

involved economic factors, this may only have been part of the story, as B. deduces.

It remains only to comment favourably on the impressive quantity of figures, tables, and other illustrations provided to support the calculations and general argument, and on the detail and carefulness of the discussion, which must be taken into consideration in all future studies of this kind of topic. But the lack of an index must be regretted; this is probably normal and to be expected in a PhD Dissertation, but is not helpful in a book, in which one does not wish to have to search widely for possible comments on a particular site or topic of debate.

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**Daniel R. Turner, *Grave Reminders. Comparing Mycenaean tomb building with labour and memory*. pp. 309, 87 figures (30 colour), 12 tables, 3 appendices. Leiden: Sidestone Press, 2020. ISBN 97890-8890-9849 (hardcover); 97890-8890-9832 (softcover); 97890-8890-9856 (e-pdf). £135 hardcover, £45 softcover.**

This study began as a PhD dissertation, conducted at Leiden in 2016-20 as part of the SETinSTONE project headed by Prof dr Ann Brysbaert, to which Y. Boswinkel's *Labouring With Large Stones* (reviewed in this volume) also belongs. Dr. Turner came to his subject with a considerable background in field archaeology, mainly in the USA, but apparently no prior knowledge of Aegean Bronze Age or specifically Mycenaean archaeology, although wide reading has given him quite good understanding. But his priority is not really to discuss the ancestry and development of the types of Mycenaean tomb (although he does include comment on this, on which more later). Rather, he wants to consider what would have been required in terms of time, labour and resources to construct the multiple-use types, particularly chamber tombs – a process which he terms generically 'earthmoving' – and he is interested in the part played by memory in the continuing construction and use, over long periods, of such tombs and the cemeteries in which they were grouped. He has much to say about the problem of establishing general standards for pre-industrial labour rates, drawing on multidisciplinary material from different world cultures, and he tests the standards that he has calculated, which include generous allowances of error because of the multiple uncertainties involved, against a chosen sample of Mycenaean tombs. In the course of this, he provides copious data on his use (with a collaborator) of photogrammetry to map the tombs and establish accurate measurements of their volume, an obviously basic element in calculations of the amount of work required to construct them and the time that it would have taken. The shaping of the tomb entrances and chambers and, in the case of stone-built tombs, of the blocks used to build them will have added to the time needed, and will naturally have varied, depending on the amount of care taken, thus introducing further uncertainties into the calculations.

Overall, this is a praiseworthy attempt to consider topics not often discussed in detail. The calculations produced seem reasonable and form a necessary

correction to notions that the construction of such tombs must have required excessive expenditure of time and resources. T. even provides an imaginary 'standard' chamber tomb with which to compare the data collected. He offers a beguiling picture of the construction of chamber tombs as essentially a community-based undertaking, in which members of an extended family and their 'close contacts' would join to provide the labour and other resources needed for the 'commission' to build the tomb. He estimates that, for an average chamber tomb, a team of ten, including a supervisor, might have been needed for the labour over a few days, and suggests that personal experience of previous tomb-constructions and community memory would combine to provide them, especially the leader(s), with the knowledge of how to go about this. Community memory might affect details such as the size and shape of the tomb, which would not normally exceed standards expected within the community. These, though, might vary from one community to another, as is demonstrated by comparison of the details of the two cemeteries that T. has studied, Portes and Voudeni in Achaia (respectively 50 km southwest and 9 km east of Patras): the 'rules' that seem to have been followed in Voudeni allowed much more latitude in size and variability in shape than in Portes (the main differences are summarised on p. 209). Even the construction of a tholos tomb, the example studied in detail being the relatively well-preserved tomb at Menidi near Acharnai in Attica, could be a locally based venture, using local labour as well as local stone. But the labour required, as well as the need for all the quarrying, preparation and laying of the stone, would have put this on a totally different scale, requiring a crew of 50-150 labourers to complete all the work involved in a relatively short time (pp. 119-21, 209). The biggest chamber tombs at Voudeni, Ts. 4 and 75, which in size can compare with the Menidi tholos (pp. 166, 204-5), would have required larger teams and more time (70 labourers for 9 days for T. 75, p. 70), but not on such a massive scale, showing the relative restraint of the 'regional elite' (p. 209).

There is an unresolved clash in T's account between the idea of 'commissioners' of chamber tombs, who seem to be envisaged as 'middle class' or even 'sub-elite', and those who undertake the actual work. Is the labour group derived from an extended family and its close contacts therefore to be understood as of lower status, maybe dependants of the commissioning person or family, but hired for this job specifically? When the labour teams envisaged are large (as for Voudeni T. 75), this must almost inevitably be so. T. certainly argues that the potential

for gaining prestige from involvement in such major projects might be an inducement for ordinary labourers, but one can also imagine that hereditary bonds of dependence on particular leading families might be involved. Since T. does not seem to make the point clearly anywhere, it seems necessary to emphasise that, numerous though chamber tombs are in many regions, they can hardly have held the burials of the whole population or even most of it. There must always have been a substantial class who could not hope to have access to what the evidence suggests was a tomb to be used over generations by members of a group.

Nevertheless, the increase in numbers of tombs in use over time, at sites all over the mainland, suggests that they became something of a 'status symbol' for persons and groups that wished to present themselves as of ranks that might be designated 'middle class' in modern terms. The fact that it seems very common for cemeteries to begin with just one or two tombs, quite often larger and better constructed than many later tombs, strongly suggests that their adoption involved a display of status. Indeed, there were always exceptionally large tombs that might have been constructed for persons or families of very high rank (such as Prosilio T.2 in Boeotia, mentioned several times in the text), equivalent to the small or medium-sized tholos tombs, but burials richly provided with goods could also be found in less impressive tombs.

However, there must be more to it than simple assertions of status, for not every community of mainland Greece adopted chamber tombs. But the custom that they represent, of using a tomb multiple times over a period of generations, does seem to have been becoming widespread at the time when the 'Mycenaean culture' was taking shape, and with it the idea of developing cemeteries for groups of such tombs *outside* the area of a settlement. This is a marked break with the practice in Middle Helladic (MH) times, when it was normal for burials to be sited within or close to the settlement area, if in areas currently not occupied by buildings, in simple graves that were most often used once only and might be placed together in small groups. This point is overlooked by T., who seems to suppose that a continuing tradition of multiple tomb-use could have begun with burial tumuli. But these are extremely rare in the archaeological record and their distribution is eccentric; in many mainland regions there are few if any MH examples. They also vary so much in details that they cannot be easily interpreted as representative of a single custom.<sup>1</sup>

<sup>1</sup> See Dickinson 2016: 324-25 on tumuli and 326-28 on MH burial

The remarkable association of the central part of the Portes chamber tomb cemetery with two tumuli dating from the period of transition between MH and LH is, as far as I know, unique, and seems more likely to reflect a wish to be associated with monuments of the past rather than any continuity of belief and behaviour.

This underlines another point that needs to be made, that neither Portes nor Voudeni has a history stretching back to the time when chamber tombs were first beginning to be constructed on the Greek mainland, in contrast with cemeteries in southern parts of the Peloponnese.<sup>2</sup> They and all other Achaean chamber tombs, on current evidence, represent a secondary spread of the idea, quite likely deriving from the central Argolid, where the 'classic' format of the chamber tomb seems to have been established; the oldest tombs there can be dated in LH I and cemeteries were established at many sites no later than LH IIA, whereas it is hard to identify anything older than LH IIB in any tomb in Achaea. It seems a pity that no study could be made of some well-published tombs at an Argive site like Prosymna or Dendra, for comparison; at Prosymna particularly, which has most of the oldest chamber tombs identified in the Argolid, the wide spread of several groups of tombs, most begun at an early stage, is a very striking feature.<sup>3</sup> But they may very well not have been suitable for the methods employed by T. to map tombs.

Thus, the first chamber tombs at Portes and Voudeni must surely have been constructed under the supervision of outsiders, who knew how to do this and might well have done a significant part of the work, even if some of the labour was locally recruited. The same process will have applied, of course, to the introduction of chamber tombs on the Greek mainland generally, a development that remains hard to explain fully, but is likely to be connected with the occurrence at appropriate dates of comparable types of tomb in some parts of the Aegean, notably Kythera.<sup>4</sup> This passing on of skills by outsiders is to be expected, for building in stone or shaping a chamber in rock are skills that surely have to be learned. Once learned, they can be passed on locally, and native traditions can be established; but it might still seem likely, especially in the case of more elaborate work, that these were partly maintained by professional builders of many types of construction, who might have led teams of skilled

workers and have accepted the 'commissions' that T. imagines.

But the motivation for the change to establishing extramural cemeteries, of tombs that ideally would be used by a group, probably centred on a family, for generations, needs more consideration than T. offers, for it surely involved more than a desire for display of status. It must have to do with the formulation and adoption of new ideas concerning proper attitudes towards the dead of one's family or community, which can be detected in behaviour that was far more complex, involving the manipulation of the remains of previous burials in a whole variety of ways, than used to be thought.<sup>5</sup> Such ideas must surely have been spread through communities as part of the changes in society taking place in the early Mycenaean period, so that adopting them would reflect acceptance of an apparently new ideology. Establishing tombs that were intended to be used for generations might also have conveyed a general belief in the stability of society, and hence the construction of new chamber tombs and their continued use may have begun to decline towards the end of the palatial period and was certainly a widespread phenomenon in the notoriously unstable postpalatial period. At Portes and Voudeni and other communities in Achaea, that seem to have remained stable and prosperous for generations in the postpalatial period, relatively many tombs continued in use, often for burials that were clearly of high-status individuals. But eventually the practice died out in Achaea as in most of Greece, perhaps because the effort needed for reopening tombs was thought to be excessively costly in terms of the time and labour needed, but probably also because of social changes, including in attitudes towards the treatment of the dead.

T.'s study obviously provides much food for thought, as well as a mass of useful data to consider when reckoning on the cost in time and labour of the construction of what were fairly elaborate tombs, and it is therefore with regret that I feel bound to complain of the absence of an index, which would undoubtedly have been useful in tracing references to information and ideas drawn from many sources.

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customs generally, 328–29 on the transitional period to LH.

<sup>2</sup> Notably in the area of Epidauros Limera in Laconia, and at Volimidia near Pylos in Messenia.

<sup>3</sup> See Blegen 1937, especially Chs. V–VI.

<sup>4</sup> As argued in Dickinson 1977: 61, 1994: 223.

<sup>5</sup> See most recently Moutafi 2021, which centres on analysis of remains from Voudeni.

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**Karina Grömer with contributions by R. Hofmann-de Keijzer and H.R. Mautendorfer, *The Art of Prehistoric Textile Making. The Development of Craft Traditions and Clothing in Central Europe*. pp. 533. Vienna: Naturhistorisches Museum, 2016. ISBN-10 3902421940; ISBN-13 978-3902421944. €59.00.**

The study of ancient textiles has made spectacular progress in recent years, with a large number of articles and conference proceedings already forming a fairly solid information base. In contrast, there are few monographs dealing exclusively with prehistoric textiles. The result of this state of the art is that the knowledge on this multifaceted topic is quite fragmented, complicating the introduction and understanding of the basic technological elements, without avoiding significant gaps. For this reason alone, the monograph discussed, dedicated exclusively to textile research, is a very important step towards a presentation of concise and well-documented information. This book is the third monograph by the main author preceded by one also devoted to prehistoric textile crafts. It is an expanded English version of an earlier publication written in German. The book is aimed both at the professional who wants to get informed about the latest developments in the field of prehistoric textiles and their technologies, and at the general public, which wants to learn more about this subject and the most important discoveries.

The book covers the period between the Stone Age and the Iron Age, and the main region treated is Central Europe, with most references to studies, activities, and finds in Austria, where the author has conducted research for many years. The other regions and the later historical periods are treated mainly in those cases in which the data are of particular importance to the overall consideration and evaluation of the subject matter. Comparatively, little is said about the manufacture and use of fabrics in early prehistory and in Bronze Age societies of the Aegean, some of which are contemporaneous with the periods covered in this book.

The introduction in Part A1 provides a general overview of the European prehistoric periods (pp.4–20). The main characteristics of each era, its duration, and the geographic distribution of the various cultures studied are given. As an introduction for a broader audience, a general summary of the most important archaeological evidence from Central Europe is given. The chronological framework is presented with an informative diagram of the synchronizations between the cultures of Central Europe and those of the Mediterranean and Scandinavia.

A particular and very important parameter in textile archaeology is the preservation conditions of textiles, which depend directly on the climatic conditions in the archaeological environment, which vary greatly from area to area and from site to site. This situation leads to an imbalance in the available information, as there are areas with abundant actual finds and others, for which we rely only on indirect evidence such as for e.g. the tool kit and, less frequently, iconography. For this reason, a special chapter (pp. 20–32) discusses the conditions for the preservation of ancient fabrics: direct contact with metals, liquid or salty environments, the location in mines, bogs or oak coffins. Some typical examples of well-preserved fabrics and garments are presented, such as the garments of the Iceman, also known as Ötzi. Through these examples, which produced numerous and impeccably preserved textile finds, it will be shown how important information can be given in terms of materials, technology and clothing, and consequently in terms of society and the economy of textiles, if they can be preserved and restored. In addition to theoretical knowledge of preservation conditions, this chapter is very useful for future research, as it helps to call for more attention to those environments in which textile finds can be expected due to exceptional conditions. One advantage of this chapter is that the conservation conditions and procedures are explained in simple terms, without using