

Time and Stone

**The Emergence and Development of Megaliths
and Megalithic Societies in Europe**

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Chapter 1

Megaliths and megalithic societies in Europe

Summary: There are two competitive hypotheses for the origin of megaliths in Europe. The conventional views in the early 19th century were single-source theories with the emergence and spreading of megaliths in Europe outgoing from i.e. the orient. An alternative hypothesis arose under the impact of the early radiocarbon dating in the seventies of the last century and is until today dominating the megalith research. This hypothesis claims different nucleus areas for an independent and time delayed emergence of megaliths in Europe. The first chapter of this volume introduces the subject, surveys the central research questions and provides a history of ideas on the emergence of megaliths in Europe.

Introduction and central research questions

Megaliths (deduced from the Old Greek μέγας (mégas) big and λίθος (líthos) stone), which include megalithic tombs, standing stones, stone circles, alignments, and megalithic buildings or temples, are a worldwide, time-transcending phenomenon and appear in Europe, North and West Africa, Madagascar, the Near East, in North and South America and in Asia.

In Europe, where the main focus of this analysis is centered, the most of the approximately 35000¹ still existing megaliths were constructed during the Neolithic and the Copper Ages and are located in coastal areas. These megaliths represent just a small portion of the original existing monuments. They were built, on the one hand, along the so-called Atlantic façade in Norway, Sweden, Denmark, North Germany, the Netherlands, Belgium, Scotland, England, Ireland, Northwest France, Northern Spain and Portugal and, on the other hand, in the Mediterranean region in Southern and Southeast Spain, Southern France, on the Islands of Corsica, Sardinia, Malta and the Balears, in Northern Italy, Apulia, Sicily and also in Switzerland (cf. Figure 1.1.)

Strikingly, in Europe and even worldwide, the appearance and the architectonic concepts of megaliths are similar or even identical. Throughout the mentioned geographical areas, megalithic graves were built as dolmens and as passage or gallery graves. Moreover, anthropogenic erected stones stand either isolated in the landscapes or were arranged as circles or in rows. Furthermore, there is evidence all over Europe for an orientation of the graves towards the east or southeast in the direction of the rising sun.

After megaliths became popular in science, art, and literature in the Zeitgeist of Romanticism at the end of the 18th and the beginning of the 19th centuries,

and the first excavations were undertaken in that period, for example at the Maltese megalithic temples, the described similarities were recorded by travelers at that time. These reports represent the kickoff of a research debate continuing until today on the origin and emergence of the megaliths (cf. chap 1, p. 2).

The question arises if there is a single, original source from where a megalithic movement spread throughout Europe or whether these structures developed independently and/or even convergent in the singular regions with similar forwarding factors? Were megaliths part of an ideology which spread all over Europe? If so, how was such a transfer of knowledge implemented?

In an investigation on a wide, supra-regional European phenomenon like megaliths, an immense potential is created to observe cultural-historical processes and to carry out cognitive or social interrogations for and within the various prehistoric societies. With this in mind, it is possible to determine indications of interaction, of transfer and migration movements, and moreover the development of technical skills and the inner and outer organization of these societies. The construction of many of these monuments required an immense labor effort and building materials were often transported over long distances. Thus, the building and planning of these megaliths represent well-organized, communal endeavors.

In order to contribute to the ongoing debate, it is evident that the timeframe of the construction of the different megalithic forms must be determined and compared. Therefore, the approximately 2410 available radiocarbon results from European megalithic, pre-megalithic and contemporaneous non-megalithic contexts were compiled for this project, evaluated according to their context and quality, and finally compared. With an interpretative Bayesian statistical framework, it was possible to untangle the nuances of the differences for the calendar years as well as the origin and the spreading of the megaliths in the different regions to a greater extent and to define

¹ This number is a rough estimate reconstructed after Soulier 1998; Burl 2000; Kalb 2002; Trump 2002; Tarrús i Galter 2002; Sjögren 2003; Midgley 2008; Sanjuan 2009; Cicilloni 2010; Fritsch *et al.* 2010a; Leandri *et al.* 2014.

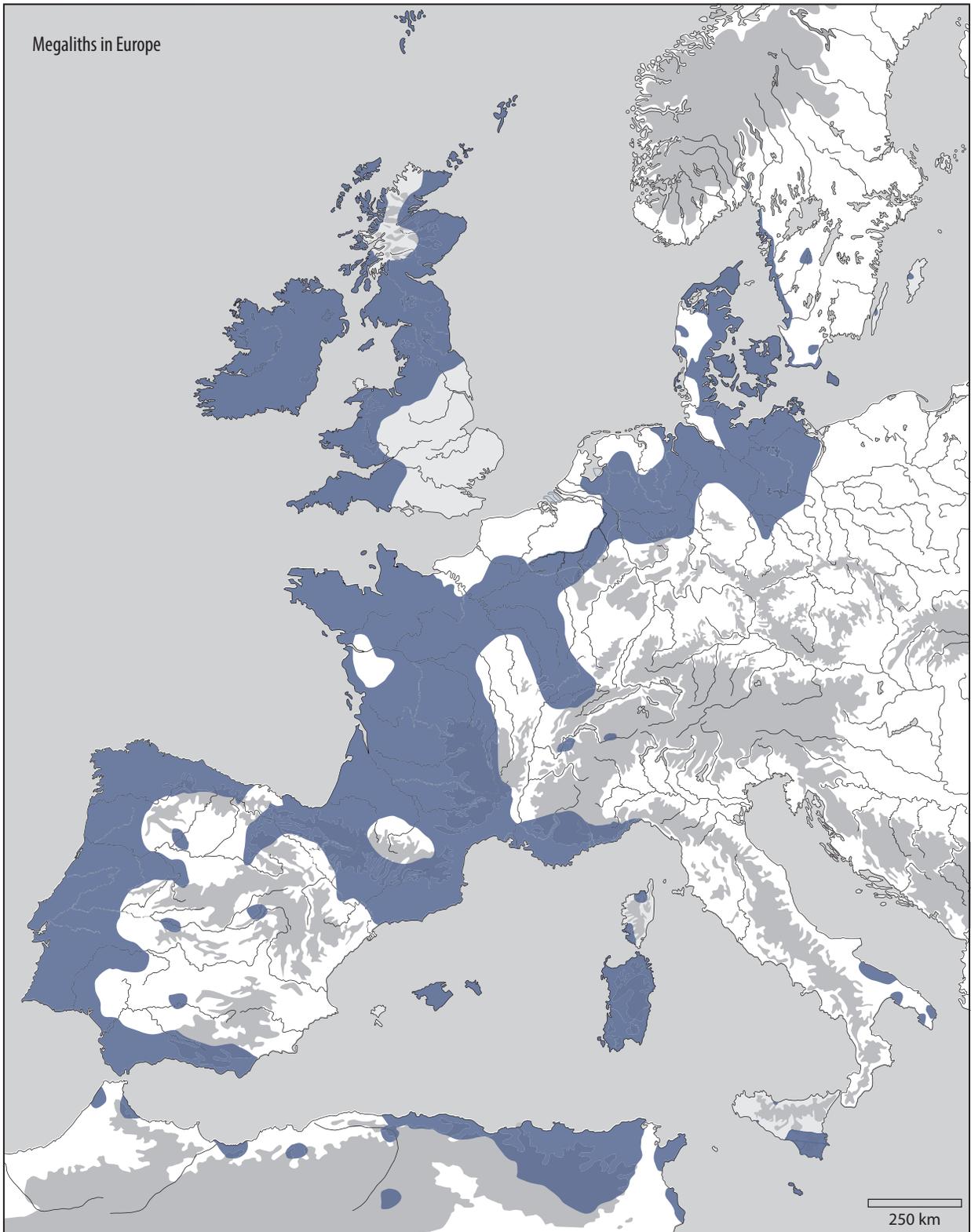


Figure 1.1 The megalithic regions in Europe and North Africa (after Camp 1961; Whitehouse 1981; Soulier 1998; Burl 2000; Kalb 2001; Malone 2001; Trump 2002; Sjögren 2003; Piccolo 2007; Scarre 2007; García Sanjuán 2009; Cicilloni 2010; Fritsch et al. 2010a; Leandri et al. 2014)

possible emergence and spreading scenarios for the archeological remains, for

'It's a capital mistake to theorize before one has data'
(Arthur Conan Doyle, *A scandal in Bohemia* 1891, 4).

Theories on the emergence and spreading of megaliths

Research on megaliths during recent decades was dominated by regional studies. Manifold publications are available for the different regions. Just a few

approaches considered megaliths as a wide, supra-regional phenomenon and focused on the origin and the spreading of megaliths throughout Europe. In the following, main research theories regarding this perspective will be summarized.

Research on megaliths from the late 19th century to the 1960s was mainly embossed by one-source and diffusion theories based on the typology and the morphology of the different graves.

One of the most influential approaches of this time was Oscar Montelius's consideration of megaliths worldwide (Montelius 1905) (Figure 1.2). He formulated the theory of the spreading of an idea and a super-diffusionistic view regarding the global megalithic movement.

Dösarna I Indien, Syrien, Sudan, Algeriet och Europa kunna icke tillskrivas ett och samma folk, ej ens och samma folkgrupp (Montelius 1905: 41).

The expansion of the megalithic idea was, according to Montelius, an ongoing process extending from the Orient over the southern European Mediterranean coast to Western Europe and from there over the coasts of the North Sea to the regions of the Baltic (Montelius 1889: 28; 1905). This theory corresponded to the *ex oriente lux* Zeitgeist of the 19th and the beginning of the 20th century.

Similar rudiments regarding megaliths in Brittany, Ireland, England and Scandinavia and their origin from the Orient were already asserted by M. Jehan de St. Clavier in 1863 in a short communication for the Société polymathique du Morbihan (St. Clavier 1863).

Gustav Kossina suggested Southern Scandinavia as the origin of the megalithic world which spread with the ancient Indo-European migration movement (Kossina 1910). Ernst Sprockhoff postulated a migration route from Ireland to Southern Scandinavia. His arguments for their origin in the Nordic countries were limited and restricted to observations solely on a similar form of the chambers (Sprockhoff 1938).

Most researchers preferred Montelius's theory of the spreading of an idea rather than whole migration movements. Gordon Childe considered the entire trans-European megalithic occurrence and he incorporated early the idea of a diffusion of 'oriental culture' by a partial maritime exchange (Childe 1925, 213). According to Childe, megaliths were assumed to have spread by the diffusion of a megalithic religion/idea by way of migrants who settled down long enough among local societies. Due to a certain prestige status, they were supposedly able to convert local inhabitants and

perhaps form a spiritual aristocracy (Childe 1940: 52) (cf. Figure 1.3).

Megalith-builders must be conceived as families coming by the sea from different quarters and settling down among native populations, to whom they brought their own peculiar version of the faith (Childe 1940: 52–53).

As a proliferation path he proposed a route from the Mediterranean to the Atlantic North West across the Pyrenean isthmus and a further dissemination of the megalithic tradition from there to Britain and then later over the sea route around Spain and Portugal (cf. Figure 1.3).

Later Childe extended this theory about the spreading of a megalithic religion along the coastlines over the sea route (Childe 1950; 1957; 1958: 124–134) by way of missionaries or prospectors with developed seafaring as a base. Similar theories were proposed by Brønstedt (1957: 193) and Nordman (1935: 75).

According to Glyn Daniel, the spreading of the megalithic tradition coincides with the prospection for copper (Daniel 1960); the impetuses behind the dispersal were colonialism, trade, and prospection by people with a strong religious faith and complex burial rites (Daniel 1963: 128).

At the beginning of the 1970s with the invention of radiocarbon dates in megalith research together with a processualist approach, single-source theories were questioned and discussions concerning the possibility of independent, converging regional developments and different nucleus areas in Europe resulted.

Colin Renfrew defined four or possibly five regions with an independent development of megaliths based on radiocarbon dates and on typological considerations including Portugal, Andalusia, Brittany, South West England, Denmark and possibly Ireland, Brittany being the earliest region with tombs already built before 4000 BC (Renfrew 1973: 120–129).

But we are no longer obliged to see the tombs as a result of a single movement, whether it originated in Iberia or in Brittany. Instead our task is to create some social model, some simple picture of how it all came about (Renfrew 1973: 124).

According to Colin Renfrew's more neo-evolutionistic approach, Neolithic societies were egalitarian and segmentally structured during the Early Neolithic and then changed in the younger horizons of the Neolithic to a stratified society with the henge monuments as central places. Thus, megaliths appeared as territorial markers for the Early Neolithic segmentary



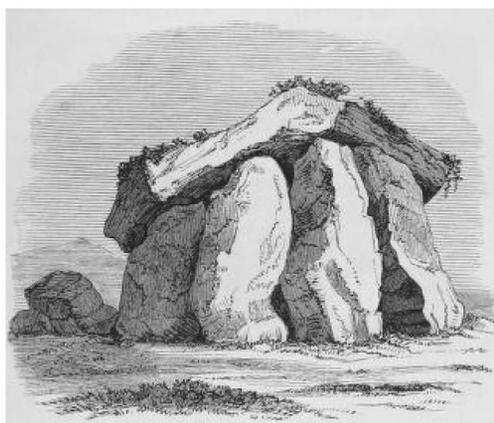
1. India, Katapur



2. Kaukasus, Krim



3. Sudan, Ladó



4. Portugal, Ayorolos



5. Palestine, Hebron

Figure 1.2 Dolmens world-wide. Drawings from Montelius 1905 *Orienten och Europa*. 1. India, p. 11, Figure 4; 2. Krim, p. 14, Figure 8; 3. Sudan, p. 16, Figure 9; 4. Portugal, p. 23, Figure 13; 5. Palestine, p. 13, Figure 6

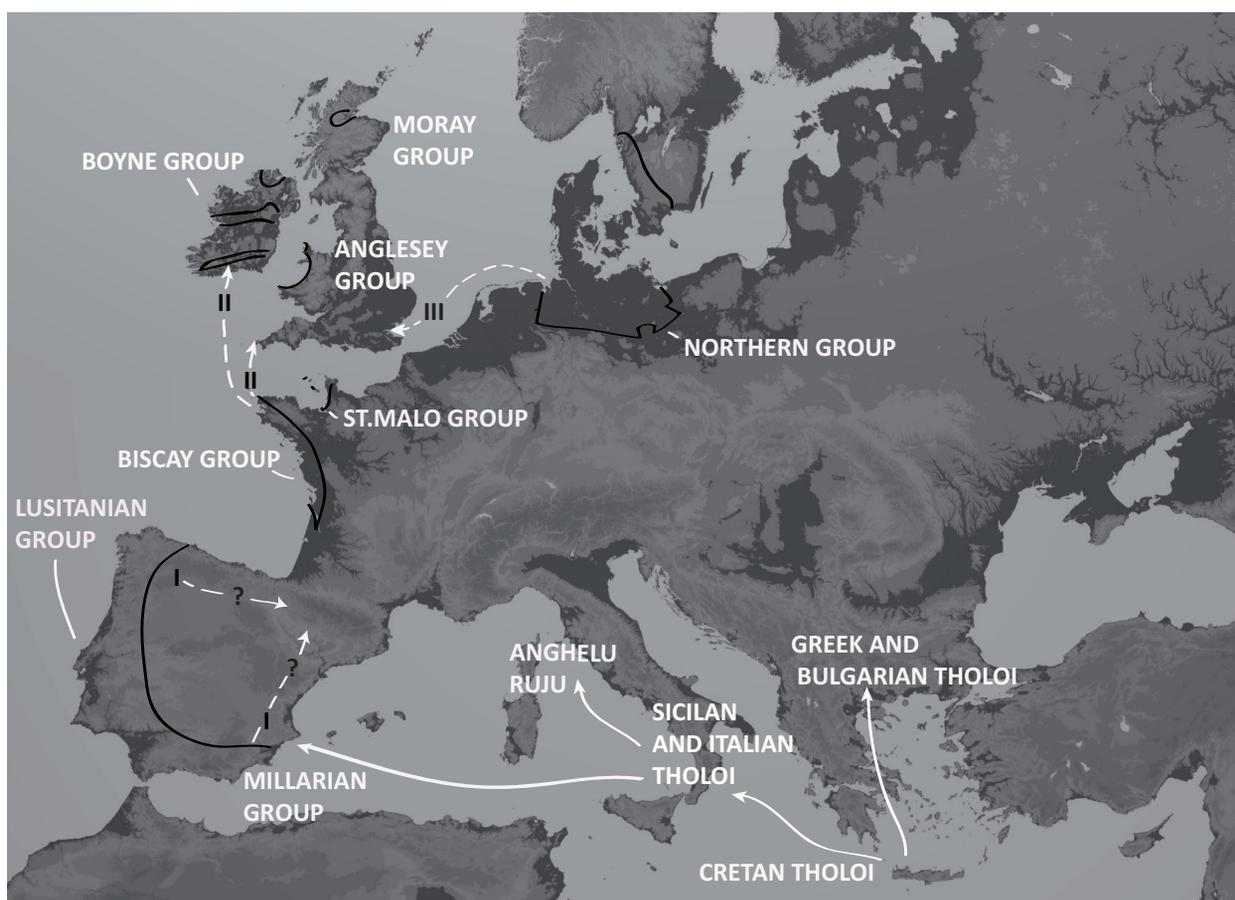


Figure 1.3 The modified diffusionism of Gordon Childe in Europe and his successors. Passage graves are seen as derivations of Cretan passage graves (after Renfrew 1973: 46)

societies. The dynamic behind this territorial behavior originated in a phase of population pressure through Central Europe in connection with agriculture. The Atlantic coast represented a natural border for the colonialization of new regions and competition for arable land necessitated territorial behavior and the marking of the landscape by pronounced monuments (Renfrew 1976). He later revised this model and the presumed coherence between territorial marking and segmentary societies due to fieldwork in Maes Howe and Quanterness on the Orkney Islands (Renfrew 1979; 1981).

Like Renfrew, Chapman proceeded from an independent development model for formal disposal areas and megaliths in the different regions. According to his interpretations, interments in cemeteries and monuments emerged in periods of imbalance between society and critical resources (Chapman 1981).

Andrew Sherratt compared the genesis of megaliths and monuments within three areas including Western France, Britain and Northern Europe and similarly developed a model of an independent origin from different starting points on the loess periphery (Sherratt 1990).

In his book *Le dolmen pour le morts*, Roger Jousaume provided an outline on megalithic regions in Europe and the world on a larger scale than Oscar Montelius in 1905. Jousaume compared architecture, archaeological material, and burial rites (Jousaume 1985) and registered megaliths which were constructed in Colombia, Japan, China, Korea, the Maghreb, Ethiopia, Syria, Libya, Israel, Jordan, the Caucasus, India, and on the Arabian Peninsula and Madagascar. Even if Jousaume accepted that the development of megaliths worldwide can only be considered as a convergent development, he again took a diffusionist standpoint and viewed the megaliths of the Atlantic façade as the origin of the megaliths in the Mediterranean regions. Furthermore, he considered megalithic developments in North Africa to be the result of a dispersal of megalithic phenomena from Europe (Jousaume 1985: 370–372; 2003).

The emphasis of Johannes Müller's approach was to define the chronology of the different megalithic grave forms for Europe (1987; 1998; 1999) based on 603 radiocarbon dates and sum calibrations. He determined two or three centers of origin for European megaliths: North West France, the Western Iberian Peninsula and possibly Ireland with passage graves

and dolmens in these specific regions from 5000 cal BC onwards. The megalithic grave tradition spreads from there to the backlands of West and Central France, to Southern Ireland and possibly to Wales and the South of England (Müller 1998: 78). Radiocarbon dates from the Netherlands, Northwest Germany, Denmark, and

Scandinavia suggest the beginning of megalithic architecture in these regions shortly before 3400 cal BC. The emergence of megaliths in the Mediterranean was, according to Müller's calculations, even later than their occurrence in the Northern regions, with Catalonia as a possible exception (Figure 1.4).



Figure 1.4 Estimates for the start of construction of accessible megaliths from Müller (1998), based on the then available 606 radiocarbon results out of megalithic and long barrow contexts. The time intervals are showing the approximate modified values from sum calibrations (1-sigma ranges) for the earliest accessible megalithic architecture in the regions as dolmens and passage graves. The early results originate mostly from including too many terminus post quem values into the calculations.

However, the trend in megalithic research in the last two decades or even longer focused on studies of regional scale and recognized the enormous diversity of monuments, burial rites, and megalithic societies (Midgley 2008: 178) (see various papers in volumes such as Beinhauer *et al.* 1999; Burenhult 2003; Furholt *et al.* 2011; 2012; Schulz Paulsson/Gaydarska 2014).

Investigated megalithic regions

The choice of megalithic regions to be described in more detail anticipates the synthesis of this analysis. The preference for the chosen areas followed an evaluation of the available 2410 radiocarbon determinations.

The selected megalithic regions have an ongoing megalithic sequence, where megaliths either first emerged in Europe or where a transfer of the megalithic thought occurred in the 5th millennium BC. Moreover, some neighboring regions are considered in order to determine and to demonstrate the demarcation of megalithic development in the specific areas. The selected regions include the Paris Basin, Brittany, the Channel Islands, Central West France, Catalonia, Southern France, Corsica, Sardinia, Malta, Andalusia, Portugal and Galicia.

The entire geographical area of Northwest France (the Paris Basin, the Channel Islands, Brittany, and Central West France) is considered in chapter 3 and portrays the largest analyzed area in this project. The main goal hereby was to compare and to demonstrate the quite

similar emergence of monumental proliferation in this region. Although the Channel Islands belong to Great Britain today, they are also discussed in this chapter due to their geographical closeness to the French coast and Brittany and a similar megalithic sequence.

The other megalithic regions in Northern Europe and the Mediterranean with a later emergence or a transfer of megaliths in the 4th or even the 3rd millennium cal BC are shortly summarized in chapter 11. In parts of these regions, extensive research projects are being carried out or are recently finished. Results from these finished projects are available based on the application of Bayesian statistical frameworks such as those for the dating of enclosures and megaliths in England and Ireland (Whittle *et al.* 2011). In others of these 'later' megalithic regions, such as Northern Germany or Southern Scandinavia research projects with dating programs and the application of Bayesian statistical frameworks are still ongoing, and the end results are not available yet (cf. chap 11, p. 304-306, 306-308). Preliminary reports are currently available for the ongoing Priority Programme of the German Research Foundation 'Frühe Monumentalität und soziale Differenzierung' at the University of Kiel (e.g. Dibbern/Hage 2010/2011; Fritsch *et al.* 2010; Furholt *et al.* 2014; Hinz/Müller 2012; Mischka 2011, cf. chap 11, p. 304-306) or for the ESS-, and Döserrygg projects of the Statens historiska museum in Sweden (e.g. Andersson/Nilsson 2009; Andersson *et al.* 2015; Lagergren *et al.* 2013, cf. chap 11 306-308).