.

⁷⁷ Araújo *et al.*, 1995, 1996.

⁷⁸ Jorge, S.O., 1990; Silva, C.T., 1993.

⁷⁹ Duarte & Arnaud, 1996.

⁸⁰ Araújo *et al.*, 1995, 1996.

⁸¹ Parreira, 1997; Silva, A.M., 1997a, b.

⁸² Jorge, V.O., 1989, 1991; Cruz, D.J., 1995; Sanches, 1997c.

⁸³ Silva, C.T., 1993.

⁸⁴ Gomes, 1994, 1997; Lago *et al.*, 1998.

⁸⁵ Gomes, 1994, 1997b.

⁸⁶ Gomes, 1997b, c: 30-31, 37-39.

Strangely, there is in the north of the country a probable precinct with stelae, Cabeço da Mina, which could date back to mid-4th millennium B.C.⁸⁷. It stands at the top of a low hill in the middle of an alluvial valley, and includes stelae or statue-menhirs of Mediterranean type, showing only some facial features and items of clothing or adornment. It could have been erected in the late Neolithic and used at least up to the 3rd millennium B.C. (Chalcolithic).

Obviously there are many differences, in chronology, morphology, iconography and use, between the precincts at Almendres or Portela de Mogos in the south and that at Cabeço da Mina in the north. But it is still interesting to note that whatever their local or regional contexts, 'enclosures' in both the north and the south now include for the first time statue-menhirs showing highly simplified human forms: a few facial features, adornments and sometimes items of clothing.

– This was also the period of expansion of open air rock art sanctuaries. In addition to those of the Tejo and the Côa/Douro already mentioned, which may have been reused during the 4th millennium B.C., there were others in many places throughout the country.

These sanctuaries consist of paintings or engravings, either on rocks in the open air or in rock shelters. We shall simply mention as examples the painted shelters of Arronches⁸⁸ and the open-air site of Escoural⁸⁹, in the south, and the painted shelters at Penas Róias, Pala Pinta, Cachão da Rapa and Serra de Passos⁹⁰ and the open-air engravings at Gião and Tripe, all in the north⁹¹. They all include examples of what has been called, rather simplistically, Iberian 'schematic art', a concept which may be considered too general to be useful.

This conventional artistic group, which could have originated in the 6th millennium B.C. with the hunter-gatherer-herders of the so-called 'early Neolithic', survived in a variety of contexts at least up to the 2nd millennium B.C. Throughout these four millennia it must have helped in many different ways to establish territorial rights and ways of perceiving the world – that is, it would have been of value in territorial 'marking' and in the construction of group identity. In this sense, as some researchers stress⁹², the study of rock art should be seen in the context of landscape archaeology. Accessibility, location relative to natural resources and conspicuousness in the landscape are some of the aspects to be considered in the study of these so-called sanctuaries. Moreover, as with burial monuments, rock art sanctuaries remained in the landscape beyond the time of their creation and original use, being subject in the same way to multiple reinterpretations connected with continual social negotiation. We believe there is a need for a thorough investigation into Portuguese prehistoric rock art as one element among others in the whole system of symbolic qualification of the landscape.

– Finally, we shall refer briefly to the settlements of this period. Considering the country as a whole, there could scarcely be a wider variety: settlements reflect concisely the diversity in lifestyles, in available resources, and in technologies and strategies adopted.

⁸⁷ Jorge, S.O., 1998a, d.

⁸⁸ Baptista, 1986.

⁸⁹ Gomes *et al.*, 1983.

⁹⁰ Baptista, 1986; Jorge, S.O., 1986; Sanches, 1997c, *et al.*, 1998.

⁹¹ Baptista, 1986; Jorge, S.O., 1990.

⁹² Sanches *et al.*, 1998.

There are whole regions, especially in the centre and north, where hardly any settlements are known, while in others they occupy large areas, such as hillsides, or more restricted spaces, such as hill-tops. There are places with a much more dominant position in the landscape than others. We know of settlements in the Alentejo and Estremadura that are clearly agro-pastoral in character, and others where it is difficult to distinguish a productive system. There are sites displaying a wide range of so-called ‘domestic’ items and others with very few. The style of domestic pottery is decidedly different in the south, the centre and the north. On the scale of the country as a whole, there seems to be no standard pattern at all⁹³.

2. Discussion

Following archaeologists such as Renfrew (1974), Chapman (1981) and Sherratt (1990), there spread the general idea of a strict correlation between the first burial monuments and the consolidation of the agro-pastoral economy. Monuments functioned as territorial markers of cultivated landscapes. Ancestors, represented by the monuments, were the legitimating support in a process of negotiation for rights over arable land.

In the case of Portugal, all burial mounds, standing stones and cromlechs were also seen essentially as ‘monuments’ which, apart from their specific social function, marked new territories connected to the emergence of the agro-pastoral way of life⁹⁴.

In more recent years, Barrett (1991) and Bradley (1993, 1998a, b), have variously questioned this correlation between agro-pastoral economy and monuments, with Bradley recently (1998 a) asking if it is still useful for understanding the social role of these earliest buildings. He prefers a structural division between open and closed graves, which not only reflects different notions of time, but is also linked to different types of economy: according to him agro-pastoralism first appeared along with open graves. This model, although lacking empirical evidence in Portugal, seems to us to be sufficiently coherent to be mentioned here.

For Bradley (1998 a), the first closed burial mounds were similar to earlier tombs in that they were for individuals. After the burial, the grave was closed, and any later rituals had to be held around the monument and not inside it. This, while showing only a tenuous link between the living and the dead, at the same time allowed more people to be present⁹⁵ at what may be called ‘burial rites’⁹⁶. In fact, what was new in these earliest monuments was their visibility – their mass makes a significant impression in a variety of landscapes. However, we should ask ourselves whether, even in the case of Portugal, these landscapes were already being used by farmers and herders. It is generally agreed that these closed burial mounds, like the first standing stones and cromlechs, date from sometime in the 5th millennium B.C. depending on the region, and especially from the second half – that is,

⁹³ Jorge, S. O., 1986, 1990; Silva, C.T., 1993; Gonçalves, V.S., 1994a, b, 1997; Senna-Martinez, 1994, 1994-1995; Valera, 1997a; Sanches, 1997c.

⁹⁴ Jorge, S.O., 1990; Silva, C.T., 1993.

⁹⁵ Jorge, S.O., 1998a.

⁹⁶ Bradley, 1998a.

during what is known as the middle Neolithic. In this period, as we have said, we know of few settlements definitely associated with monuments, and those we know of provide little direct evidence of a secure agro-pastoral economy.

The regional disparities which certainly exist – the south seems more ‘advanced’ than the centre or the north – result rather from the open tombs from the middle of the 5th millennium B.C. found in the south than from any earlier agro-pastoral economy there. In summary, the monuments at this time were markers of landscapes in the process of change. But what economies were developing in this land dotted with small mounds of earth and stone?

From the middle of the 5th millennium B.C. in the south and the turn of the 5th and 4th millennia B.C. in other regions, we find burial mounds with passages and forecourts. These are open tombs, used for collective burials over a period which varied considerably from site to site. What we have here, in the words of Barrett (1991) and Bradley (1998 a), are ‘ancestor rites’ as opposed to the earlier ‘burial rites’. Such collective ceremonies were ideally held between the forecourt and the far end of the burial chamber, following an axis whose visibility was only accessible to a restricted number of officiating religious leaders⁹⁷, and may have involved considerable manipulation of the bodies and associated artefacts. Not only could ritual transformations occur (a mixture of primary and secondary depositions, for example), but, as in various places in Europe, the bones of the ancestors could be circulated among a wide variety of other, not exclusively sepulchral, depositional contexts, which could be called ‘mortuary monuments’. In fact, ancestor rituals transformed remains into relics.

In Portugal the phenomenon of open tombs is most common from the late Neolithic onwards. Despite huge gaps in our knowledge of ritual life, there is no doubt that these tombs are contemporary with fixed settlements, where for the first time we find direct and indirect evidence of an agro-pastoral economy. Moreover in this phase precincts delineated by standing stones and/or stelae were first built or enlarged. Like the open tombs, they were built or reused in landscapes where for the first time we consistently find indications of an agricultural economy.

So it is only at the end of the middle Neolithic or during the late Neolithic, depending on the region, that ritual/burial monuments came to be used to legitimate rights of access to arable land. Thus it is only in this phase that they became ‘territorial markers’ of agro-pastoral communities.

If we accept this distinction between closed and open tombs, between burial rites and ancestor rites, we are deconstructing the connection, accepted in recent decades, between the act of monumentalising the landscape and agro-pastoral economy. According to the new view, there are burial/ritual monuments which were initially conceived outside any productive system based on cereal growing and herding.

Furthermore, if the productive system was related to a ‘cult of the ancestors’, this practice is seen not only in monumental contexts, but also in caves and hypogea, that is, in places that were almost invisible architecturally, possibly inaccessible or even deliberately hidden or disguised.

So rock art sanctuaries, standing stones, precincts of menhirs or of stelae, settlements, tombs (monumental or not) – all, in the mid-late Neolithic, fulfilled different social roles

⁹⁷ Jorge, S.O., 1998a.

in helping to construct an agro-pastoral landscape in what is now Portugal. This landscape included a range of very different social spaces, where these first agricultural communities negotiated a kind of power which was perhaps still fragile and subject to disruption.

In this kaleidoscopic setting, what was the major novelty introduced by burial under barrows?

In the Portuguese context, detailed study of the megalithic necropolis of the Serra da Aboboreira, in the north of the country⁹⁸, has been of fundamental importance for understanding the construction of an organised setting over three millennia. Considerable effort was invested in excavating all the monuments, and the many C14 dates obtained (showing a long time-span as well as the contemporaneity of remarkably diverse architectural and ritual elements), have fully justified the methods of spatial archaeology used here. In fact, in a recent study Alonso Matthías and Bello Diéguez (1997) confirm the internal chronological coherence of the model proposed for the Aboboreira necropolis, showing that this cluster of monuments was broadly contemporary with the Galician megalithic sites.

It was as a result of this global study that the sequence of the construction and spread the necropolis was clarified. We come here to the notion of ‘time’ which shapes this ritual/burial complex. Without going into the chronological, architectural and ritual details of this specific necropolis, we can nevertheless mention some general points about it, which may help us to understand the organisation of other necropoles in Portugal⁹⁹:

- The first tombs – small, polygonal, closed chambers under mounds – were built in the second half of the 5th millennium B.C. At first they were isolated, on flat areas of the upper plateau and on poor soils; the people who built them were probably mobile, and there are no signs of any ongoing agro-pastoral lifestyle. Nevertheless, these burials correspond to a new concept of the landscape as an emergent territory, marked by small mounds which distinguished it symbolically. Around these monuments, burial rites would have been held, probably with a varying number of spectators.

- These ancient tombs lasted throughout the 4th millennium B.C. when other tombs were being built in nearby areas – larger chambers, closed or open; polygonal chambers with a passage (Chã da Parada 1); possibly other smaller tombs nearby, as yet unidentified. That is to say, throughout the 4th millennium B.C. the oldest tombs were integrated in a ritual/burial system which renewed or reformulated their original meaning. They were used in this late phase, along with more recent tombs, to legitimate the social practices of the farmer-herders who enacted the ‘ancestor cult’. It is likely that the reinterpretation of the oldest tombs in the light of new concepts of time and space in the 4th millennium B.C. would involve the building of other ritual structures in the immediately surrounding area, but this could only be proved by excavating the spaces between tombs.

- The tombs of the late 5th and the first half of the 4th millennia B.C. were not placed at random: builders exploited the local topography and the proximity of older burial mounds. Larger tombs, such as those of the Serra da Aboboreira, Outeiro de Ante 1 or Chã da Parada 1, would then be built, and around them other tombs might later appear. That is to say, at a certain point in time ‘centres’ were created, both real and symbolic, which

⁹⁸ Jorge, V.O., 1989, 1991; Cruz, D. J., 1992.

⁹⁹ Jorge, S.O., 1998a; Parreira, 1996.

polarised the space used by the megalithic builders. These centres, which as we have seen could have been linked to the manipulation of relics as part of the ancestor cult, led to the reorganisation of the ritual/burial setting. Groups of more or less equidistant, scattered monuments became hierarchically organised, with tombs eventually arranged peripherally around one great mound. This phenomenon can also be seen in the south, for example in the megalithic area of Crato (Parreira, 1996).

– The maintenance of a ritual setting which is to be renewed over time requires constant vigilance on the part of the groups which use it. At the beginning of the 4th millennium B.C., when the passage-grave of Chã de Parada 1 was built, we already see a well-developed landscape setting, but one where all the monuments, from the oldest to the newest, played a common, structured role at any particular time, and were therefore in this sense culturally contemporary. Generally such structures form a meaningful whole, corresponding to the need to create a stable territory where the identity of the group could be negotiated¹⁰⁰.

– Elsewhere, other monuments – standing stones and cromlechs – which lasted over time would have been similarly ‘maintained’. While they could be included within necropolises, they are also found outside them, and in that case their setting could correspond to completely different intentions.

Seen together, the burial/ritual monuments of the mid-late Neolithic, and in particular the megalithic burial mounds, define the first symbolically constructed landscape to present in visible form the notion of ritual time. There is in the ‘long time’ of the megalithic necropolises a timelessness which is synonymous with a new social order. Their apparent long-term stability was part of a project to control the collective memory, which was vital for strengthening the social structures of the first agro-pastoral communities.

III. STRATEGIES FOR CONSOLIDATING THE AGRO-PASTORAL SYSTEM: 2ND HALF OF THE 4TH MILLENNIUM TO 3RD QUARTER OF THE 2ND MILLENNIUM B.C.

1. It is usual to distinguish the Chalcolithic (from the end of the 4th to the end of the 3rd millennia B.C.) from the early and middle Bronze Age (roughly 2300 to 1300/1200 B.C.)¹⁰¹. We shall try here to outline the general trans-regional characteristics of this long period, so as to note cultural affinities between regions and to raise discussion about the kinds of continuities and discontinuities that we find.

From the end of the 4th to the end of the 3rd millennia B.C. burial places show signs of both stability and change. Firstly, in some parts of the south the existing megalithic tombs continued in use. In other regions, mainly in the north, such reuse may have been partially interrupted at this period¹⁰².

In Estremadura, there was continued use of caves, hypogea, *tholoi* and megalithic monuments. In the Alentejo and the Algarve *tholoi* were built, either standing alone, or in

¹⁰⁰ Jorge, S.O., 1998a.

¹⁰¹ Jorge, S.O., 1990, 1996; V.V.A.A., 1995.

¹⁰² Cruz, D.J., 1995.

originally Neolithic necropoles, or under the same burial mounds and annexed to megalithic tombs, like the *tholos* in the group of tombs at Olival de Pega 2 (OP 2b)¹⁰³. These *tholoi* are monuments of modest proportions compared to megalithic passage-graves; some of them may be found in multifunctional enclosures, like that of Perdigões in the northern Alentejo¹⁰⁴, which will be mentioned again later.

It would have been during this phase that some small, scattered burial mounds were built, mainly in the central interior (Beira Alta) and the north. These are small megalithic cistoid chambers, either relatively isolated or (as at Moinhos de Vento in Beira Alta¹⁰⁵) on the edge of existing megalithic monuments.

It was in the north, in the region of the Portuguese Upper Douro, that two innovations appeared in the first half of the third millennium B.C. Here, where no Neolithic megalithic tombs are known, and where in fact places for the dead are almost invisible in the archaeological record, two types of tombs emerged: beside the Douro, on a terrace above the river in Vale da Cerva, there are cists without mounds, with individual burials and very few grave-goods¹⁰⁶. Also, a few kilometres away there is a monumental enclosure, Castelo Velho de Freixo de Numão¹⁰⁷, inside which a stone structure has been found containing the bones of 8-10 individuals (a child, some adolescents and young adults¹⁰⁸) along with loom weights and pottery¹⁰⁹.

At the end of the 3rd millennium B. C. all of what is now Portugal, with the exception of the Algarve, was affected by the 'bell-beaker phenomenon', seen in the reuse of existing tombs for individual burials. These really seem to be intrusions, as they did not respect the original tomb design; nearly all monumental megalithic tombs, *tholoi*, hypogea and caves were reused in this way. The intrusions are initially associated with bell-beakers of the 'maritime style' and variants, and in a slightly later phase with beakers of Palmela-Ciempozuelos type and with metal goods (weapons and personal adornments)¹¹⁰: generally grave-goods are remarkably uniform from region to region. In later bell-beaker contexts there occur Palmela points, tanged copper daggers, wristguards, bone buttons with v-shaped perforation, and gold jewellery, such as beads, spirals and pendants. There may also have been new tombs built which were associated with the later bell-beaker phenomenon. This is the case in the Serra da Aboboreira in the north, where the megalithic cist under a mound at Chã de Carvalhal 1¹¹¹ was built during this period in an originally Neolithic megalithic necropolis.

Parallel with bell-beaker burials, two new types of tombs appeared at the turn of the 3rd and 2nd millennia B.C. On the one hand there were small cists under mounds, small cairns, or simpler kinds of cists (placed in the ground and not covered by a mound), associated with individual burials or cremations in Beira Alta¹¹²; the grave-goods are sparse

¹⁰³ Gonçalves, V.G., 1995.

¹⁰⁴ Lago *et al.*, 1998.

¹⁰⁵ Cruz, D. J. *et al.*, 1998a.

¹⁰⁶ Cruz, D.J. *et al.*, 1998a.

¹⁰⁷ Jorge, S.O., 1998e.

¹⁰⁸ Antunes & Cunha, 1998.

¹⁰⁹ Jorge, S.O., 1998e.

¹¹⁰ Jorge, S.O., 1990.

¹¹¹ Cruz, D.J., 1992.

¹¹² Cruz, D.J. *et al.*, 1989; Cruz, D.J., 1995; Castro *et al.*, 1997; Cruz, D.J. *et al.*, 1998a.

or non-existent, consisting mainly of pottery vessels. These small, visually insignificant tombs may be grouped together, either on hilltops or plateaux or in depressions, by themselves or near originally Neolithic burials. As we shall see, they could have lasted all through the Bronze Age¹¹³, but little is known so far about them, since excavation of these sites has barely started in Beira Alta. It is very likely that similar graves were built in many places, at least in the centre and north, between the last quarter of the 3rd millennium and the end of the 2nd millennium B.C.

Secondly, at more or less the same time as these local types of tombs, relatively archaic in style, others appeared whose grave-goods in particular suggest inter-regional relationships. These very diverse tombs are found mainly on the coast in the provinces of Minho/Douro Litoral, Estremadura, Lower Alentejo and the Algarve. Echoes of this type of burial structure can sometimes be perceived in the interior, especially in the Upper Alentejo, though there other independent forms developed¹¹⁴. One particular group of tomb is known as the 'Ferradeira-Montelavar' type: these graves, without mounds, usually cists contained undecorated pottery along with the inhumation, as well as metal artefacts rather similar to those in late bell-beaker burials. In the Ferradeira-type contexts (in the Alentejo and the Algarve), apart from copper tanged daggers and Palmela points there are metal objects with Mediterranean connections (for example, in Alcalar, simple lateral notched copper daggers sometimes with an axial rib, and undecorated gold diadems, while in Montelavar-type contexts, in addition to the bell-beaker artefacts already mentioned, there are objects of Atlantic scope: gold coronets, spirals and necklaces, halberds in arsenical copper, etc.

In Estremadura, Montelavar-type contexts appear in cists without mounds and in natural caves, whereas in the north they may be either in simple cists, such as Quinta da Água Branca, or in cists under mounds, such as Chã de Arefe. There is obviously a wide diversity in the quantity and nature of the grave-goods: only a few burials contain a range of different weapons and metal adornments, the majority having a sparse selection of the artefacts usually found in Atlantic tombs.

Among tombs from this period there also appear in the north, in the Serra da Aboboreira, small cairns where grave goods include undecorated vases and silver spirals. Here too we sometimes find small cists, with or without mounds, which sometimes contain only pottery¹¹⁵.

Generally, Montelavar-type cists are found in wide valleys, while the other tombs (cists under mounds, under cairns, or just cists with no mound at all) occur in many different topographical situations, most frequently in hills or mountains.

During the course of the second millennium B.C., except in the Alentejo and the Algarve, burial places become less archaeologically visible.

In fact, in the south cists and pits for individual burials appear in connection with the so-called Iberian 'south-western Bronze Age'¹¹⁶. Sometimes they are in apparently random groups, but they can also be in "funerary enclosures", either circular (Atalaia type) or rectangular (Sines type). In Atalaia-type cemeteries the arrangement suggests a hierarchy: around a central, larger cist other smaller ones are grouped, sometimes with poorer and less diverse

¹¹³ Cruz, D.J. *et al.*, 1998b.

¹¹⁴ V.V.A.A., 1995.

¹¹⁵ Jorge, S.O., 1990; Bettencourt & Sanches, 1998; Bettencourt, in press.

¹¹⁶ Soares & Silva, 1995.

grave-goods. This differentiation is not so clear in the Sines group. These cemeteries also sometimes include 'ritual areas', of unknown purpose, next to the tombs. The majority of the cists or pits of the 'south-western Bronze Age' contain one single offering, a pottery vase. Other objects are less common: riveted daggers, copper Montejícar-type halberds, small stone wristguards and gold or silver spiral rings are some of the funerary objects culturally related to the Mediterranean world of El Argar. As we shall see, stelae found at these cemeteries indicate the leadership role of some of the people buried there.

In contrast to the picture in the south as characterised by the necropoles just described, the rest of the country presents more tenuous information. In the far north of the Alentejo passage graves occasionally survived¹¹⁷. In Beira Alta small and very diverse monuments were built, such as those at Casinha Derribada¹¹⁸. Here, along with cists inside cairns, there is a structure in the form of a pit, containing four pottery vases and covered by a carved slab on which there had been a ritual fire; after the pit was closed a small mound was built. The excavators suggest that this is possibly a 'ritual deposit' and not a tomb.

In the north, again in the Serra da Aboboreira, the necropolis of Tapado da Caldeira¹¹⁹ was built in the middle of the 2nd millennium B.C. It consists of a set of four rectangular depressions in the sandy soil, one probably used for the burial of a child. At one end of each depression was a complete vase, one of which is of 'Cogotas' type, showing contacts between the north-west of the Peninsula and the northern Meseta. These were therefore graves without a mound, probably of individuals, here sited near a settlement.

In many parts of the centre and north, megalithic tombs were definitely reused in the Bronze Age. Furthermore, recent studies in Beira Alta¹²⁰ suggest that there would have been many different kinds of small graves throughout the centre and north, in very complex ritual settings.

Lack of information about these new burial forms in many areas is doubtless due to their decreasing conspicuousness in the course of the Bronze Age, as well as an almost complete absence of investigations aimed at locating them.

It is time to present a general evaluation of the development of burial places in Portugal between the end of the 4th and the middle of the 2nd millennia B.C.

In the first phase, up to the mid-3rd millennium B.C., we can see three main characteristics:

- Tomb architecture is decreasingly conspicuous in the landscape: despite regional differences, both in design and ritual, we have seen *tholoi* and hypogea appear in the south and small cists under mounds and simpler kinds of cists in more northern parts of the country. Caves were also reused. It is clear too that these burials, when in existing tombs, used smaller ones rather than the larger, imposing tombs which characterised the mid/late Neolithic.

- There was thus less effort invested in burials: either small tombs were built, or old ones reused.

- Despite this modest appearance and investment, Chalcolithic burials in all regions reveal great variety and ritual complexity. They made use of existing necropoles but are

¹¹⁷ Oliveira, in press.

¹¹⁸ Cruz, D.J. *et al.*, 1998b.

¹¹⁹ Jorge, S.O., 1981, 1990, 1996.

¹²⁰ Cruz, D.J. *et al.*, 1998b.

also found in new settings, either in multifunctional precincts or standing alone. Burials of individuals or of a few people together were common, but the practice of secondary burials in ossuaries also persisted. We should not reject the theory that some human bones could have been moved to various different places: the ritual structure at Castelo Velho¹²¹ reminds us of this, albeit remote, possibility.

It should also be mentioned that despite obvious exceptions, such as burials inside enclosures like Castelo Velho and Perdigões, there was usually a certain distance between the tombs and the settlements of their potential users.

Between the middle of the 3rd and the beginning of the 2nd millennia B.C. some trans-regional changes appeared:

- Bell-beaker reuse of tombs, especially later in the period, caused a dissolution of the traditional order in some groups. In fact individual burials are linked to a standardised set of grave-goods, indicating changes in the power arrangements of the elites.

- Ferradeira-Montelalvar contexts emphasise this change in power structures in certain basic ways: the building of cists (with or without a mound) in valleys, usually near settlements, and the inclusion in them of metal goods with Mediterranean and especially Atlantic affiliations, showing a relative capacity on the part of some elite groups to control the exchange of rare objects at an inter-regional level.

However, despite these changes, which are seen mainly near the coast (the Minho and Douro Litoral, Estremadura, the Lower Alentejo and the Algarve), there persisted a great diversity and complexity of burials and associated rites throughout what is now Portugal.

In the interior, in particular in the provinces of Trás-os-Montes and Upper Douro and of Beira Alta, there were small tombs, and ritual structures around them, which did not usually contain metal objects. They are found in former necropoles as well as in new settings, in wide valleys, hills or mountains, and they seem to have been connected with individual burials or cremations.

The monument of Outeiro de Gregos 1 in the Serra da Aboboreira¹²² is a typical example of two interconnected aspects: architectural inconspicuousness and ritual/funerary complexity. Next to a cist included in a cairn surrounded by a circle of small regular stones, a well-defined ritual structure was found, which is currently still being re-excavated. The grave-goods included a silver spiral, and under the paving of the ritual structure was found an undecorated tronco-conical vase.

It seems that during this transitional phase between what is conventionally known as the late Chalcolithic and the early Bronze Age, there were many different ritual/funerary options, bearing witness to the legitimisation of power by local chiefs of small-scale communities. They would not all have been able to display prestige goods from outside the region, but they all seem to have used burial places to display in many different ways their control of the land and the work invested in it.

During the 2nd millennium B.C., the cemeteries of the Bronze Age in the south-west, e.g. in the Alentejo and the Algarve, introduced to the south a stage of evolution in burials and rituals which we have dealt with above. We know that they were located in valleys,

¹²¹ Jorge, S.O., 1998e.

¹²² Jorge, V.O., 1989.

near settlements, and that they often reveal an internal organisation which points to explicit forms of social hierarchy¹²³.

Atalaia-type monuments, probably reused for 300 to 400 years, show signs of strong social codification, without archaeological parallel in similar contemporary contexts elsewhere in the country. But despite their formal and symbolic complexity they simply reflect on a more elaborate level the general pattern of early and middle Bronze Age tombs: topographical inconspicuousness; individual burials associated with goods consisting mainly of pottery vases and only rarely metal objects (of Mediterranean type); recurrent association of funerary and ritual structures, suggesting complex settings at the time of burial; some use of metal artefacts obtained by exchange between regional elites; occasional display of ownership of metal weapons, not only in grave-goods but especially in the iconography on stelae accompanying some burials.

The necropoles of the south-western Bronze Age represent the emergence in the south of small-scale regional chiefs attempting, within a fairly competitive system, to maintain control of the land, its resources and the work done in it.

In their own ways, different regions of the country experienced a generally similar ongoing process. The necropolis of Tapado da Caldeira in the north, with its lack of monumentality, fulfils the role of all burial places of the time: together with other areas of 'social debate', to legitimate in a particular way the rise and growing power of those elites who controlled the structure of new territories.

During this long period, from the end of the 4th to the middle of the 2nd millennia B.C., anthropomorphic stelae – small monoliths with representations of facial features, clothing and personal adornments – were set up in various places. There are stelae or statue-menhirs dating from the 3rd millennium B.C. in the interior, both in the Alentejo in the south (Crato, Nossa Senhora da Esperança) and in Trás-os-Montes and Upper Douro in the north (Cabeço da Mina, Cabeço do Couquinho, Quinta de Vila Maior, Moncorvo, Castro de Santa Luzia)¹²⁴. They fit into a stylistic group which covers the east of Trás-os-Montes and Upper Douro, Salamanca/Cáceres and the Upper Alentejo, and show obvious resemblances to the Mediterranean stelae and statue-menhirs of southern France¹²⁵.

The contexts of such pieces were previously unknown, but recently in northern Portugal, at Cabeço da Mina on the right bank of the Douro¹²⁶, a possible enclosure has been found on top of a hill standing out from the flood plain of one of the Douro's tributaries. It was likely that it would contain many stelae, since it seems to be a ceremonial site, set formally in the landscape. It is the first place of its kind and epoch found in the Iberian Peninsula or even in the western Mediterranean; it is remarkable that the stelae here have similar characteristics to those from other regions of the Peninsula and from southern France: small size, engravings of anatomical motifs (eyes, nose, mouth, arms and sometimes legs and possibly genitals) and of other features (belts, insignia, collars, etc.). The style is predominantly very schematic; weaponry is never shown. Although its construction may have started in the 4th millennium, this sanctuary must have continued in use throughout

¹²³ Jorge, S.O., 1990, 1996.

¹²⁴ Jorge, S.O., 1990, 1998c.

¹²⁵ d'Anna, 1998.

¹²⁶ Jorge, S.O., 1998c.

the 3rd millennium B.C., that is during the regional Chalcolithic.

In the south, according to some researchers¹²⁷, late Neolithic cromlechs were generally abandoned. Nevertheless, some standing stones, like no. 58 from the Almendres monument, may have been engraved during the middle Chalcolithic¹²⁸. There is thus the possibility that some standing stones from the mid-late Neolithic may have been changed into stelae or statue-menhirs during the Chalcolithic, indicating reuse of the cromlechs during the period under discussion.

From the late 3rd millennium and in the course of the 2nd millennium B.C. we find stelae in completely different contexts from those of Cabeço da Mina or the Almendres cromlech. Firstly, they depict weapons; also, none have yet been found in ceremonial enclosures dating from the Neolithic or Chalcolithic. These ‘Alentejan’ stelae are found in association with tombs of the “south-western Bronze Age” in the Alentejo and the Algarve. There is also a solitary example of a stele at Longroiva on the left bank of the Douro, not far from the site of Castelo Velho de Freixo de Numão.

The stele at Longroiva must have been designed to stand upright in the ground. We do not know if it was connected with any burial context, or if it was intended to mark the territory symbolically. It is slightly anthropomorphic in outline, and one side is dominated by a central engraved male figure with several weapons of recognisable types such as a Carrapatos-type halberd typical of the local early Bronze Age, a bow, and a dagger with a triangular blade¹²⁹.

The ‘Alentejan’ stelae, however, are not obviously anthropomorphic in outline, their human association being suggested more by the composition. These monolithic slabs, previously considered as the capstones of graves¹³⁰, could also perhaps (at least in certain cases) have stood next to tombs to symbolise the privileged social status of the dead¹³¹. Apart from the iconographic groups recognised by Gomes & Monteiro (1976-1977) and Gomes (1995 a), we should mention the representation of weapons, in relief or occasionally engraved, mainly swords, halberds and axes, associated with rather enigmatic forms such as the so-called ‘anchor-shaped object’.

Despite the lack of explicitly anthropomorphic outlines, in the great majority of the pieces the weapons and the ‘anchor’ shape are hanging or attached to ‘belts’ which cross the unengraved surface in such a way as to subtly suggest an anthropomorphic meaning. It is clear that certain objects were highly valued, being always represented even at the expense of the human form, as if the most important thing was to show the possession of these valuables. This attitude is also shown in the highly standardised compositional structure of ‘Alentejan’ stelae.

It is interesting to see the depiction of metal weapons, some of which are found in burials of both ‘Montelavar’ and ‘south-western Bronze Age’ contexts.

As far as rock art sanctuaries are concerned, the so-called schematic art survived for a considerable time – through the 3rd and 2nd millennia B.C. – throughout Portugal,

¹²⁷ Gomes, 1997b, c.

¹²⁸ Gomes, 1997b.

¹²⁹ Jorge, V.O. & Jorge, S.O., 1993; Jorge, S.O., 1998d.

¹³⁰ Gomes & Monteiro, 1976-1977.

¹³¹ Gomes, 1995a.

particularly in the interior. This survival, however, presupposes continual production or reinterpretation of meanings. Once again, the issue can be summed up in one question: how are we to link these sanctuaries of schematic art with the resources, access routes and frontiers of the new territories which emerged during the Chalcolithic and the first part of the Bronze Age?¹³²

With the sanctuaries of ‘Galaico-Portuguese’ art in the north-west of Portugal, a new thematic system is introduced: on the one hand geometric – concentric circles, spirals, etc., and on the other hand semi-naturalistic or naturalistic – animals, human figures, weapons, ‘idols’, etc. This does not mean that in the north-west there could have been no interpenetration between schematic and geometric-naturalistic representations. Nevertheless, there is a generally accepted thematic and spatial unity to “Galaico-Portuguese art”¹³³, and recent investigations¹³⁴ have helped define more clearly some of its principal characteristics in the north-west of the Peninsula.

Firstly, a short chronology has recently been adopted, limiting the phenomenon to the third and second millennia B.C., that is to the end of the Chalcolithic and the beginning of the Bronze Age.¹³⁵ This hypothesis is mainly based on types of weapons (daggers, short swords and halberds) and on the spatial relationship between the rock sanctuaries and related sites (burial places and settlements) which can be attributed to this chronological and cultural phase.

Secondly, investigation of the distribution and spatial organization of rock carvings¹³⁶ has attempted to prove a close link between them and the routes followed by certain animals, in relation to essentially nomadic human groups.

Peña Santos and Rey García (1998) maintain that there is a direct link between rock carvings and visually privileged locations, symbolically marking territories controlled by dominant elites. The arrangement of this art on the periphery of burial places and settlements, fixing boundaries to new territories, would have been intended to display symbols connected with emerging elites in areas of great social tension. The symbolism of “Galaico-Portuguese” art would thus have had the structuring function of promoting and upholding the rising prestige of new local chiefs. If we accept this interpretation, the sanctuaries of “Galaico-Portuguese” art in the north-west of Portugal could help to map the emergence of new arenas of social assertion and dispute parallel to those seen around burial places from the same period.

One of the most interesting recent developments in the field of prehistory has perhaps been the discovery in the south (Alentejo) of monumental enclosures with ditches, dating from the Chalcolithic (from the end of the fourth to the end of the third millennia B.C.) During the nineties other monumental enclosures of various types were also identified in the centre and north of the country, dating from various periods between the Chalcolithic and the middle Bronze Age¹³⁷. If to these discoveries we add attempts to reinterpret the

¹³² Jorge, S.O., 1990; Sanches, *et al.*, 1998.

¹³³ Baptista, 1983-84.

¹³⁴ Peña Santos & Rey García, 1993, 1998; Bradley, *et al.* 1994a, b.

¹³⁵ Peña Santos & Rey García, 1993, 1998.

¹³⁶ Bradley, *et al.*, 1994a, b.

¹³⁷ Jorge, S.O., 1998a.

traditional ‘fortified settlements’ of the Chalcolithic period in the south of Portugal (Alentejo, Algarve and Estremadura)¹³⁸, we can perhaps say that one crucial area for investigation is the description and evaluation of the overall functions of the several monumental enclosures dating from between the end of the 4th and the beginning of the 3rd millennia B.C. Let us look more closely at these sites.

If we observe the many enclosures dating from the end of the 4th millennium B.C. we see an enormous variety of topographical locations, of architectural plans, of uses and indeed of life-span. Apparently this is a polymorphous universe, difficult to categorise or reduce to one single interpretation of their social function.

In the south (Alentejo) enclosures of different types with ditches have been discovered:

– for example, the Perdigões enclosure¹³⁹. Situated near a fertile valley, this is a large site (around 16 hectares) consisting of various concentric lines of ditches (associated with earthworks and possibly walls), surrounding a smaller, roughly circular, area at the centre of the monument. Although with a position which is not especially prominent in the landscape, it is without doubt one of the most complex architectural devices with ditches in the south-west of the Peninsula, resembling enclosures such as those at La Pijotilla and Valencina de la Concepción¹⁴⁰. Within the complex at Perdigões there is a funerary area which is still being excavated. The ‘settlement’ is next to a cromlech¹⁴¹, probably contemporary with the first phase of occupation, which would seem to date back to the late Neolithic. There is evidence that the enclosure was used during the period of bell-beaker pottery, but it is not known whether it remained in use at the beginning of the 2nd millennium BC.

– In addition to the Perdigões site, there are smaller ditched enclosures such as those at Santa Vitória¹⁴² and Torrão¹⁴³. These are situated in places which are raised above the level of the plain; very little, as yet, is known about their internal structures.

– The enclosure at Monte da Ponte¹⁴⁴, in the megalithic area of Vale de Rodrigo, has a general plan which somewhat resembles that of Perdigões: several concentric lines surrounding a smaller sub-circular area in the centre of the monument. There are indications of a mixed design, with ditches associated with walls and bastions. It is sited on a low hill, within view of several megalithic tombs; at present it is thought to be purely Chalcolithic.

– Although the ‘settlement’ at Porto do Torrão¹⁴⁵ cannot unreservedly be included in this group, its probable area, between 50 and 100 hectares, is similar to the parameters established for La Pijotilla and Valencina de la Concepción. Although having as yet no published data concerning boundary ditches, it seems that we should investigate the possibility that it might be a large ditched enclosure. For the moment, Arnaud attributes

¹³⁸ Jorge, S.O., 1994; Valera, 1997a.

¹³⁹ Lago, *et al.* 1998.

¹⁴⁰ Hurtado, 1995a, b.

¹⁴¹ Gomes, 1994.

¹⁴² Dias, 1996.

¹⁴³ Lago & Albergaria, in press.

¹⁴⁴ Kalb & Hock, 1997.

¹⁴⁵ Arnaud, 1993.

its chronology to the Chalcolithic, particularly in view of the use of bell-beaker artefacts in the central part of the 'settlement'.

In the south of the country, therefore, a new type of site has been identified, but one which can nevertheless be linked with a group of relatively well known sites in the south west of the Peninsula in general¹⁴⁶. Despite a certain amount of internal variation, they were near good agricultural land, and many were quite large. The Perdigões enclosure is an example of a multi-purpose monument, combining within its perimeter domestic, funerary and ritual areas. Further research into this large monumental complex should make an important contribution to our understanding of Chalcolithic societies in the south of Portugal.

Bearing in mind recent reflections on the nature of monumentalised sites¹⁴⁷, we may attempt to group the traditional 'walled settlements' or even 'fortified settlements' according to two broad types of location: – those which made use of existing rock-formations, prominent in the landscape, which were monumentalised by the construction of small walls or other architectural features, and those on sites which were simply difficult of access (ridges, spurs, etc.) but on which walled enclosures were built from the ground up. In the first case the visibility and geographical characteristics of natural locations were used to reinforce the monumental nature of the enclosures: it may even be that these were built on natural places which were in some way sacred to the peoples who monumentalised them, or chosen in order to be seen from a distance. Thus the symbolic value of a natural setting is augmented architectonically.

The enclosures built on top of these rock-formations obey different architectural plans. In the north and in the centre, we may mention Castro de Palheiros¹⁴⁸, Castro de Santiago, Fraga da Pena or Castelejo¹⁴⁹. Although some of these sites have not yet been extensively excavated, they appear to be small in area (less than 1 hectare) situated among rocks and bounded by walls and/or stone platforms. Some fall exclusively within the Chalcolithic (Castro de Palheiros, Castro de Santiago, Castelejo), while one at least was occupied until the middle Bronze Age (Fraga da Pena).

In Estremadura the situation is rather more complex. In fact we may mention no fewer than three sites which are situated on cliffs or crags: Leceia, Columbeira and Olelas. Leceia¹⁵⁰, relatively spaciouly located, is a 'citadel' with two lines of walls, a tower and bastions. Columbeira¹⁵¹ is a smaller citadel surrounded by only one wall. Olelas¹⁵² is a roughly rectangular enclosure with sub-circular towers at its corners; this site may have included human burials. Leceia is exceptional in that it was begun in the late Neolithic and remained occupied until the end of the Chalcolithic: the chronology of the other two falls entirely within the Chalcolithic.

These three enclosures are merely the tip of the iceberg: obviously there will be other similarly located sites which have not yet been identified. Nevertheless, the outlook provided by the above cases points to a vast diversity of architectonic features varying in

¹⁴⁶ Hurtado, 1995a, b; Martin de la Cruz, 1997.

¹⁴⁷ Jorge, S.O., 1994, 1996, 1998a; 1998e; Valera, 1995/1996, 1997a.

¹⁴⁸ Sanches, 1997b.

¹⁴⁹ Valera, 1995/1996, 1997a.

¹⁵⁰ Jorge, S.O., 1994; Cardoso, 1997.

¹⁵¹ Schubart *et al.*, 1969; Jorge, S.O. 1994.

¹⁵² Vicente & Serrão, 1959; Gonçalves, J.L.M., 1979; Jorge, S.O., 1994.

size, uses, etc. Clearly these fit into a wide variety of local and regional contexts, and their common characteristics only become useful for us in a very large-scale analysis.

Sites built on hills or spurs but without making use of existing geographical features are abundant in the Alentejo, Algarve and Estremadura; instances are also found in the centre and north of Portugal. These are roughly circular or elliptical in plan and surrounded by a wall, or in some more complex cases, by two or three lines of walls. They were, and by many researchers still are, classified as ‘fortified settlements’, thereby stressing their defensive function¹⁵³. More recently we have tried to deconstruct this uniformising view, which over-simplifies the functional complexity and meaning of these sites¹⁵⁴.

In the north, enclosures have recently been identified which consist of a higher area surrounded by walls or stone platforms, such as at Castelo Velho de Freixo de Numão¹⁵⁵ and probably at Castanheiro do Vento or São Lourenço¹⁵⁶. For the time being we can only state that the Castelo Velho enclosure, originating in the mid-Chalcolithic, remained in use into the middle Bronze Age: we do not know, however, if it was used in the same way throughout this period. It contains various areas apparently conceived for storing and grinding grain, and for weaving. A ritual structure has also been discovered inside the monument, containing the primary or secondary deposition of 8 to 10 bodies, together with loom-weights and pottery sherds.¹⁵⁷ Whatever the social function of this site may have been over the course of almost a thousand years, its initial architectural plan remained unchanged throughout.

In the remaining regions of the country sites are known which are architecturally more diverse. The most complex type, a ‘citadel’ with at least two lines of walls with towers and bastions, occurs only in Estremadura, at Zambujal and Vila Nova de São Pedro. Most widespread, especially in the south (as generally in the south-west of the Peninsula) is the enclosure bounded by a single wall, with or without towers and bastions, such as the “citadels”, roughly circular or elliptical in plan, at Castelo de São Brás, Monte da Tumba and Santa Justa. In Estremadura there is yet another specific type: enclosures roughly rectangular in plan with circular towers at the corners, such as at Pedra do Ouro¹⁵⁸.

If we except Zambujal and Vila Nova de São Pedro (which vary in size between 1 and 2 hectares), these enclosures are of less than 1 hectare in area. Only in Estremadura do we find enclosures (such as the two sites just mentioned) which continued in use during the Bronze Age – the same phenomenon as in the north of the country (Castelo Velho, Freixo de Numão).

The great majority of these sites would not, actually, have been particularly easy to defend: rather, their stone structures should be seen as marking boundaries or emphasising the monumental nature of the sites. This does not mean that at any particular point in their history they could not have been used to defend people and property within their precincts. But it was not this circumstantial function which determined the construction and maintenance (over the course of centuries) of what were genuine monuments.

¹⁵³ Schubart, 1997.

¹⁵⁴ Jorge, S.O., 1994.

¹⁵⁵ Jorge, S.O., 1993, 1994.

¹⁵⁶ Jorge, S.O., 1994.

¹⁵⁷ Jorge, S.O., no prelo.

¹⁵⁸ Jorge, S.O., 1994.

Overall analysis of walled enclosures in Portugal leads us to the following conclusions: during a period of around 700-800 years there appear sites bounded by walls, which remained in use for varying lengths of time and were linked to different ecosystems and distinct social and economic processes. These have in common an elevated position which makes them highly visible in the landscape, as well as stone structures which mark out areas of varying size and which exhibit varying degrees of durability and, above all, of monumentality.

As we shall go on to discuss, these places rise above landscapes in which the occupation of land, and the ways it was being systematically represented, were undergoing change from at least the end of the 4th millennium B.C. Intensive investment in agriculture, by controlling access to land and to the work-force, was enabling continuous occupation of the same territories for long periods of time, territories which became, geographically and conceptually, more restricted. The new territory of the late 4th/early 3rd millennia B.C. was narrower and probably more circumscribed, and its frontiers, both real and symbolic, showed increased internal spatial dichotomies.

The use made of this emerging territory by groups which did not yet have a strongly hierarchical organisation or which were politically not centralised, would have demanded a clearer demarcation of boundaries and definition of different spaces. This new system of management required a new definition of power in terms of space, which also helped to shape a new perception of the territory. The walled enclosures of the Chalcolithic/early-mid Bronze Age, apart from the network of contextual relationships to which they were linked, reproduced on a local level a new model of 'belonging' – new perceptions, both individual and collective, of the social world¹⁵⁹. Independently of the specific functions which they performed over the course of time, these monumental enclosures, dominant in the landscape, are powerful spatial markers of the first irreversibly agrarian landscapes¹⁶⁰.

In relation to the totality of monumental enclosures analysed, we may highlight the following main tendencies:

- Those with ditches appear so far to be concentrated in the interior of the northern Alentejo; those with walls are dispersed throughout the country.

- Despite the differences mentioned (in both types of site), there are other distinguishing aspects: enclosures with ditches occupy less prominent locations than those with walls, while some of the former cover enormous areas (of several hectares), as opposed to the walled enclosures, which in Portugal are not normally larger than 1 or 2 hectares, with some exceptions. The two types of monument thus differ in geographical distribution, visibility, inter-visibility and overall size.

- Although enclosures with ditches are not found dating from after the end of the 3rd millennium B.C., some with walls extend into the Bronze Age (in Estremadura and in the interior of central and northern Portugal). There is therefore considerable divergence in the durability of these monuments in the landscape.

- There is however one factor which unites these structures: on different scales, some of them share something very new – their 'multifunctionality'. Areas for 'domestic', 'funerary' and 'ritual' use coexist at some of the better-known sites, such as at Castelo Velho de Freixo de Numão in the north and Perdigões in the south.

¹⁵⁹ Jorge, S.O., 1994.

¹⁶⁰ Jorge, S.O., 1998a.

– These ‘multi-functional’ enclosures lead us to reflect upon the usefulness of the traditional distinction between ‘burial’, ‘ritual’ and ‘domestic’ spaces and above all on the nature of the domestic. Even though it is recognised that a site may sometimes be taken over by one temporally and spatially more continuous activity, it is now commonplace to say that all prehistoric sites are multifunctional. In reality, however, we continue to treat them as places ‘specialised’ in putative activities which probably never took place, as such, in prehistory.

– Finally, whatever the specific roles performed by the multifunctional enclosures in each region and over the course of time, they are obviously linked to the emergence of new arenas of social conflict involved in the consolidation of the first agrarian societies. Later we shall have occasion to reflect on the central question of what may have been the social function of these different enclosures in the context of various cultural traditions across the country, and what role they fulfilled in structuring societies which were still organised at a local level.

It is known that the regular circulation of metals and the appearance of so-called ‘hoards’ is a phenomenon characteristic of the early and middle Bronze Age (between the end of the 3rd and the middle of the 2nd millennia B.C.)¹⁶¹. Thus we can identify, dating from the early Bronze Age, hoards or uncontextualised deposits of metallic artefacts, especially in northern Portugal and Estremadura. For example, in the north we have the set consisting of lunulae and two gold discs from Cabeceiras de Basto, as well as various groups of halberds of Carrapatas type made of arsenical copper. Both hoards show Atlantic affinities of style. In Estremadura we may mention for example the arsenical copper tanged daggers with an axial rib from Barro, the undecorated gold diadems from Papagovas and Outeiro de S. Mamede, or the plain solid gold bracelets with thickened ends from Atouguia da Baleia, Outeiro da Assenta and Bonabal. Atlantic links are also evident in these cases.

Although less frequent, metal artefacts are also found in other regions: for example, the short tanged arsenical copper sword from Pinhal de Melos in Beira Alta, or gold spirals, undecorated bracelets and diadems from the Alentejo (near Portalegre, Esmoriz and Évora). It can be noted that objects of personal adornment are predominantly of gold, whereas weapons are of arsenical copper.

In the middle Bronze Age the picture seems different, with the circulation of flat axes, and riveted daggers and swords of an obviously Mediterranean, mainly Argaric, type. Thus during this period Mediterranean and Atlantic influences mingled in the context of supra-regional relations between elite groups. In the north bronze axes of Bujões-Barcelos type predominate, and we also find, for example, bracelets of bronze and gold, from Corvilho and Arnozela respectively. The arsenical copper sword from São Bartolomeu do Mar (in the north), like that from Castelo Bom (Beira Alta) or a third of the same type deposited in the National Museum of Archaeology in Lisbon, show a wider process: this model, of “Argaric type” (whether conceived in the south-west of the Peninsula or merely an imitation of Atlantic products), circulated among various communities in the centre and north of the country during the middle Bronze Age. These swords prove that metal objects or their prototypes could ‘move’ over vast areas of the country. We may also highlight the

¹⁶¹ Jorge, S.O., 1990; V.V.A.A., 1995.

early appearance of bronze alloy in the north-west of Portugal from at least the beginning of the middle Bronze Age.

As we have already observed in relation to grave-goods in this phase, it is during the first stage of the Bronze Age that we find intense supra-regional exchanges. These are proof of new socio-political pacts between territories, and indicate the growth of similar sumptuary practices among elite groups. One question suggested by this social framework is whether these changes represent ruptures in the organisation of power, or whether they were merely cosmetic, a new and superficial phenomenon supporting the traditional power structure. Whatever the answer, the social role of the early and middle Bronze Age hoards continues to be problematic.

Finally, we must briefly mention settlement. By this term we mean all the places permanently occupied by communities for the construction of social strategies intended to consolidate the agro-pastoral system. As we shall see, in the period under analysis the boundaries between so-called 'settlements' and 'other places' are tenuous, as in multifunctional enclosures for example. It is perhaps this (con)fusion of various types of inhabited places which best characterises the Chalcolithic and the early and middle Bronze Age in Portugal.

Unfortunately, there is a great unevenness in the quantity and quality of information available from the different regions. For example we know as yet very little regarding Beira Alta¹⁶². The regions which traditionally furnish most data, the Alentejo, Algarve¹⁶³ and Estremadura¹⁶⁴, have not in recent years been subjected to exhaustive survey, particularly excavation. As for the north, there are only a few attempts at synthesis based on projects not yet completed or indeed only just begun¹⁶⁵.

Let us begin by comparing Chalcolithic settlement in three regions of the country: the North, Estremadura and Alentejo/Algarve.

Firstly, in each area we can observe an enormous variety of sites located in different types of landscape. There are settlements situated in open valleys, in hills or mountains, and adapted to the terrain and to the specific natural conditions of the area. This expansion of settlement into marginal areas in fact began at the end of the 4th millennium B.C. and developed in the course of the 3rd.

Secondly, within each region there were differences in the pace of development: alongside networks of settlement linked to a well-established agro-pastoral economy there survived more archaic 'islands' in the tradition of the late Neolithic of the region.

Thirdly, in those regions which have been most thoroughly investigated it is clear that sedentary populations connected with various types of economic intensification became established. Even in Beira Alta there is suggestion of the emergence of settlements associated with a fully developed agro-pastoral way of life, such as those at Malhada, Ameal, Buraco da Moura de São Romão and Castro de Santiago¹⁶⁶.

¹⁶² Senna-Martinez, 1995; Valera, 1995/6, 1997a.

¹⁶³ Jorge, S.O., 1990, 1998a; Soares & Silva, 1995; Gonçalves, V.S., 1995, 1997; Parreira, 1997f.

¹⁶⁴ Jorge, S.O. 1990, 1998a; Silva, C.T., 1993; Lillios, 1991, 1997; Oosterbeek, 1994a, b, c; Cruz, A.R., 1997.

¹⁶⁵ Jorge, S.O., 1986, 1988, 1994, 1998a; Sanches, 1997c; Sanches & Bettencourt, 1998; Bettencourt, in press.

¹⁶⁶ Valera, 1995/1996, 1997a.

Within these settlements there is direct and indirect evidence for what has been called the 'secondary products revolution'. Weaving is evident in all regions and probably also took on social significance in a ceremonial context, as in the enclosure at Castelo Velho de Freixo de Numão, in the north. Copper metallurgy is now less important, and is very rare in the centre and north. In Estremadura and Alentejo/Algarve it may occur but it is in no way a conditioning factor in the social trajectories of the elite groups of the period. There is some exchange of copper artefacts between adjacent regions, but there is no real or at any rate permanent exchange between regions.

Fourthly, we must point to the strong stylistic identity of the domestic pottery from several regions – Estremadura in the south and Minho, Douro Litoral and the west of Trás-os-Montes) in the north. In this latter region much of the pottery (nearly 80%) is highly decorated¹⁶⁷. Here, near Chaves and Vila Pouca de Aguiar there is also a correlation between intensification of economic activity and an increasingly ornamented style of pottery.

The use of decoration on pottery – particularly on pottery found in settlements – as an element of identity may possibly indicate situations of emphasis local values, and competition between communities. Besides, competition, as opposed to serious, open conflict, is quite obvious in other aspects of the life of these peoples, such as their need to build the monumental enclosures discussed above.

Early and middle Bronze Age settlement shows some interesting breaks in continuity. If we look at the information available, in every region we see two interrelated characteristics: changes of location, that is the appearance of new settlements (on high ground or in valleys, 'fortified' or 'open'), and expansion and structuring of settlements (with the introduction of ordered networks in areas which before had not been permanently occupied).

In other words, these are landscapes in which unoccupied spaces are progressively filled either by continuing use of old settlements (many Chalcolithic sites survived) or by building new ones, like at a net whose connections become gradually tighter in the course of the 2nd millennium B.C.

Thus research shows that in the early stages of the Bronze Age there was a move towards a definite 'colonisation' of territory by agrarian communities which were still segmentary. This shows continuity with a process which had started in many regions in the 4th millennium, increasing considerably in the 3rd millennium B.C.

Contrary to what some authors believe¹⁶⁸, these Bronze Age settlements are not systematically linked to nomadic groups, whose economy would have been based principally on the herding of livestock. Research data prove the contrary: on these sites there is direct and indirect evidence of cereal cultivation and of only secondary use of domestic animals, in the context of settled, sedentary peoples.

In addition to weaving, there is occasional evidence of working in copper. At any rate, copper (as well as bronze in the north from the middle Bronze age on) begins to be significant in certain contexts, even if we cannot determine its social value in the assertion of new elites.

Although this is a type of settlement which is more organised and densely populated, it has not left us such a clear archaeological record as that of the 3rd millennium B.C. We

¹⁶⁷ Jorge, S.O., 1986, 1990.

¹⁶⁸ Ruiz-Gálvez Priego, 1998.

do not know of any spatial markers as obvious as those of the Chalcolithic. Domestic pottery is generally undecorated, and most settlements did not have stone or other structures which mark them out clearly in the landscape. Bronze Age settlements, therefore, seem to have a certain archaeological invisibility, which has suggested to some authors the rise of social segmentation, linked to greater mobility and less competition between communities¹⁶⁹.

Nevertheless, we should consider the following questions: whether a settlement with the characteristics described can go together with a locally-based regime; whether we are looking at a breakdown of structures or merely another stage in their development; and how to assess the cultural values of these transformations.

2. DISCUSSION

We believe that from the end of the 4th millennium B.C. a regime was installed in various regions whereby greater control was exercised over access to arable land and to the labour invested in it. In some areas there is proof that intensification of the economy involved the introduction of agrarian innovations. The use of the ard for ploughing, and the probable secondary use of animals such as sheep and oxen, allowed the development of longer-lasting sedentary settlements.

Control of the land and of permanent labour must have corresponded to an increasingly elaborate system of family relationships and a change in social institutions based on lineage.

Local chiefs in the late 4th and 3rd millennia B.C. ruled over more restricted areas, or ‘closed landscapes’ to use the apt expression of Vicent García (1995). In these territories, communities produced a surplus in return for the protection of the elite groups in power. This is a ‘proto-tributary’ system on a small or medium scale¹⁷⁰ within a locally-based regime, which presupposes complex and heterogeneous arenas of conflict and assertion of power.

These spaces take on apparently contradictory aspects. On the one hand, burial grounds cease to be visible. But that does not mean that they are architecturally less complex or that they lose status in the legitimisation of power. The diversity of areas devoted to burial and ritual indicates a considerable multiplicity of burial rites. The fact that bones seem to have circulated, transformed, perhaps, into ‘relics’, may in various contexts reveal a curious distancing of the living from the dead at the same time as the social status of a few was being raised, paradoxically, above that of the rest.

Along with these less visible arenas, new social markers come into being. Monumental enclosures are the most visible sign of tension between communities in these early local regimes. Walled sites of a wide variety of types, exploiting the visibility of their locations, are the visual emblem of the Chalcolithic. Enclosures with ditches, however, or with stelae, although less conspicuous to the eye, also act as social markers and in many cases fulfil the basic conditions of multi-functionality. Within certain sites there are domestic, ritual and funerary areas in a (con)fusion which matches the polarising nature of these monuments in a territory becoming ever more ‘centred’.

¹⁶⁹ Lillios, 1991, 1997.

¹⁷⁰ Vicent García, 1995.

Other spaces connected with social dispute may at first be invisible. The rock shelter used for storage at Buraco da Pala, in the north, dating from the middle of the 3rd millennium B.C., is doubly significant: as an indicator of economic intensification in a well-established agro-pastoral economy, and as a potential focus for negotiations between communities. In fact it is virtually a multi-purpose site.

Despite the breaks in continuity which we have noted, we believe that, on a wider scale, what we see is an overall process of self-assertion on the part of agrarian communities: if we wish to find regional differences and imbalances we will have to look further down the scale of our analysis. The overall process exhibits undeniable continuity with earlier times: this is seen in the creation of prominent monuments in the landscape, a strong tendency in the formation of agro-pastoral societies from the 5th until at least the end of the 3rd millennia B.C.

Between the end of the 3rd and the middle of the 2nd millennia B.C. we can see a progressive displacement of power. This would have been related to the need to prevent excessive social instability in still very fragmentary groups, for one way of reducing the fragility of groups in competition is to strengthen local elites. At the time this involved the accumulation (on a small scale) of wealth resulting from the exchange of metal artefacts with supra-regional prestige. Such exchanges were intended not only to maintain a balance in relations between groups, but also to display and consolidate the power of new chiefs within their own communities.

Interestingly, the manifestation of such wealth and power can be seen in new settings: in the context of burial and rituals of widely differing types, in certain rock art sanctuaries, and in areas where special offerings were deposited (hoards, etc.). In other words, it is found in places with no archaeological visibility and which are not, according to the traditional model, conspicuous monuments in the landscape.

This accumulation of wealth does not, however, take place in 'proto-mercantile' social spaces, that is, in contexts in which exchanged goods were divorced from their primitive symbolism in the community. It occurs in traditional social structures where its main function was to distinguish local power. Therefore objects (or representations of them on stelae or in rock art sanctuaries) acquired markedly different and particular meanings in each community.

The dislocation of power which we have referred to is thus connected with two particular changes: a greater proximity in space between settlements, necropolises, sanctuaries and fields for cultivation or grazing, and the progressive disappearance of traditional monuments, since the logic of territorialisation no longer tended towards a symbolism of display. The new territories were structured around stronger chiefs who controlled access to the land and to the permanent work-force and who uphold the self-regulation of society by means of a small or medium-scale system of tribute¹⁷¹.

It is known that this system contained in itself contradictions which were only to be resolved when the locally-based system was replaced in part, at the end of the 2nd millennium B.C., by a regime of socio-politically interdependent 'solidarities'¹⁷².

¹⁷¹ Vicent García, 1995.

¹⁷² Jorge, S.O., 1995.

In contrast with earlier periods we now see, even on a broad scale of analysis, differences in the typology and style of artefacts between regions. These differences mark the emergence of large territorial networks with autonomous and specific trajectories. The coastal area in the centre and north, allied to the Atlantic world, the south, within the Mediterranean sphere of influence, and the interior of the centre and north, more closely connected to the Iberian Meseta, suggest the creation of socio-political compromises between groups with different cultural traditions.

Some researchers have argued in favour of an evolution of the 'ritual landscape' of the 5th and 4th millennia B.C into the 'domestic landscapes' of the 3rd and 2nd millennia, an argument with which we disagree. In general, it is based on very simple premises:

– Barrows would have been the structuring element for communities that were still relatively mobile. A collective identity would have been built up around these monuments through the constant maintenance and reuse of tombs devoted to ancestor rituals. Cromlechs and other ritual enclosures could function in the same way, cyclically bringing together populations whose extensive economy normally scattered them across wide territories. This situation would have occurred in the mid-late Neolithic (5th-4th millennium B.C.).

– Later, from the 3rd and 2nd millennia B.C., in the more sedentary farming peoples, the settlement would progressively occupy the social role previously fulfilled by the barrow or cromlech. The new peoples would not make the same investment, either in terms of architectural complexity or of effort expended, in their burial grounds, transferring to the settlement all the socially unifying functions which had previously been attributed to the sepulchral/ritual monuments. The settlement was becoming the real and symbolic centre of these farming and herding peoples. This was to be the world of the Chalcolithic and the Bronze Age.

In this sequence, sketchy as it is, there is the implication that landscapes punctuated by so-called 'ritual' activities (associated with barrows and cromlechs) gave way to landscapes punctuated by 'domestic' activities associated with settlements, around which the peoples of the period organised their lives, socially and symbolically.

There remains a fundamental divergence of thought here, as can easily be seen from the present text. From our point of view the approach just mentioned is an obviously simplistic one, not supported by theory or factual evidence either in the context of the Iberian Peninsula or of the rest of Europe at the time¹⁷³.

In the first place, in referring to prehistoric societies it makes no sense to speak of what would nowadays be commonly described as 'domestic' activities. In more general terms, all human acts and the backgrounds against which they are carried out are impregnated with meanings which are always codified and able to transmit more or less complex symbolic messages. Thus the designation 'domestic' is only of any value if it is used as an expedient to denote that which is not, in the strictest sense, 'ritual'; that is, that which is not performed deliberately (according to established codes and practices) in a clearly ceremonial context.

In this line of thought, the evolution of agro-pastoral societies must always be viewed in the light of the existence of 'ritual contexts', either in the stricter or the more general sense of the term. In the stricter sense these obviously consist of ritual/burial places, rock art sanctuaries, multifunctional enclosures, enclosures with stelae, and other ceremonial

¹⁷³ Bradley, 1998a.

areas which were sometimes outside these places – inside the actual settlements, for example. In the wider sense, they often occupy the entire settlement, as well as all the land used regularly or sporadically by the inhabitants – cultivated fields and pastures, paths, places where raw materials were extracted, trade routes, etc.

It must be mentioned again that in these ‘ritual contexts’ (in the wider sense) specific ceremonial practices may be found: for example, in the middle of an arable field, to celebrate a good farming year; or in a place used for exchange activities with other communities, to honour good social relations between neighbours. In this way, there could be multiple ritual contexts (in the strict sense) which left no archaeological trace and have become invisible to us.

Bearing these problems in mind, we may wonder how we can trace the development of the various ritual contexts between the 4th and the 2nd millennia B.C., so as to detect signs of variability in ritual practices.

The societies of the 5th and 4th millennia were certainly structured around tombs and ritual enclosures. As we have tried to show, these very primitive agrarian societies created what we have called a ‘long-term ritual setting’. The ‘long time’ of these monumental ritual spaces was intended to control the collective memory and thus help prevent the groups from breaking up. But, precisely because these groups were still mobile, scattered throughout vast territories, it is likely that they would have created other ritual settings, more modest, specific and archaeologically invisible, in the many places they occupied, so as to maintain social cohesion among very fluid groupings. Burial mounds and ritual enclosures are simply the centre of a wider, invisible system made up of many points which give out complex symbolic messages, hard to detect and decode.

From the 3rd millennium B.C. onwards, archaeology shows us a variety of ritual scenarios. Not all are monumental, but whatever their prominence in the landscape, they demonstrate the explicit value given to ceremonially ambivalent places where strategies for the strengthening of elites were negotiated. Apart from specific areas for specific ceremonies, multifunctional enclosures appeared, where ritual contexts in the stricter and the wider sense coexisted in extremely complex ways. This proximity of different types of contexts makes it difficult to interpret the nature of each, and in practice subverts the traditional dichotomy between ‘domestic’ and ‘burial-ritual’ areas. Furthermore, these ritual settings may not have been static in space and time, since it is possible that the places where certain ‘rites’ were held were later changed into areas of non-ceremonial utility. The long time-scale normal in prehistoric studies make it difficult to understand symbolic changes in one place over a short period of time.

The 2nd millennium B.C. is said to be lacking in ‘visibility’, especially in terms of the traditional areas for the display of power, namely burial/ritual sites. But this is not strictly true, and we do not consider this period generally ‘invisible’ in terms of ceremonial settings. It is true that one earlier thread broke: traditional ‘monuments’ – tombs under mounds and monumental enclosures – tended to disappear. Some persisted, although changed, in parts of the interior, but it is true that in most regions they tended to become rarer.

However, as we have said, other ritual spaces arose. The tombs of the 2nd millennium occupied new positions, enclosed a different kind of burial and were associated with new artefacts. The complex necropolises of the south-west tell us of new rites, where power is also symbolised in the iconography of the armed Alentejan stelae. The sanctuaries of “Galician-Portuguese rock art” suggest the physical and symbolic borders of new territories.

So-called hoards would have been placed in ritual scenarios now difficult to identify. Settlements – still to be identified and studied in many regions – may hold the key to this enigmatic ‘invisible symbolism’ which paradoxically characterises the period of greatest interactive capacity, before the major changes at the end of the millennium.

Thus, at the period of greatest strength of these small-scale, ‘tributary’ agrarian societies there were clear indications of active ritual scenarios, although not monumental according to traditional criteria.

We must however point out here that prehistoric archaeology has not always known how to deal with ‘archaeological invisibility’. In the line of processual thought, it has tried to make improper inferences from this invisibility, assuming for example less ‘social complexity’. In fact, according to this view, no ‘complex society’ could avoid monumentalisation and/or specialisation of domestic/funerary contexts, nor enrichment and diversity of grave-goods and the presence of exceptional artefacts, which together would have involved ritual display settings¹⁷⁴. It is up to archaeology to prove the inconsistency of such a preconception and so to reject the more orthodox parameters of the processual concept of social complexity. Investigation of early and middle Bronze Age communities can certainly contribute to demolish the foundations of a simplistic correlation between archaeological visibility and social complexity.

Earlier on we asked whether variations in ritual settings are perceptible between the 4th and the 2nd millennia B.C. It is certain that ritual scenarios played an integral part in all phases of the growth of agrarian societies. Strangely, archaeology can more easily find out about them in the middle of this process, in the 3rd millennium B.C., than before or afterwards. But this is more related to the physical characteristics of these settings than to the nature, the variety and even the social role of the spaces in the construction of the identity of the communities which conceived them.

FINAL COMMENTS

Between the 6th and the 2nd millennia B.C. land was ‘domesticated’ in a long process which is linked to the emergence of hierarchical communities. Controlling access to products of the land, and directing the constant work invested therein, means having power not only over the physical limits of a territory, but also over their representation. It means controlling the identity codes which constrain the mobility of groups, making them place themselves within a land they have made ‘their own’. Domesticating the land is thus a complex process of territorialisation, in the many senses of the word.

These four millennia present us with a cultural continuum which it is difficult to subdivide into periods. We know that communities of the 2nd millennium B.C. were clearly able to create a stable territory, passed on to future generations; they were responsible for an irreversible domestication of the land. We know too that this ability was already sporadically in evidence from the 4th/3rd millennium B.C. in some parts of Portugal. Before this period, however, the past is opaque, almost unclassifiable. Any attempt to find ‘breaks’ or ‘discontinuities’ has inevitably to resort to the selection of arbitrary signs: proofs of a

¹⁷⁴ Jorge, S.O., 1998b.

productive economy, the existence of monuments or monumentalised ritual settings, the accumulation of wealth based on prestige objects from outside the region, etc. Finding ‘breaks’ forces us into the dangerous mental exercise of domesticating the fluidity of time, of dividing it into stages. How are we to do this without introducing arbitrary periods, that is, without losing the explanatory power of the historical process?

There is at least one idea remaining after our meteoric journey through four millennia: ‘monuments’ (graves under mounds, enclosures, etc.) arose in a very early stage in the development of agricultural and herding societies – some of them may even come before the introduction of a productive economy. Later they were to be the most significant features of the first agricultural territories of the 4th and 3rd millennia B.C., but in general they predate the firm establishment of an agro-pastoral way of life, as though their construction determined the success of the entire cultural process which followed. If this was so, however, then what exact purpose did these monuments serve? How did they function, in the multiple social contexts which created and used them, so as to ‘programme’ agrarian societies not to return to non-productive conditions? How was an irreversible situation reached, one where the communities which domesticated the land seem to have become hostages of the very process which they themselves set in motion?

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