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Edited by Timothy Earle and Kristian Kristiansen

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## ORGANIZING BRONZE AGE SOCIETIES

### The Mediterranean, Central Europe, and Scandinavia Compared

The Bronze Age was a formative period in European history when the organization of landscapes, settlements, and economies reached a new level of complexity. This book presents the first in-depth, comparative study of household, economy, and settlement in three microregions: the Mediterranean (Sicily), central Europe (Hungary), and northern Europe (south Scandinavia). The results are based on ten years of fieldwork employing similar documentation, and scientific analyses were used in each of the regional studies, making controlled comparisons possible. The new evidence demonstrates how differences in settlement organization and household economies were counterbalanced by similarities in the organized use of the landscape in an economy dominated by the herding of large flocks of sheep and cattle. The eight chapters in this book provide a new, contextualized understanding of the social and economic complexity of the Bronze Age. Its innovative theoretical and methodological approaches are of relevance to all researchers of landscape and settlement history.

Timothy Earle is Professor of Anthropology at Northwestern University. His scholarship focuses on the emergence of chiefdoms, and he has conducted field research in Hawaii, the Andes, Denmark, and Hungary. He is the author of several books, most recently *Chiefdoms: Power, Economy, and Ideology*, *How Chiefs Come to Power*, and *Bronze Age Economics*.

Kristian Kristiansen is Professor of Archaeology at the University of Gothenburg. He is an honorary Fellow of the Society of Antiquaries of Scotland, the Society of Antiquaries of London, and the European Association of Archaeologists, which awarded him the European Archaeological Heritage Prize in 2005. He is the author of *Europe before History*, *Social Transformations in Archaeology* (with Michael Rowlands), and *The Rise of Bronze Age Society* (with Thomas B. Larsson), which was awarded best scholarly book in 2007 by the Society for American Archaeology.

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# Organizing Bronze Age Societies

THE MEDITERRANEAN, CENTRAL EUROPE,  
AND SCANDINAVIA COMPARED

Edited by

**Timothy Earle**

Northwestern University

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*In memory of Ildikó Poroszlai*

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## Preface

This book results from the combined effort and collaboration of eight universities in Europe and the United States; the National Danish and Swedish Heritage Boards; the superintendenze in Trapani in Sicily; local museums in the areas of the field projects in Denmark, Sweden, Hungary, and Sicily; and a large number of students who received archaeological training and experience in international cooperation (participating institutions in Appendix 1). The philosophy and history of the projects therefore are told in this Preface, because they represent the conditions facing archaeological research projects now and in the future.

Although research often is considered an individual project, in archaeology it is always based upon the combined efforts of many people. Archaeological excavation projects cannot be carried out by single individuals; whereas in the early days of archaeology the director of excavation was often considered solely responsible for executing and publishing the results, such practice is unwarranted and unrealistic today. Modern field projects are so demanding in their organisation and integration of diverse skills, from documentation to complex scientific analyses, that they demand teamwork, not only among individuals from different fields of knowledge, but also among institutions. Today, very few, if any, departments in the world cover all the skills needed in modern archaeological field projects. This was the archaeological *raison d'être* behind the joint organisation – the first pillar of the project.

The second pillar of the project, which followed from this realisation, was to assemble a group of scholars and students who shared the same vision and approach to archaeology, because when you are

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in the field, mutual respect and cooperation are a first condition, and from that follows good discussions and other enjoyable side effects of social interaction. However, I also looked for diversity among the participants, as innovation often originates in confronting different research and fieldwork traditions. It took time and negotiations to overcome some differences, mostly those grounded in different excavation traditions, but others were immediately realised, such as the plough-sampling strategy employed in the Thy project in Denmark, or the micromorphology analysis employed in Hungary and Sicily.

The third pillar of the project was to integrate undergraduate honours, master's degree essays, and doctoral projects into the project, as this vitalises work and helps get results analysed and published (doctoral projects are listed in Appendix 2). I believe that joint projects should be interdisciplinary, multinational, and balanced with respect to gender and junior versus senior researchers to create a dynamic environment. A sociological analysis was done at one point in the project's history in Sicily, but we did not intend to analyse the results ourselves, but rather preferred to work collaboratively and let the results speak for themselves.

The fourth pillar of the project was to integrate local museums into the individual field projects, and the national archaeological heritage organisations, because they represent cutting-edge skills in archaeological documentation, and because it secured similar documentary standards between all field projects. We used the newly developed digital documentation system from the National Swedish Heritage, Intrasis, in all three projects in Tanum, Százhalombatta, and Monte Polizzo, and staff from the rescue divisions in Sweden took part in all three projects to maintain and teach the system, even as they carried out separate subprojects. For many students, this provided important skills that qualified them for the archaeological job market.

The fifth pillar was funding. Inviting different institutions to participate brought in funding from different sources, sometimes in the form of student labour, sometimes in the form of skilled archaeologists, sometimes in the form of money for scientific analyses, which levelled out fluctuations on a year-to-year basis. Although most funding was national and institutional, we also obtained a European grant from the European Union's (EU's) 6th Framework Programme during the last four years of the project, which financed a number of PhD scholarships and some postdoctoral research. This helped greatly to integrate the research programmes into the larger project.

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During the same period, a generous grant from the Swedish Riksbankens Jubileumsfond provided funding for most of the natural science analyses in the projects. Likewise, generous grants from the National Science Foundation of the United States provided funding for both the original Thy project and the field surveys in Hungary and Sicily.

After this presentation of the ideals behind the project, let me tell the story of its realisation, which, of course, never is as smooth and well planned as it may look upon completion. I shall begin by citing my old friend and museums inspector from the Thy museum, Jen-Henrik Bech. When asked about his experiences from the Thy project, which served as a model for the subsequent projects, he answered: 'If I had known all the difficulties that an international project were to involve, I never would have done it, and that would have been the biggest mistake of my life.'

The first project was carried out in Thy, a peninsula in north-western Jutland, which borders the rough North Sea to the west and the quiet Limfjord to the east. It started in 1990, and by this time I was director of the archaeological heritage division in the National Agency for Nature Conservation and Forestry, Ministry of the Environment. The project originated out of two strands of research: At the time we were running a national program of pollen diagrams in collaboration with the Geological Survey of Denmark, which hosted the department for palaeo-botanical research headed by Svend Thorkild Andersen. We had already done interesting regional pollen diagrams from southern Jutland and Djursland, but I wanted to do one for Thy, as this was the area with the densest distribution of preserved Bronze Age barrows in Denmark. Through research by Klavs Randsborg and myself, Thy was known as one of the richest areas in burial wealth from the Early Bronze Age. By period 3, swords deposited in burials were heavily worn on their hilts, and after that time, bronzes nearly disappeared from the burial record there. It was thus an enigmatic region in Bronze Age research that deserved to be studied in a field project. I had completed a draft manuscript of my book and felt the need to test some of its hypotheses in field research.

The pollen diagram turned out to be one of the most dramatic in northern Europe (Chapter 2, Figures 2.1 and 2.2). It showed a massive forest clearance around 2700 BC providing grazing lands for herds of animals. This clearance created an open landscape, and during the Early Bronze Age most of the remaining forest was taken

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away, basically creating the open landscape that is known today, although the medieval period took away the last few stands of trees. We now decided to establish a field archaeological project within the catchment area of the regional pollen diagram. It encircled a 10-km-wide area in Thy with a dense barrow landscape around Lake Ove and the parish of Sdr. Hå (Chapter 1, Figure 1.7).

We further decided to create a project that placed natural science and archaeology on equal footing. To accomplish these ambitious goals, Jens-Henrik and I realised we needed the skills and supplementary funding of international partners. I contacted my good friend Tim Earle, who, at the time, was running a project in Peru that was under increasing pressure from a local insurgency in the region where he worked. He therefore readily accepted my invitation and brought a whole set-up of new ideas and field procedures. When confronted with the Danish tradition of large-scale stripping of plough soil with machines to get to the house plans, he pointed out that we were taking away all ploughed-up cultural information from underlying houses. Together with his graduate student, John Steinberg, we designed a plough soil-sampling program that provided much new information to the project and was used in John's PhD; an award-winning article in *Antiquity* in 1996 presented the methodological approach. Together we worked out systematic procedures for field walking, procedures for excavation, and sampling procedures for macro-botanical evidence, which later became a PhD by Kristina Kelertas. Soon I also invited my old friend Michael Rowlands from University College London, who came with his graduate student at the time, Nick Thorpe; he carried out much of the field walking with English students.

Over the years, the project joined forces with two remarkable rescue projects of Bronze Age farms, in Bjerre Enge in northwestern Thy, and in Ås, close to the Limfjord. Some of Tim's high demands had to give way because of the nature of the landscape in Denmark, but during trial and error we ended up with a research design that became the model of the subsequent three projects in Sweden, Hungary, and Sicily (Chapter 1). It also included the joint multinational teamwork that had been so productive, although not without heated discussions when different research and field traditions – and sometimes different personalities – clashed. However, that provided innovations in our research design and in our thinking. It was also a central aspect of the project that students and project leaders lived together and shared meals and other daily practicalities.



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We also practised our anthropological knowledge of feasting by creating a feasting tradition for each project. In Thy, it was the eel party with snaps and beer (eels were, strangely enough, foreign to many American students but most of them learned to appreciate them). In Sicily, it was the midsummer party, with snaps and herring, to which all friends of the project in town were invited and at which we raised a Swedish midsummer pole and danced around it; in Hungary it was a goose-liver dinner at a traditional restaurant.

The Thy Archaeological Project (TAP) was concluded in 1997. By that time, I had been professor at University of Gothenburg since 1994 and brought students to participate in the project. I had also started up a new Bronze Age project linked to the rock-art of Bohuslän in Tanum, western Sweden, where I met Christopher Prescott from Oslo, who later became my field director in Sicily. However, in 1996, two completely independent things happened that proved to be decisive. Through one of my graduate students, Marco Montebelli, who visited Sicily for his PhD research, I received an invitation from Sebastiano Tusa, then at the soprintendenza of Trapani, to come down and start a joint project. I met with him during an international conference in Forlì that same year and realised we could work well together, as we shared a modern theoretical approach to archaeology. Later at the conference in London, which started the Bronze Age Campaign, I met Ildikó Poroszlai, then director of the Matrica Museum in Százhalombatta, south of Budapest. I told her I had always wished to do a modern excavation of a Bronze Age tell, and she answered that she – or rightly, her museum – owned one. They had just bought the land where the tell was situated at the Danube, where she had started to excavate some years before, but had stopped because of financial and other constraints. Both Sebastiano and Ildikó were keen to add natural science analyses to their excavations, as well as modern documentation procedures. One thing led to another, and after having visited both sites during 1997, we agreed to get started, but on the condition that I could invite colleagues from other universities to participate on equal terms, and on the condition that we applied similar documentation procedures and a similar research design in the two projects, which became three when we added Tanum in western Sweden.

We could never have carried out the projects without the goodwill and support provided by Sebastiano and Ildikó and their colleagues. They paved the way for the projects in multiple practical ways, so that we could concentrate on the archaeology.

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Also of fundamental importance to the projects was the goodwill of the Swedish National Heritage Board to let their rescue units (the division called UV) take part in the projects and provide the digital documentation, which later became the Intrasys system. It was tested under diverse foreign conditions, but it also helped students achieve skills they could use later when applying for jobs. Of equal importance was having two colleagues on board from the very beginning, Tim Earle in Hungary and Christopher Prescott in Sicily. In Sicily, we also had Michael Kolb from Northern Illinois University to conduct the field survey (and later he also developed his own projects), and we soon added Michael Shanks and Ian Morris from Stanford University. Although Michael soon moved on to new projects, Ian Morris stayed on and conducted excavations on the acropolis during the whole period, aided by his assistants Emma Blake and Trinity Jackson, as well as Brien Garnand. I was lucky to have good assistant directors in Christian Mühlenbock in Sicily and Claes Uhner in Hungary, both of whom took their PhDs on material from the project. Sebastiano Tusa also brought in excavation teams from Sicily, which meant that we soon numbered close to a hundred.

In Hungary, we were likewise lucky to have good partners in Marie Louise Stig Sørensen from Cambridge, who brought in Joanna Sofaer, newly appointed in Southampton, just as Ildikó and her invaluable assistant, now director of the museum, Magdi Vicze, invited a group of talented Hungarian graduate students, several of whom took their PhDs in the project. Charly French supervised the students on landscape history and soil micromorphology, while Tim Earle completed the field survey of the project in collaboration with Magnus Artursson from the Swedish Heritage.

In the Tanum project, our partner became my old friend Felipe Criado and his team from Santiago de Compostela in Spain. In this project, new innovative excavation methods around the rock-art sites were developed and exchanged. Lasse Bengtsson and, later, Johan Ling were the principal field directors. The results of that work are available separately.

During the nine years of the projects, hundreds of students from Scandinavia, the United Kingdom, Hungary, Slovakia, Germany, Sicily, Canada, and the United States met and learned to collaborate internationally, as well as learning to cope with cultural differences. I consider this a major achievement of the project at a time when national and local archaeologies predominate. Excursions to visit the sites and museums of the regions were a steady ingredient

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in the projects. The students also learned how to adapt to a foreign country, just as they experienced the hospitality and support of local people and politicians, most notably in Sicily, where the municipality of Salemi furnished a huge building to house the project and its participants. In the illustration above, you see the mayor of Salemi cutting a huge layer cake decorated with the flags of all participating nations. The project leaders, Ian Morris, Kristian Kristiansen, and Christopher Prescott are, for the occasion, decorated with laurels. The photo epitomises the spirit of the projects.

To integrate the three projects, we had planning meetings every January in Rome, at the Swedish Institute, followed by dinner at our favourite restaurants. We named the project 'The Emergence of European Communities,' a name that alluded to both the present and the past. After getting the projects off the ground through rather modest funding during the first three or four years, I received a generous four-year research grant in 2002 from the Swedish Riksbankens Jubileumsfond that enabled us to employ natural scientists to conduct the osteological and macro-botanical work for all three projects,

As the mayor of Salemi cuts a cake decorated with flags of all participating nations, he is surrounded by the project leaders Michael Kolb, Ian Morris, Bengt Westergård, Kristian Kristiansen, and Christopher Prescott, as well as local friends of the project.

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carried out by Maria Vretemark and Hans-Peter Stika, just as it paid for the Swedish participation. Parallel to this, we received an EU grant within the Marie Curie program, called 'research training networks.' It paid for six PhD grants and two or three postdoctoral positions in the project during a four-year period, just as it enabled us to arrange specialist seminars within the project. The PhD grants enabled a generation of talented graduate students who had worked for the project to do their PhD work in another country, and thus supported international integration of research. Finally, the National Science Foundation of the United States provided extensive funding for the original Thy project, the field surveys in Hungary and Sicily, and one PhD project.

This book summarises the nine years of joint efforts from all participating institutions between 1998 and 2006, and its completion rather soon after the termination of the project, in 2009, is a testimony to the collaborative spirit of the project. It was decided to leave out the ritual aspects of the project, as a separate book on the rock-art research in Tanum and Galicia is in print.

No project is without shocks, but it was a nearly unbearable tragedy for all of us in the Százhalombatta project when the inspiring and charming project leader and museum director Ildikó Poroszlai suddenly died at the age of 50 in February 2005, in the middle of an active and prosperous life. The feeling of loss is still with me, and I dedicate this book to her memory.

Finally, I wish to thank all participants, named and unnamed, who made these nine years one of the most productive and exciting experiences of my life, and contributed to its success. Most of all I wish to thank my co-editor, Timothy Earle, for many years of friendship and cooperation, and for carrying a huge workload in the completion of this book. The project started, symbolically, in 1998, when I hosted the annual meeting of the European Association of Archaeologists (EAA) at our university in Gothenburg in my last duty as president. To be able to practise in the project what I had worked for during the previous ten years during the formation of the EAA has been a gratifying experience. We all had a great time, and I do think the intellectual inspiration radiates from the pages of the book.

Kristian Kristiansen