

Exchange Networks and Local Transformations

Interaction and local change in Europe and the
Mediterranean from the Bronze Age to the Iron Age

Maria Emanuela Alberti and Serena Sabatini

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Abstracts

1. THEORIZING EXCHANGE AND INTERACTION DURING THE BRONZE AGE

Kristian Kristiansen

The collection of articles in this volume integrates archaeological evidence and theory in new exciting ways, probing more deeply into the historical nature of Bronze Age exchange and interaction. The aim of this article is to briefly explore what meaning can be given to these generalizing concepts in the historical context of the Bronze Age. The reader will then be able to engage in reflections on their possible application in the various case studies presented. When approached with relevant theoretical categories and analytical tools to organize the evidence, we learn how communities responded to the dynamics of a globalized Bronze Age world by constantly negotiating its incorporation into local worlds.

2. 'PERIPHERY VERSUS CORE': THE INTEGRATION OF SECONDARY STATES INTO THE WORLD SYSTEM OF THE EASTERN MEDITERRANEAN AND THE NEAR EAST IN THE LATE BRONZE AGE (1600–1200 BC)

Nikolas Papadimitriou and Demetra Kriga

World Systems Theory, originally developed by I. Wallerstein for the study of modern capitalist economies, has proved a useful analytical tool for prehistoric archaeologists, too. Its emphasis on the *longue durée* and the interdependence of socio-economic phenomena and structures has allowed for the synthesis of seemingly unrelated processes into unified macro-historical approaches.

The Late Bronze Age was a period of intense interaction in the Eastern Mediterranean and the Near East. From Mesopotamia to the Aegean comparable political institutions emerged, which were based on centralized 'palatial' economies, administered through sophisticated bureaucracies. Inter-regional exchanges ensured the wide circulation of raw materials (mainly metals) and luxuries but, also, artistic traditions, religious beliefs and ideological constructs.

World Systems approaches to the period have focused, so far, on the systemic role of the most powerful – economically and militarily – 'core' political formations of the region (the Egyptian and Hittite empires, Babylonia and Assyria). Our paper examines how smaller 'peripheral' states in the Levant, Cyprus

and the Aegean managed to integrate into that system. It is argued that such 'secondary' polities developed rather late and were largely dependent on maritime trade networks. This dependence imposed strategies of *economic specialization* in commodities favoured by the affluent elites of coastal urban centres, while at the same time necessitating the introduction of new forms of sumptuous behaviour that would further support the consumption of such commodities.

3. AEGEAN TRADE SYSTEMS: OVERVIEW AND OBSERVATIONS ON THE MIDDLE BRONZE AGE

Maria Emanuela Alberti

The Aegean area has always been a sort of 'interface' between Eastern and Western Mediterranean and Central Europe. During the Bronze Age, it was the filter between urban and palatial Near East and less complex, generally tribal, European societies. This is the key of the historical developments of the Bronze Age Aegean, as we can reconstruct them.

At various levels, we can sketch out the history of the global Aegean area – and of its various parts – in the framework of a 'core'-'periphery'-'margin' system, the main and general 'core' being Near Eastern civilizations. Minor 'cores' can be individuated through time in various Aegean areas or societies. The overall picture sees the Aegean starting at the 'margin' of the Levant in the Early Bronze Age to enter the 'core', though in a liminal position, during the Late Bronze Age (with its own 'periphery' and 'margin' in the Balkans and central Mediterranean), Crete playing a pivot-role in this process.

These dynamics arise from the interaction between internal factors and developments and external inputs and influences. Trade systems – both at 'international' and local level – are essential in this view, and can be considered the key for the interpretation and reconstruction. Trade networks have strongly influenced social and economic developments in various periods and areas, and constituted the backbone of the growing Aegean economies. They had to go on, and they did, even after the 'collapse' of the palaces c. 1200 BC.

The aim of this article is to reconstruct the role of trade systems in the historical developments of Bronze Age Aegean. At the same time it also to reconstruct the history of the Aegean through archaeological

evidences of trade. Case studies, focusing on the crucial period of the middle Bronze Age, will be taken into consideration, in order to underline various levels of interpretation, general phenomena, common features, local initiatives and specific solutions.

4. THE MINOANS IN THE SOUTH-EASTERN AEGEAN? THE EVIDENCE FROM THE 'SERRAGLIO' ON KOS AND ITS SIGNIFICANCE

Salvatore Vitale and Teresa Hancock Vitale

At the beginning of the Late Bronze Age period, the presence of Minoan and/or Minoanizing features, including Cretan-type pottery, wall paintings, and architecture, dramatically increases throughout the Aegean area. The widespread occurrence of the aforementioned characteristics has been variously interpreted as evidence for Minoan settlement, governed, or community colonies, thus implying a certain movement of people from the island of Crete abroad. While such a crucial phenomenon has been more thoroughly investigated in relation to the Cyclades (Kythira, Keos, Thera, and Phylakopi) and the south-western Anatolian coast (Miletus), the area of the Dodecanese has been so far relatively neglected.

The aim of the present paper is to reconsider the evidence for the presence of Minoan people in the southeast Aegean, with particular reference to the settlement of the 'Serraglio' on Kos. In so doing, a careful re-examination of the most important archaeological contexts, dating to the earliest Late Bronze Age Period (LBA IA Early to LBA IA Mature), will be proposed. Attention will be devoted to the following crucial points and their historical implications:

- a) Defining the comparative relative chronologies of Crete and Kos in the early 17th century BC;
- b) Determining the extent and the meaning of the interaction between the Koan 'local tradition' and the new Minoan elements;
- c) Comparing the evidence from the 'Serraglio' with that from the neighbouring islands of the Dodecanese and the Cyclades;
- d) Interpreting the nature of the possible Minoan presence in relation to the well know problem of the so-called Minoan Thalassocracy.

5. WESTERNIZING AEGEAN OF LH III C

Francesco Iacono

The twilight of Mycenaean Palaces and the subsequent post-palatial era have been always topics arousing an outstanding interest in the academic community as

well as among the general public. In the spectrum of hypotheses proposed in order to explain this puzzling transitory phase exogenous factors have periodically re-emerged as something which cannot be ruled out completely. These exogenous elements, or more specifically their material traces, are the principal data that I will discuss in this paper. They are by no means new; indeed they were recognised long ago as well as extensively treated by various authors in the last decades.

What is really new here is the will to openly challenge one of the more long lasting underlying assumptions in Mediterranean archaeology, namely that of directionality of cultural influence, from east to west, from the 'civilized' to the 'uncivilized'. Can cultural influence travel the other way round? My point here is that it is possible and I will try to show in this paper how, after the dissolution of mainland states, the contraction occurring in the sphere of cultural influence in the Mycenaean 'core' left room for a variety of 'peripheral' elements to be accepted and become largely influential in Greece.

6. MALTA, SICILY AND SOUTHERN ITALY DURING THE BRONZE AGE: THE MEANING OF A CHANGING RELATIONSHIP

Alberto Cazzella and Giulia Recchia

The elements connecting Malta and Sicily during the Bronze Age are well known, but the specific features of those links are still to understand. Luigi Bernabò Brea's hypothesis of Maltese 'colonies' seems to be difficult to accept in a literal meaning. Some year ago a few elements connecting southern Italy to the Maltese archipelago were recognized, but the meaning of this phenomenon remains unexplored.

The authors aim at discussing the role played by the interaction between Malta, Sicily and southern Italy during the Bronze Age. Their purpose is also to analyse possible causes and transformations of such interaction, examining more generally the changes occurred in the economic and social context of those areas.

7. EXTERNAL ROLE IN THE SOCIAL TRANSFORMATION OF NURAGIC SOCIETY? A CASE STUDY FROM SÀRRALA, EASTERN SARDINIA, MIDDLE BRONZE TO EARLY IRON AGE

Luca Lai

The role of external contacts in the social history of the Nuragic culture of Sardinia has long been an issue. In this paper, the main theories formulated on the subject are measured against evidence from Sàrrala, in Eastern Sardinia. Here, despite poor stratigraphic evidence, a preliminary survey and mapping, with the contribution of oral knowledge for destroyed sites, and

the presence and distribution of materials of non-local origin allowed the assessment of spheres of interaction and their role, if any, in the progressive nucleation documented between the Middle Bronze and the Iron Ages (c. 16th through 7th century BC).

An outline of organizational evolution could be drawn, which is articulated into first signs of presence, evidence of fission and filling of the landscape with approximately 25 sites, beginning of enlargement and possibly competition, and finally progressive concentration of building activity at only five sites. The fact that non-local stone is used only at the most complex sites, and that at one of them Mycenaean sherds and ox-hide ingot fragments were retrieved, are discussed as a contribution to the debate on the relevance of external *vs.* internal factors in social dynamics. The conclusion is that a significant, direct role of extra-insular groups seems unsubstantiated until the last phase (Final Bronze–Early Iron Age).

8. METALWORK, RITUALS AND THE MAKING OF ELITE IDENTITY IN CENTRAL ITALY AT THE BRONZE AGE-IRON AGE TRANSITION

Cristiano Iaia

During the transition between the Late Bronze Age and the Early Iron Age, in South Etruria, and in other zones connected to it, the emergence of a new kind of community, characterized by settlement and production centralisation ('proto-urban centres') results in an increasing openness to transmission of models through long-distance exchange: symptomatic of this is the elaboration of prestige items, particularly metal artefacts of highly specialised craft, whose typological, technical and stylistic features have both an intercultural character and a strong link to localized groups. Among these are elements of armours (helmets) and bronze vessels, which are very akin to similar central and northern European objects. A complex embossed decoration (Sun-ship bird motive) characterizes some examples of these symbols of power and social hierarchy, strictly related to a cosmological thought deeply rooted in north-central Italy since the Late Bronze Age. This is the first attempt at creating a material identity, particularly elaborated in burial rituals, of the emerging Villanovan warrior elites.

9. INDIGENOUS POLITICAL DYNAMICS AND IDENTITY FROM A COMPARATIVE PERSPECTIVE: ETRURIA AND *LATIUM VETUS*

Francesca Fulminante and Simon Stoddart

Within the major debate on Bronze and Iron Age Mediterranean and European transformations, the authors will examine the tension between indigenous

political dynamics and connectivity in two, geographically related, but contrasting, political contexts: Etruria and *Latium vetus* (central Italy). The long established debate on urbanism in Etruria and *Latium vetus*, dating in Italy since at least the 1977 'Formation of the City' conference (*La Formazione della città nel Lazio*), will be updated in the light of current debates of settlement dynamics, political identity and the timing and significance of interaction in the central Mediterranean.

The settlement patterns in Etruria (Stoddart) will be contrasted and compared with the settlement patterns and social transformations, as mirrored in the funerary evidence, of *Latium vetus* (Fulminante), within the Mediterranean context of connectivity over the period 1200–500 BC, and in the light of new socio-anthropological models such as the network idea.

10. LOCAL AND TRANSCULTURAL BURIAL PRACTICES IN NORTHERN EUROPE IN THE LATE BRONZE AGE: FACE, HOUSE AND FACE/DOOR URNS

Serena Sabatini

Archaeological evidences from Late Bronze Age Northern Europe invite reflecting upon the presence of foreign objects belonging to traditions from the southern part of the continent. Also specific ritual practices appear travelling the same large distances to be adopted, not before undergoing significant local transformations. Within this framework, three burial practices (so called face, house and face/door urns) are analysed and compared with each other. They suggest not only the existence of intercultural interaction between variously far societies, but also of selective processes of negotiation and incorporation of external material culture. The study of face, house and face/door urns provides useful insights into the cultural complexity of Late Bronze Age Northern European communities within the larger continental framework. It unveils their capacity to perform phenomena of hybridization between practices with different cultural origins and allows discussing the complex role of material culture as marker of identity.

11. MIGRATION, INNOVATION AND MEANING: SWORD DEPOSITIONS ON LOLLAND, 1600–1100 BC

Sophie Bergerbrant

This article will consider the deposition of local and foreign swords on Lolland, a Danish island, between 1600–1100 BC. It focuses on the treatment of the earliest imported examples of Hajdúsámson-Apa swords (from the Carpathian Basin) and its local copies, and discusses the swords from the following periods.

Topics to be discussed include how the different types of swords were accepted and used, *i.e.* how and where they were deposited (hoards, burial or stray finds). A closer consideration of the use and treatment of this material helps us to understand how new innovations are accepted into a society.

Theoretical perspectives such as migration theory and concepts such as hybridity and third space will be used to shed light on the relationships between the meaning of an object in its area of origin and the transformation that occurs upon entering its new context, as well as how objects were accepted, copied and subsequently made into local types. The combination of a detailed study of use and the context of artefacts in a new area and theoretical discussions will give us a much better understanding of phenomena relating to transculturation. This study focuses on Lolland since it is an island with both imported and local copies of Apa-Hajdúsámson swords, and this can therefore help us to understand how a significant innovation like 'the sword' was accepted into south Scandinavia.

12. LONG AND CLOSE DISTANCE TRADE AND EXCHANGE BEYOND THE BALTIC COAST DURING THE EARLY IRON AGE

Jutta Kneisel

By considering the so called Early Iron Age Pomeranian Culture in Northern Poland it is possible to show close and distant trade contacts between the Baltic Sea and the Hallstatt-Area.

Close contacts appear through the analysis of clay lids of anthropomorphic urns. The lids are often found together with face urns and are decorated with complicated patterns. These ornaments facilitate a fine differentiation of decoration kinds, styles and forms.

GIS-analyses reveal linear patterns which reach from the Baltic coast to the southern rivers Varta and Noteć. The distribution of these ornaments in a linear way is striking, because lids are found in numerous burial sites next to these lines.

In contrast to the regionally restricted lid-ornaments, amber can serve as an example for long-distant contacts. Though amber is rarely found within the Pomeranian Culture, the large amounts of raw amber found at Komorowo, which lies farther South, indicates that there was a centre of amber processing. At the same time, the nearby burial site of Gorszewice, featuring Poland's northernmost Hallstatt-imports, indicates connections with the Hallstatt-Area. It is therefore argued that Komorowo was involved in the exchange of amber to the South – presumably to Italy.

13. CERAMIC TECHNOLOGY AND THE MATERIALITY OF CELTIC GRAPHITIC POTTERY

Attila Kreiter, Szilvia Bartus Szöllősi, Bernadett Bajnóczi, Izabella Azbej Havancsák, Mária Tóth, György Szakmány

This article examines the ceramic technology of Celtic pottery from Hungary focusing on graphite-tempered pottery. By the means of petrographic analysis, X-ray diffraction and X-ray fluorescence analyses, and scanning electron microscopy the use of ceramic raw materials and tempers are examined. The analyses put great emphasis on the provenance of graphite. The results suggest that all the examined vessels were locally made although the graphite incorporated into the ceramics was procured from a distant region. The examined society appears to be involved in long distance exchange networks and the results indicate complex social and economic organization.

Preface

The idea of this volume matured gradually over time, following a series of events. Originally, it was the aim of the editors to promote a large project investigating trade and exchange as a means for the development and expansion of societies in Bronze Age and Iron Age Europe and the Mediterranean. A convenient starting discussion for this project took place at a relevant session at the 14th annual meeting of the European Association of Archaeologists in Malta (September 2008).¹ The project has not yet materialized. However, following the session in Malta there was general agreement regarding the lack of comprehensive studies on the reciprocal relations between exchange networks and local transformations, particularly those focusing on the latter and their specific dynamics. We decided then to attempt to address this scientific gap. With an eye to our main areas and periods of interest (the Bronze and Iron Ages in the Mediterranean and Europe) we felt that such a study would benefit from including a large number of regions and chronological horizons.

We also agreed on the potentially fruitful results that could arise from overcoming the disciplinary barriers which often prevent dialogue between archaeologists working in the Mediterranean and in continental Europe. While this problem undoubtedly persists, the channels of communication have been opened, and we

feel the present volume represents a significant step in the right direction. Some of the articles in the volume were written by participants in the EAA session in Malta 2008 while others were written by scholars who were subsequently invited by the editors.

During the long editing process² we have had support from several colleagues and friends. In particular we wish to thank Kristian Kristiansen, who also contributed to the volume, as well as Paola Càssola Guida, Elisabetta Borgna, Renato Peroni and Andrea Cardarelli. As far as the very conception of this book is concerned, thanks must go to Anthony Harding for the inspiring talk right after the session in Malta 2008. We are also grateful to the organisers of the 14th annual meeting of the European Association of Archaeologists in Malta, who made the session possible. In addition, we wish to thank Göteborg University and the Jubileumsfond for its generous support. Of course we also extend warm thanks to all of the contributors to this book – your collaboration has been very stimulating in many ways. We wish to also thank very much Kristin Bornholdt Collins for considerably improving the language of the introductory parts of this volume. Finally, we would like to thank the publisher Oxbow Books Ltd for taking an interest in our work, and in particular Dr Julie Gardiner for help and support with the publication.

Note

- 1 The original title of the session was: Exchange, interactions, conflicts and transformations: social and cultural changes in Europe and the Mediterranean between the Bronze and Iron Ages.
- 2 The volume was completed at the beginning of 2011. Therefore, not all bibliographical references might be fully updated. Both editors equally worked on the volume.

Maria Emanuela Alberti and Serena Sabatini
2012

Introduction

Transcultural interaction and local transformations in Europe and the Mediterranean from the Bronze Age to the Iron Age

Maria Emanuela Alberti and Serena Sabatini

European and Mediterranean societies appear to have been involved in complex systems of exchange networks throughout their respective Bronze- and Iron Ages. This book seeks to investigate how these networks affected local customs and historical developments. Archaeological evidence suggests social and economic phenomena, cultural expressions and technological skills stemmed from multifaceted encounters between local traditions and external influences. Examples of cultural openness and transcultural hybridization can be found all over the continent in settlement patterns and organization, material culture and technology, funerary customs and ritual practices.

As far as the study of these phenomena is concerned, both in continental Europe and the Mediterranean, we believe two issues deserve wider investigation:

- the outcomes of the dynamic relationship between local traditions and exchange networks
- the possible parallels between patterns of interconnection and transformation.

At the core of this work is the assumption that people (as individuals or organized groups) always moved, although for different reasons and significantly different distances. In their movements they invariably carried with them means of sustenance, objects, goods, ideas, and narratives likely to be exchanged with other people, having consequences that can vary significantly from one context to another.

Archaeology today uses the term 'exchange' very freely to embrace a wide range of activities, regardless of their scale (from single site to regional and continental), their requirements (involving variously complex technologies and skills and/or long journeys), or their

outcomes (being at the origin of cultural, social, economic changes, production specialization, and/or intermingled with the building of ideological power). In this volume we do not question the general use of the term, although one might argue that is necessary; it should be made clear, though, that the term 'exchange network' is employed to identify movements (regardless of their purpose) of people and goods on an interregional scale, thus necessarily involving transcultural dialogues.

Exchange and transformation

A long tradition of contacts and exchange practices can be traced back to very early periods of prehistory in Europe and the Mediterranean. Bronze- and Iron Age societies appear to have been involved in a variety of complex systems of exchange and trade which have been widely investigated (*e.g.* Thrane 1975; Bousek 1985; 1997; Gale 1991; Sherratt and Sherratt 1991; Sherratt 1993; 1997; Kristiansen 1993; 1998; Oates 1993; Scarre and Healy 1993; Dickinson 1994, 234–256; Pydyn 1999; Harding 2000, 164–196; Pare 2000; Peroni 2004; Kristiansen and Larsson 2005; Laffineur and Greco 2005; Galanaki *et al.* 2007; Vandkilde 2007; Cunliffe 2008; Clark 2009; Dziegielewski *et al.* 2010; Wilkinson *et al.* 2011).

The particular aim of this volume is to apply a bottom-up strategy and thus discuss exchange patterns through the analysis of regionally contextualized archaeological evidence. Specifically, the focus is on the reciprocal relationship between material culture development and varying transformations and exchange networks, where the former represent

the epistemological means to reach the latter and not the other way around. At the core of this work is the conviction that tangible traces such as those seen in distribution maps of 'international' artefacts (e.g. Kristiansen 1993; von Hase 1992; Bousek 1985; Thrane 1975; Jockenhövel 1974) are not the only ones left by exchange. Its impact may also affect communities which receive or participate in the transmission of other people and material culture in less obvious ways as far as the study of archaeological evidence is concerned. People invariably learn from each other and significant changes may occur in reaction to contacts, even where the lack of foreign objects might cause one to question the existence of any exchange. We believe it is necessary to highlight contextual social, cultural, economic and technological transformations as relevant for the study of exchange networks and associated movements of material and non-material culture. As noted by Kristiansen (Chapter 1), in the last 50 years great advances have been made in archaeological sciences and in the use and interpretation of both textual and material evidence. There is therefore room for a better historical understanding of the relationship between individual actors or communities and the institutional, political, socio-cultural and economic framework in which they moved. The collected contributions examine and discuss those issues through case studies and from a theoretical point of view. Some of the papers discuss evidence of selection, negotiation, incorporation, eventual transformation or refusal of external inputs. Most discussions treat the occurrence of hybridization at various levels (*i.e.* within material culture, ritual, social and technological practices) and/or illustrate long or short term socio-cultural and economic transformations.

In Papadimitriou and Kriga's discourse (Chapter 2), when shifting the focus from the largest Mediterranean regions and cultures to minor communities, it appears clear that a multifaceted variety of strategies has been adopted to enter the international trade. Production specialization and internal cultural changes gain renewed meaning when analysed in the light of the interregional Mediterranean networking pattern. Alberti's work (Chapter 3) seeks to demonstrate how interaction and hybridization, along with resources and territorial management, seem to constitute the backbone of the historical development(s) in the Aegean in a crucial formative period known as the local Middle Bronze Age. In her analysis, the structure of the trade circuits appears at the same time to have been cause and consequence of society formations and transformations.

A careful study of local transformations may also provide new perspectives on long debated issues such as the possible stable presence of foreign

groups beyond local cultural changes and externally inspired production. Vitale and Hancock's study (Chapter 4) of the evidence from Kos and Cazzella and Recchia's analysis (Chapter 6) of the relations among Malta, Sicily and Southern Italy throughout the Bronze Age, reveal the necessity to question previous interpretations and to adopt wide-ranging approaches for the understanding of changes and transformation in reaction to large exchange networks. Along the same lines, Iacono's (Chapter 5) paper opens up a discussion about reverse influence patterns. His study of particular ceramic productions is a trigger for revisiting the traditional centre-periphery mechanisms to allow for the possibility of the adoption of westernizing elements in Late Helladic III C Greece.

Iaia's and Sabatini's (Chapter 8 and 10) contributions show in different ways how local transformation(s) in connection with exchange networks may also mirror identity strategies. Together with Bergerbrant's analysis of the incorporation of swords in the Nordic material culture (Chapter 11), they illustrate how material culture is rarely simply borrowed. Identity as much as ideological strategies involve negotiations and local elaboration of original meanings. In other words, these contributions show how external inputs do not affect internal developments, unless local societies are keen to negotiate and incorporate them into their own trajectories of transformation.

The articles in the volume also show how change is detectable out of very different archaeological sources. The studies of Lai (Chapter 7) and Fulminante and Stoddart (Chapter 9) demonstrate how complex combinations of economic, social and ideological factors may influence structural development in settlement patterns and organization.

It also seems that the rarer the exchanges the more subtle and less visible is the impact on local communities and cultures. However, as Kneisel's study (Chapter 12) illustrates, specific decorative patterns on the lids of Pomeranian face urns provide insights into exchange networks even where other evidence does not show consistent traces of intercultural interrelations.

When exchanges involve perishable materials or microscopic elements within complex final products, like for example ceramics, they are less easy to detect. In their work, Kreiter, Bartus Szöllösi, Bajnóczi, Azbej Havancsák, Tóth and Szakmány (Chapter 13) demonstrate how we can fruitfully derive evidence of exchange from the analysis of ceramic composition. Thus, even more transformations of varying nature might represent important evidence for an updated map of the movements of people and material culture throughout the continent and the Mediterranean basin.

Transculturality and hybridization

Two particular conceptual frameworks appear to inform the contributions to this volume: transculturality and hybridization. Both concepts belong, we could say, to the post-colonial study tradition and to discussions about the permeability of cultures. From the beginning one of the basic aims of post-colonial literature (e.g. Said 1978; Spivak 1988; Young 2001) has been to question the general supposition that so-called subaltern cultures (colonized) normally underwent processes of acculturation imposed by the dominant ones (colonizers). In doing so, post-colonial studies invited an innovative approach to interpreting the complex outcomes of any multicultural meeting (e.g. Bhabha 1994; Young 2003). Subaltern as much as dominant cultures negotiate and absorb each other at the same time as their merging together gives space to a variety of new expressions not belonging to any previous tradition, but being new and unpredictable (e.g. Rutherford 1990; Bhabha 1994). From such an exciting tradition of study, originally investigating pre-modern and modern societies within the colonial experience in its entirety and consequences, important theoretical frameworks have been borrowed for the study of ancient societies. Regarded through post-colonial sensitive lenses, material culture becomes not only a marker of transcultural dialogues, but a promising laboratory for the analysis of their forms of expression (see e.g. Bettelli 2002; Broodbank 2004; van Dommelen 2005; Stein 2005; Riva and Vella 2006; Streiffert Eikeland 2006; Anthony 2007; Antoniadou and Pace 2007; Cassel 2008; Habu *et al.* 2008; Knapp 2008; Vivres – Ferrándiz 2008; Dziegielewski *et al.* 2010).

Most of the articles in this volume discuss archaeological evidence to illustrate the negotiation and combination of external and endogenous stimuli. Hybridization between local elements and external input appears more a norm than an exception. Objects, rituals and technologies usually are not imported or copied *tout court* as they are, rather they enter new environments acquiring new forms or meanings. Upon first glance, they might appear to illustrate trajectories of acculturation from dominant groups or ideologies towards peripheral or 'subaltern' actors. However, archaeological evidence most often reveals processes of transculturation rather than acculturation, in the sense of conveying cultural instances from different environments into new forms of expressions.

As far as social and economic change is concerned, a post-colonial approach also provides fresh insights into established and largely debated interpretative frames of reference, such as the core-periphery model

(e.g. Wallerstein 1974; Rowlands *et al.* 1987; Sherratt and Sherratt 1991; Chase-Dunn and Hall 1993; 1997; Frank 1993; Oates 1993; Sherratt 1993; 1994; Mathers and Stoddard 1994; Harding 2000, 414–430; Broodbank 2004; Laffineur and Greco 2005; Galanaki *et al.* 2007). The issue is addressed by various contributions in the volume presenting a range of reformulations, declinations and deconstructions of the model. It appears that the very status of centres, margins and peripheries needs to be readdressed, highlighting regional dynamics and local strategies. Economic forces and trends which come into play in each region and contribute to social and cultural changes appear to be multi-directional and multi-faceted. They involve external initiatives and agents, but are also grounded and eventually affected by the interplay between tradition and innovation, in a continuum of transforming combinations.

Continental Europe and the Mediterranean in the Bronze and Iron Ages

Another important goal for this volume has been to bring together studies investigating both the Mediterranean and continental Europe. We were well aware from the start that they are not only two different socio-cultural and economic environments, but that they conventionally belong to different study traditions as well. Scholars working on Mediterranean or European proto-history seldom have occasion to meet. They normally publish and discuss their respective field issues in separate forums. Lately, something seems to be changing and the environment is becoming more hospitable to open collaborations (e.g. Sherratt 1997; *Eliten* 1999; Kristiansen and Larsson 2005; Artursson and Nicolis 2007; Galanaki *et al.* 2007; Cunliffe 2008; Dziegielewski *et al.* 2010; Fredell *et al.* 2010; Kristiansen and Earle 2010; Wilkinson *et al.* 2011), but the situation still has far to go. We of course recognise that there are reasons for the traditional divide. Continental Europe and the Mediterranean basin are characterized in many ways by specifically local socio-cultural and economic dynamics and patterns of relations. In the volume, it is not by chance that transculturality recurs more often in the contributions dealing with mainland Europe, while core-periphery models are still more likely to inform the debate on Mediterranean interaction and state formation. Nonetheless, as a whole the content of this volume highlights how those worlds are not alien to each other. Territories and people from Scandinavia to the Mediterranean have been variously connected

throughout late prehistory. We fear that many of the supposed differences between them derive more from being objects of separate traditions of archaeological research rather than their actual existence. Very little effort is normally invested in order to combine and discuss common problems and achievements. We firmly believe that several specific phenomena acquire significant value when adopting a broader and more comprehensive approach that includes both zones. Therefore, the contributions in this volume discuss case studies from the Eastern Mediterranean to Scandinavia, although we have to regret the lack of papers discussing Western and Atlantic Europe and hope to include them in future works.

Despite our aim to combine different fields of study (Mediterranean and European), we had to concur, after much discussion, that the most logical order for presenting the various contributions was still geographical. The order in which the papers appear is determined by the principal areas where the various case studies develop. The volume thus offers a journey which takes off, after Kristiansen's introductory words, in the Eastern Mediterranean and the Aegean (Nikolas Papadimitriou and Demetra Kriga, Maria Emanuela Alberti, Salvatore Vitale and Teresa Hancock and partly Francesco Iacono). It then transports the reader to the Central Mediterranean and the Italian peninsula (partly Francesco Iacono, Alberto Cazzella and Giulia Recchia, Luca Lai, Cristiano Iaia and Francesca Fulminante and Simon Stoddart), before ending with papers discussing case studies from Northern Europe (Sophie Bergerbrant and, in part, Serena Sabatini and Jutta Kneisel) and Central-Eastern Europe (Attila Kreiter *et al.* and, in part, Jutta Kneisel and Serena Sabatini).

The aim of this book is also ambitious from a chronological perspective since a broad spectrum of periods has been included:

- Eastern Mediterranean and Aegean Early, Middle and Late Bronze Age (Nikolas Papadimitriou and Demetra Kriga, Maria Emanuela Alberti, Salvatore Vitale and Teresa Hancock, Francesco Iacono);
- Central Mediterranean, Early to Late Bronze Age (Alberto Cazzella and Giulia Recchia);
- Italian Late Bronze Age and Early Iron Age and the corresponding Halstatt period A-C1 *früh* in Central and Northern Europe (Luca Lai, Cristiano Iaia and Francesca Fulminante and Simon Stoddart, Sophie Bergerbrant and Serena Sabatini);
- Hallstatt C-D, La Tène A and B periods in Central and Northern Europe (Jutta Kneisel and Attila Kreiter *et al.*).

It is our sincere hope that this volume will reinvigorate the subject and pave the way for future work, and that

interdisciplinary collaborations will continue. Since our remotest past, people and goods have travelled great distances throughout the Mediterranean and the European continent ... we invite you now to join in this renewed journey towards understanding their traces and impacts.

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Aegean trade systems: Overview and observations on the Middle Bronze Age

Maria Emanuela Alberti

Introduction

The Aegean trade systems throughout history: a synthetic view

The present work is a part of a wider program, aiming at sketching a general outline of the history of Aegean trade, or, better, a tentative reconstruction of the role of trade systems in the historical developments of the Bronze Age (BA) Aegean.¹ Some general and methodological considerations are proposed and then, after a short presentation of the largely studied and debated Early Bronze Age evidence, the analysis focuses on the Middle Bronze Age, a period less investigated under this point of view.

Historical and cultural changes arise from the interaction between internal factors and developments on one hand and external inputs and influences on the other hand. Trade systems – both at ‘international’ and at a local level – are essential in this view, and can be considered one of the best sources for the interpretation and reconstruction. Trade networks have strongly influenced social and economic trajectories in various periods and areas, and, along with primary (staple) production, constituted the backbone of the growing Aegean economies (*e.g.* Knapp 1998; Sherratt 1999; Sherratt and Sherratt 1991; 1998; Broodbank 2000; 2004; Broodbank and Kiriati 2007; Melas 2009).

In a more effective manner, when looking at the Aegean itself, we could speak of a multi-directional and multi-level complex system made up of different cores and peripheries, circuits and routes variously interrelated within each phase.² What must be stressed here, is that various Aegean societies could not have existed independently: in each period, all Aegean areas

are strongly linked, and important historical realities such as the Early Helladic (EH) ‘Corridor House’ societies, or the Middle Helladic (MH) commercial power of Aegina, not to speak of palatial Crete and the Mainland, could not be understood without looking at the global Aegean system and its links with external areas.

The present work aims to stress the existence of both some recurrent, structural elements and varying assets in the history of the trade systems in the Bronze Age Aegean. Recurrent elements are: importance of geography and resource distribution; structural link with local trajectories (primary economy, settlement pattern and social organization of various areas and periods); interaction and hybridization as a fundamental mean of shaping culture and society. The combination of these elements results in the variation of trading circuits through time (*see infra*).

The analysis and reconstruction work suggests a general framework of development trajectories, which are summarized here. While sketching a broad picture of Aegean history during the Bronze Age, two major chronological cycles can be detected, on the basis of demography, cultural continuity and economic patterns: the first one encompassing the Early Bronze Age (EB) I and EB II, the second one starting at the end of the EBA and lasting until Late Bronze (LB) IIIC Middle. Between these two cycles, important transformations occur during EBIII. Trading systems roughly follow such a partition with some internal variations due to the rise and demise of palatial polities first in Crete and then on the Mainland. Important modifications appear in LBIIIC Middle. Crete, in particular, seems to play in a different way

from the other Aegean actors, combining a diffuse trading activity with more directional initiatives in strategic key-points of the circuits, from its advanced Pre-palatial period (see *infra*).

In the first cycle, even with conspicuous changes throughout the period, the trading system appears to have been structured as a complex network of interconnections between the east and west (from Troy to Lerna and from western Greece to the Adriatic regions), with a number of peer-ranked 'hubs', each one commanding a defined and inhabited land and seascape: after a first phase, Crete seems somehow separated from the rest of the Aegean and interacts with it on a different basis. In the second cycle, the full linkage with palatial Crete gives the system a gravitational core and a more directional structure: trade activities are carried out through segmented geographical circuits, mainly north-south oriented ('dendritic' systems), by a restricted number of major leading centres, while other sites and areas play a decidedly more secondary role. The network survives, but it increasingly shows a core and a direction, and an extraordinary expansion capacity. In this way, the system involves progressively wider regions (the northern and western Mainland, the central Mediterranean) and interface on an increasing basis with the Mediterranean routes, acquiring strength. An important step is the structural connection with external *foci* of economic growth, such as the western Mediterranean and Cyprus, which gives the system an external support in case of internal trouble (*e.g.* at the end of the palatial organization), but also exposes it to the consequences of overseas crisis (*e.g.* the problematic transitions between Late Cypriot IIIA and IIIB). The final relocation of the 'core' to the Mainland and the increasing importance of western involvement cause an important northern shifting of the main circuits at the close of the Mycenaean palatial era, an asset which continues even later. Indeed, the collapse of Mycenaean (and Levantine, to a lesser extent) palatial administration, even though affecting in various ways the trade system(s), in no way stopped it: with some changes, involving mainly the insular world, and perhaps a reduced intensity, trade interactions will continue on the same paths until the end of the cycle (*e.g.* Knapp 1998; Sherratt 1999; Sherratt and Sherratt 1991; 1998; Broodbank 2000; 2004; Broodbank and Kiriatzi 2007; Melas 2009).

According to the most recent scholarship, it is hereby assumed that various trading levels and modalities coexisted in the Aegean and the Mediterranean during the Bronze Age, with a large part of the exchange carried out outside the official system of 'gift exchange' and 'administrated trade'. Palatial, elitarian, attached,

independent, and 'private' trade entrepreneurs acted alongside each other, in parallel ways, with various degree of co-participation, combination and independence. On the basis of both Near Eastern written sources and the Mediterranean archaeological records, trade relationships seem to have been too complicated and articulated to undergo schematization or formalization, unless case by case (*e.g.* Salsano 1994; Zaccagnini 1994; Sherratt 1998; 1999; Milano and Parise 2003; Zaccagnini 2003; *Storia del denaro*; Clancier *et al.* 2005; Parise 2005; Peyronel 2008; Routledge and McGeough 2009; Alberti 2011).

The present attempt will necessarily presuppose the most popular interpretative issues, such as a systemic approach, world-system theory, interaction spheres, secondary state formation, polarities between gradual evolution *vs* punctuated equilibrium and between hierarchy *vs* heterarchy (and related terms), and connectivity, identity, acculturation, and hybridization phenomena: all elements which are widely used and full discussed by other contributions in the present volume and which therefore will not be treated at great length here.³ Debate within Aegean scholarship has in recent years abandoned strong theoretical schematism(s) to welcome more nuanced and multi-faceted, open-solution approaches.⁴

Geography and resources

The history of trade in the Aegean has been largely and variously affected by the geographical conformation of the area. The study of winds and stream patterns has outlined the differences between the northern and southern Aegean, and therefore their natural division (Fig. 3.1).⁵ This is a key factor in Aegean history, as the two areas had always followed different trajectories, with repercussions on the trading and interaction patterns of various periods. In both areas, interconnections followed local circuits, which were stable throughout history and interfaced with one another, thus allowing the circulation of people, goods and ideas through a chain of segmented steps. Some major crossing routes assured stronger connections. In the northern Aegean, the most important and local circuits and routes are located in the Pagasetic gulf (interfacing with the Euboea and southern routes), the Magnesia plain and the Chalkidiki, the routes linking Samothrace, Gökçeada/Imbros, Lemnos, Bozcaada/Tenedos (the 'Northern Crescent', *i.e.* Boulotis 2009), Dardanelles, Troy and Lesbos, Lesbos, Chios and the Anatolian coast, Chios, Samos and the Anatolian coast (interfacing with the southern routes). The northern Sporades function as a bridge for the western routes to Lemnos and the eastern circuits. The island of

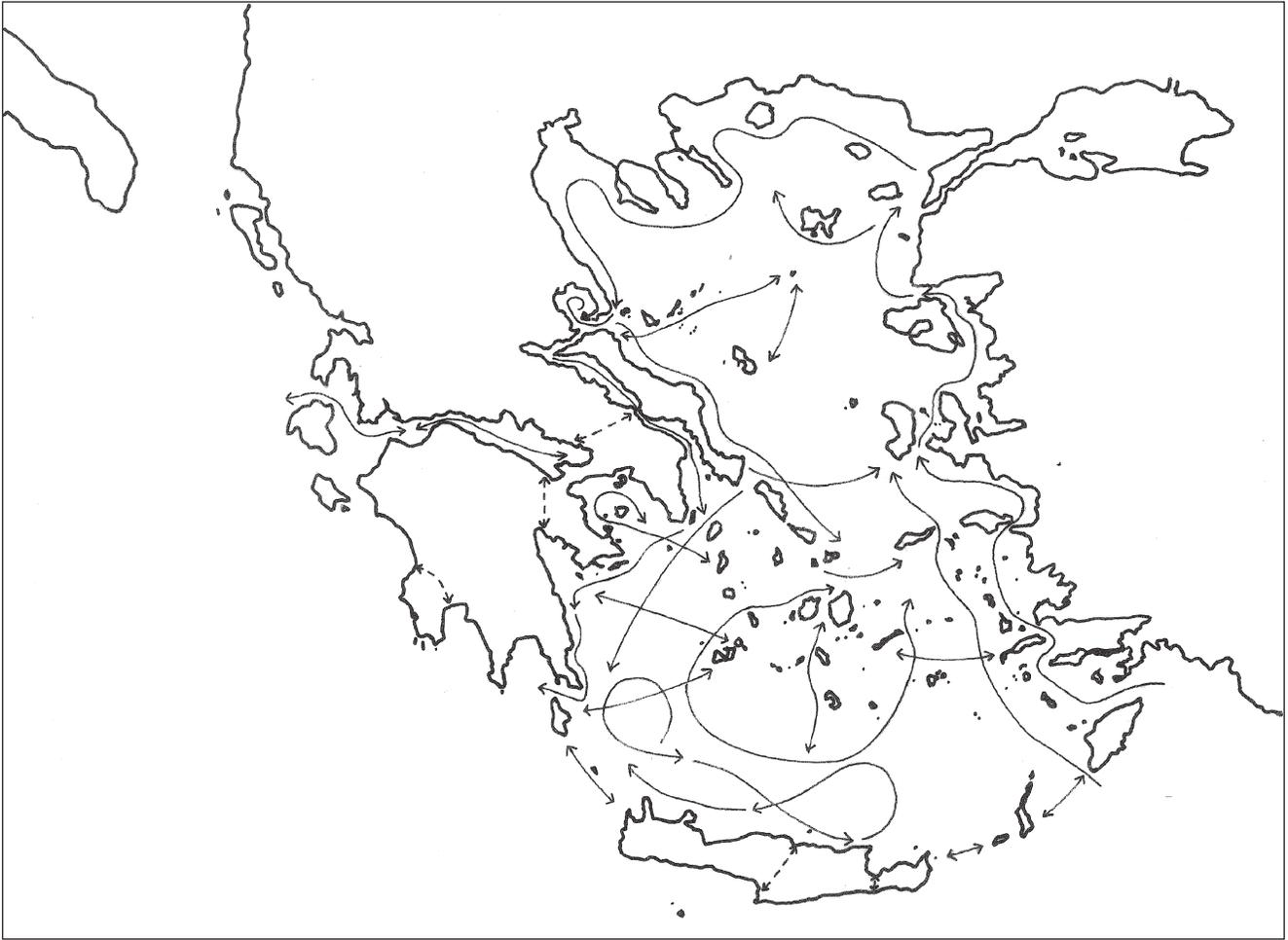


Figure 3.1 Principal maritime circuits and sea-routes in the Aegean (modified from Papageorgiou 2008 b, fig. 4) (ill. M. E. Alberti and G. Merlatti).

Lemnos has a pivot role in the area, being located at the crossroads of both north–south and east–west routes. Interactions between the eastern Aegean islands and Anatolian coasts were especially important (the ‘Upper Interface’).

The connection between the northern and southern circuits passed through Euboea, the northern Cyclades (Andros, Tinos and Mykonos), Ikaria and Samos.

In the southern Aegean, the most important and localized circuits link the southern Peloponnese with western Crete through Kythera, Attica with central Crete through the central Cyclades (‘Western String’, *i.e.* Davis 1979) and eastern Crete with the south-western Anatolian coasts through Kasos, Karpathos and Rhodes (‘Eastern String’, *i.e.* Niemeier 1984). Circuits centred on the central Cyclades are especially important and autonomous, with Keos, Thera and Amorgos as entry points. The ‘island bridges’ connecting the central Aegean and south-

western Anatolia (Ikaria and Samos, Amorgos and Kos, Karpathos and Rhodes) delimit the area of major interaction between Aegean and Anatolian societies, with important consequences on trading and cultural phenomena (‘Lower Interface’).

Exit routes from the Aegean go out from the Dardanelles to the Pontus and Danube, from Rhodes to Cyprus and the Levant and from western Crete through Messenia and the western Peloponnese to the Adriatic and the Ionian sea. The most external and far reaching route is the ‘long route’ connecting Cyprus, Rhodes, southern Crete and southern Sicily.

Other sea-routes and circuits of special importance are the Euboean Gulf, the Saronic Gulf, the Corinthian Gulf, the Gulf of Argos and the route connecting them through Corinthia and the Argolid and through Boeotia.

The location of resources is also fundamental. Globally, the Aegean contributed to the Mediterranean

trading system with typical Mediterranean products, such as oil (and derivative products), wine, sheep-wool (and derivatives) and purple-dye. Crucial for the economic and trading developments was the presence of metal ores and valuable stones in various Aegean locations: Laurion in Attica (copper and lead/silver), Siphnos (lead/silver and copper), Kythnos (copper), Melos (obsidian and andesite), Naxos (marble and emery), Paros (marble), Thera (andesite), Laconia (*rosso antico* and *lapis lazedaemonius*). With the possible exception of Laconia, all of these sources were already used in EBI, if not before. Along with maritime and geographical constraints, was this distribution of resources which shaped major trading routes and made the Laurion – ‘Western String’ – Crete connection so important.

Through history, trading circuits and geographical segmentation were crucial for local trajectories, strongly affecting the character and dynamics of each regional area. The geographical sectors and trading routes outlined above were one of the structural elements of the Aegean Bronze Age: each region had its own particular identity which developed according to constant local characteristics and constraints. Bronze Age Aegean history(ies) and culture(s) is in large part the history of the interaction of these regional identities and areas.

Internal/External factors and Staple/Wealth economies: elements for a trade system

Trading involvement and increasing complexity are strictly linked in the history of societies, as underlined in secondary state formation studies. An articulated trade system is the outcome of various trajectories followed by the involved societies, where a complex of internal and external factors coexist, combining elements of both staple and wealth economy: agricultural colonization of previous marginal lands or reorganization of the agricultural system; economic centralization and ‘mobilization’; social diversification (both horizontal and vertical); large-scale production (transformation of agro-pastoral products and/or craft activity); multi-level import-export systems, including specialized local productions, and hybridization, imitation and ‘international’ products (see below); transcultural phenomena (technology, craftwork, administration, architecture, language, ideology, religion, *etc.*) (e.g. Renfrew 1972; Cherry 1983; 1984; 1986; Sherratt and Sherratt 1991; Branigan 1995; 2001; Haggis 2002; Schoep 2002; 2006; Schoep and Knappett 2004; Watrous *et al.* 2004, 261–276; Whitelaw 2004 a; Whitely 2004; Parkinson and Galaty 2007 with references; Manning 2008).

In particular, the attested range of traded products generally includes:

- A. raw materials or primary products: mineral ore, valuable stones, cereals, resins, spices, wool, *etc.* In general terms, these constitute the bulk of the globally traded commodities, but are unfortunately the less traceable in the archaeological record.
- B. specialized products: transformed raw materials or primary products with added value (wine, oil, perfumes, textiles, purple-dye and metal ingots), medium-value/low bulk craft products (simple bronzes and especially decorated or specialized pottery, ideally made for a ‘middle-class’ or ‘sub-elite’) and high-value/low bulk manufactured products (jewellery, ivories, inlaid furniture, metal vases, *etc.*, ideally made for an elite target and typically used for ‘gift exchange’ transactions). In most cases, the products with added value are realized with imported material (metal, stone, ivory, *etc.*).

It should be stressed that imports can be both similar to and different from the products and goods locally available.

Connectivity: transculturation and hybridization

The review of the archaeological evidence suggests that both local products and imports are generally heavily influenced by the fashion or stylistic language of the period, thus testifying to various degrees of imitation, selection, modification, appropriation, hybridization and reverberation (see *infra*). One should expect to find side-by-side in the same place along the trade network, local products, fashionable imports, local products copying the imports, local products imitating, absorbing or modifying the external fashion/technology, products of hybrid character, and other imports from other places which themselves imitate the period’s fashion, *etc.*

It comes as no surprise that the most important and successful trade centres of the various periods often develop not only their own typical export classes, based on local tradition or local resources, but also specialized productions based on the fashion of the time, which generally reach a wide distribution and are one of the keys to their trading success: this is the case, for example, of the various Minoanizing and Mycenaeanizing wares of MBA, and of the LBIIIA–B ‘Cypro-Mycenaean’ and ‘Italo-Mycenaean’ pottery.⁶

The ultimate manifestation of these ‘globalizing’ tendencies are the ‘international’ classes of products, which are realized along similar stylistic and technological

patterns in various parts of the Mediterranean and are generally related to conspicuous consumption and prestige exchange, direct material manifestation of the elite 'brotherhood' and shared codes (and specialists): ivories, seals, metal vases, jewellery, precious weapons, etc.

In a broader sense, these are the material correlations of wider cultural phenomena generally affecting historical development: connectivity shapes the cultural change process. The successive transformations among societies or the rise of new culture identities result both from socio-economic factors and from complex dynamics of hybridization. This may seem to be an obvious statement, but, as far as the Bronze Age Aegean is concerned, it should be underlined that Cycladic identities and societies, Mycenaean polities, Early Minoan and 'Mycenaean' Crete are especially shaped by connectivity.

According to the successive scholarly trends of our times, these phenomena of cultural and social change have been largely debated and variously interpreted. As no exception to the rule, in recent years (e.g. Melas 1991; Schallin 1993; Broodbank 2004; Berg 2007; *Horizon 2008*; Macdonald *et al.* 2009, but see already Rutter 1979) and in the present work, transformations in the material assemblages are interpreted mainly as cultural phenomena, with no easily detectable political or social correlations, arising from a complex blending of local past traditions and new influences or fashions and varying from place to place: the emphasis is on particularities, continuity, hybridity and identity construction/negotiation, rather than on general, disruption and complete assimilation (see *infra* the discussion on Minoanization and *note 7*). It is commonly understood that the underlying element is the movement of people, other than ideas, and that the Aegean has been for centuries (and still is) a highly interconnected world, with phenomena of osmosis. Though real migrations are at present excluded from the scholarly debate, continuous fluxes of people are to be supposed at the basis of the evident connectivity and transculturality. And the effective relocation of small groups of people or the presence of *enclaves* well after the initial colonization of the region seems quite a logical correlation (e.g. Melas 2009; Warren 2009 with references; see also *note 7*). Traders, explorers, travellers, specialists, diplomats, soldiers, mercenaries and settlers made the Aegean what is was and is today.

However, it is clear that there is, for each period, a dominant fashion, a material cultural assemblage that spreads in the various Aegean areas, with different results each time. And this is the 'package' issued from the region which has in that particular phase

the strongest economy and the most developed trading means (see e.g. Sherratt and Sherratt 1991; 1998; Broodbank 2000; 2004; and especially Melas 2009). From the beginning of EBA, the Cyclades were the most active and trade involved societies, and thus the 'international' fashion was mainly Cycladic or Cycladizing. During EBIIIB, the important trading connection with western Anatolia gave an impulse to an Anatolianizing wave, mixed with the previous style. In the formative period of MBI–II, regionalism was the rule, with a conspicuous amount of interconnections, combinations and hybridization; however, the emerging power of palatial Crete fostered the progressive diffusion of Minoan and Minoanizing fashions, which became stronger and more widespread during the successive Neopalatial period (MBIII–LBI). The development of Mycenaean societies, on the other hand, contributed to the first popularity of Mycenaean elements already at the end of LBI, and then brought about the Mycenaeanization of the entire southern Aegean during LBII–III. While all of these phenomena related to the material culture can be considered chronologically limited and linked to the successive emergence of some regional power, they are however strictly connected to each other, and create a form of continuous osmosis, deeply underlying Aegean transformations. As a result, each new wave propagated more widely and consistently, until the almost pan-Aegean 'Mycenaean *koine*', and Aegean cultures acquired their own particular blend, different from those of other Mediterranean worlds.

Phases of trade system(s) patterns: EBA and MBA

The east–west network: Cycladization and the first glimpse of Levantinization (EBI and II)

Early Bronze Age trading systems has been widely investigated and will be therefore addressed only shortly here (e.g. Renfrew 1972; Barber 1987; *Poliichni 1997*; Broodbank 2000; Rambach 2000; Davis 2001; Rahmstorf 2006a; 2006b; Day and Doonan 2007; Broodbank and Kiriati 2007; *Horizon 2008*). During the EBA, sea travels were conducted by paddled canoes and longboats. Because of that, the Aegean was linked to Near Eastern civilizations mainly through western Anatolia and the eastern Aegean 'bridge of islands'. The Cyclades therefore played a central role in the intermediation between the Helladic Mainland and Anatolian coasts. Even with major changes throughout the period, as recalled above, the trading system appears to have been structured as a complex

network of interconnections between east and west (from Troy to Lerna), with a number of peer-ranked 'hubs' (each one commanding a defined and inhabited land- seascape), and an appendix leading to Crete, which is somehow separated from the rest of the Aegean and interacts with it at a different pace. Within the network, material culture (pottery, metallurgy, jewellery, weighing systems, *etc.*) is largely shared and develops along the same fashion patterns, which are strongly influenced by the Cycladic assemblages of various phases. Thus, the spreading of 'Cycladica' in the Aegean is represented by a wide range of imports, imitations, modifications, selections and hybridizations (*e.g.* Papadatos 2007; Pantelidou Gofa 2008).

The Cycladic network had some important bridge-heads both on the Mainland and in Crete (Fig. 3.2): settlements where the Cycladic culture is well represented along with local traditions both in settlement and funerary assemblages and which therefore can be viewed as ports of trade or gateway communities with an important nucleus of Cycladic residents and/or with strong ties with the Cycladic world. On the Mainland, these are situated at key-locations in Attica (where Laurion mines were already exploited), at Ayios Kosmas and Tsepi Marathonos, and Euboea, at Manika (close to northern sea-routes and Boeotian agricultural hinterland); in Crete, they are on the north coast, at the terminal of the central

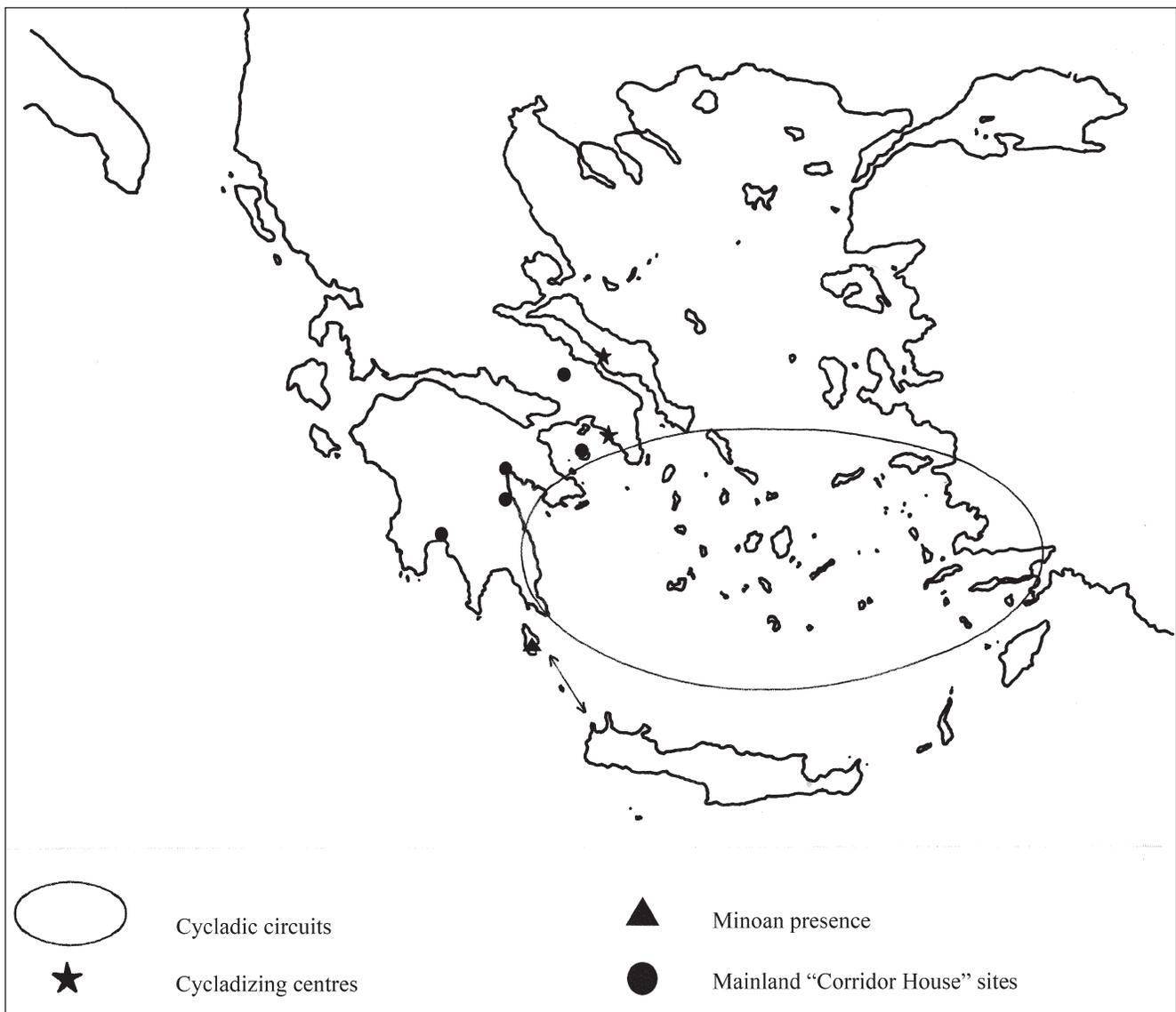


Figure 3.2 EBA. Mainland 'Corridor House' sites, Cycladizing sites and the Cycladic circuit (ill. M.E. Alberti and G. Merlatti).

Aegean network and close to the important and long-standing centre of Knossos (Poros Katsambas, Pyrgos Cave, Gouves), and towards the routes leading further east (Ayia Photia, which is the only example where Cycladic material is overwhelming) (Day and Doonan 2007; Dimopoulou-Rethemiotaki *et al.* 2007; Wilson *et al.* 2008; *Horizon* 2008).

On the Helladic Mainland, settlement expansion also in coastal locations points to an increased importance of trade involvement. Even if essentially agricultural-based, Early Helladic societies acted as powerful receptors and multipliers of the net, importing and exporting, and giving to the trade system one of its best *raison d'être*. The coastal and island location of many of the important sites is very notable: 'Corridor Houses' sites such as Akovitika (Messenia), Lerna (Argolid), Kolonna (Aegina), to which also Tiryns with the 'Rundbau' has to be added (Argolid), are strictly connected to maritime networks and to the Cycladic circuits and related 'ports of trade' (see especially the mirroring sites of Kolonna/Ayios Kosmas) (Fig. 3.2) (*e.g.* Forsén 1992; Rutter 2001 with references; Alram-Stern 2004; Wright 2004; Kouka 2008; Pullen 2008 with references).

On the other hand, Early Minoan (EM) Crete seems to have been more isolated, given its distance from the Anatolian coast and from other islands, and it took no part in the 'Eastern Mediterranean Interactive Spheres' of ECIIIB. Not surprisingly, the best evidence of trading contacts with the Levant and the rest of the Aegean comes from the north coast (Mochlos, especially during EMIIIB, and Knossos), while probable Egyptian influences can be detected on the south coasts (the Messara, Ayio Pharango valley, *etc.*), especially from the very end of the period; on the connecting route, mixed elements can be detected (Archanes) (*e.g.* Driessen 2001; Cunningham 2001; Watrous 2001; Day and Wilson 2002 with references; Haggis 2002; Cunningham and Driessen 2004; Schoep and Knappett 2004; Watrous *et al.* 2004; Whitelaw 2004a; Rahmstorf 2006a; 2006b; Broodbank and Kiriati 2007; Papadatos 2007; Betancourt 2008a; Carter 2008; Colburn 2008; Manning 2008; Phillips 2008; Wilson 2008).

A particular circuit was active since the beginning of this phase between the southern Peloponnese and western Crete *via* Kythera (Broodbank and Kiriati 2007).

Phases of development: EB I–II, EBIIA, EBIIIB

The south-Aegean trading system seems to be articulated in three phases during EB I–II, mostly following the transformations of the Cycladic circuits (Renfrew 1972; Barber 1987; Broodbank 2000; Broodbank and Kiriati 2007; *Horizon* 2008) (Fig. 3.3). In the EB I Advanced the

Cycladic network expands during the 'Kampos' period (ECI–II), with major centres in the Kouphounissia, and Cycladizing communities/ports of trade appearing on the Mainland and northern Crete. The second phase represents the classical 'International Spirit' phase (EBII Mature), with the typical 'Keros-Syros' assemblage (ECIIA) and the network of peer-ranked leading centres in key locations, from Troy to Akovitika (in the central Aegean, Ayia Irini II at Keos, Grotta at Naxos, Chalandriani at Syros, Daskaleio-Kavos at Keros and Skarkos at Ios are the most important communities). During this phase, Cretan Cycladizing centres are abandoned, with the exception of Poros, whose character, however, seems to change from a Cycladizing settlement/enclave to a Minoan port of trade (the port of Knossos) (Dimopoulou-Rethemiotaki *et al.* 2007; Wilson *et al.* 2008). This phenomenon has been connected to the progressive structuring of Minoan societies during EMIIA (Broodbank and Kiriati 2007). Interconnection reaches the apex during the third phase (EBII Late), with the increased involvement of south-western Anatolia: in the final phase of the period, a wider 'international package' was circulating through the 'Eastern Mediterranean Interactive Spheres' from Syria and Anatolia through the Cyclades to the Helladic Mainland, with articulated phenomena of imitations, selection and hybridization (Rahmstorf 2006a; 2006b; Psaraki 2007; Angelopoulou 2008 with references; Gale and Stos-Gale 2008 with references). Quite interestingly, Crete remains apart from these developments. It has been suggested that this apparent separation of Crete from the central Aegean circuits reflects a different approach adopted by Minoan elites, aiming at the direct procurement of resources with mining or trading expeditions, bypassing the islanders intermediation: the Minoan presence at Kythera, dating to this phase, can be hypothetically ascribed to this kind of approach (see *e.g.* Broodbank and Kiriati 2007; Carter 2004; 2008; Wilson 2008).

The entry of Crete (EBIII–MBI Early): the network is modified

This is a phase of major transformation throughout the Aegean, involving various areas and regions in different ways (*e.g.* Broodbank 2000; Rutter 2001; Manning 2008 with references; Wright 2008 with references). As for trade, it is the onset of the circuits and route system(s) which will last until the end of the Late Bronze Age. Among the elements contributing to the transformations there are climatic factors (some centuries of drought attested in eastern Africa and the eastern Mediterranean), whose consequences

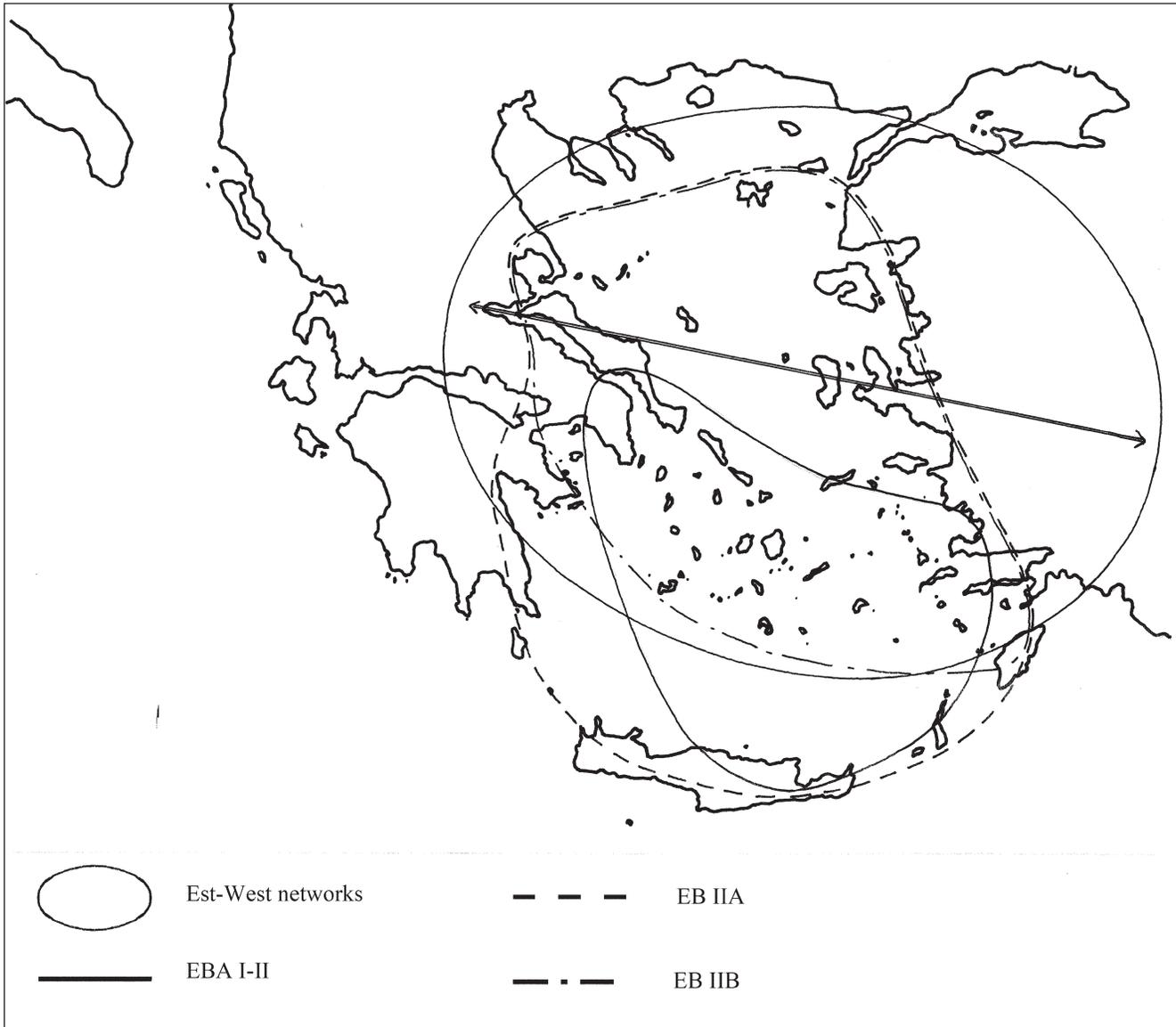


Figure 3.3 EBA. Variations of trade patterns within the E–W networks (modified from Broodbank 2000, fig. 106) (ill. M.E. Alberti and G. Merlatti).

probably varied conspicuously among the affected areas (Halstead and Frederick 2003; Watrous *et al.* 2004, 266–267; Moody 2005a; 2005b; 2009 with references; Rosen 2007; Rohling *et al.* 2009), and the increased effect of some technological innovations, such as the use of sailing boats in seafare and of donkeys for land transport, which completely changed the time and scale of transportation. In particular, sail boats brought late prepalatial Crete closer to the rest of the Aegean and the eastern Mediterranean (*e.g.* Broodbank 2000 with references; Brodie 2008).

The complete and not mediate linkage of Crete with the Aegean was a major component in the

scenario which was taking place in this phase, heavily conditioning successive developments. The trade network of peer-ranked hubs began to be disrupted, with a gravitational core taking progressive shape in its south, while new stronger links tie Crete with Kythera and the southern Peloponnese (Minoanizing material) (*e.g.* Broodbank 2000; Broodbank and Kiriatzi 2007).

At the beginning of the period, both the Mainland and islands endure a severe crisis. On the Mainland, the effects are stronger, but some sites continue and will constitute the centres of interconnections during Middle Helladic (MH) (Ayios Stephanos in Laconia,

Lerna in Argolid, Kolonna in Aegina, etc.) (e.g. Forsén 1992; Rutter 1995; 2001; Wright 2004 and 2008; Felten *et al.* 2007; Taylour and Janko 2008). Quite interestingly, the EHIII pottery assemblage seems to be a typically hybrid product, in various ways (and different areas) developing the combination of EH tradition and Anatolianizing features which characterized the late phase of EHIIIB (e.g. Rutter 1995; Psaraki 2007; Angelopoulou 2008 with references; Rambach 2008).

In the islands, the picture is more variable, but a major consequence is the general tendency towards nucleation, with one major centre growing up in the larger islands: a progressive phenomenon continuing into the MBA and probably fostered by the new transportation means (e.g. Phylakopi I.ii–iii). In this period the transition from the networked ‘hubs’ to a dendritic chain of a few large trading settlements takes place, with evidence of many coexisting strategies (Barber 1987; Broodbank 2000; Whitelaw 2004b; 2005 with references; Renfrew 2007).

Throughout Crete, after an initial phase of disruption, different trajectories of development are detectable in the large agricultural plains (conspicuous nucleation in major centres and first large buildings under the later palaces) and other areas (developing according to various patterns and a slower pace, especially north-eastern Crete) (e.g. Driessen 2001; Cunningham 2001; Watrous 2001; Cunningham and Driessen 2004; Watrous *et al.* 2004; Whitelaw 2004a; Manning 2008; Wilson 2008). The increasing evidence for contacts with the eastern Mediterranean and Egypt in the tombs of southern Crete in this phase should be emphasized: a sign of the possibilities open by the new transportation means and a foreshadowing of the future Cretan involvement in the ‘long route’ (e.g. Watrous 2001 with references; Colburn 2008 with references; Phillips 2008). Minoan Middle Minoan (MM) IA pottery begins to be documented in the Cyclades, attesting to the new trading deal (e.g. Nikolakopoulou 2007; 2009 with references, Nikolakopoulou *et al.* 2008). Agricultural development, climatic difficulties, increasing horizontal and vertical social complexity and competition, nucleation tendency, new trading scale and opportunities combine, in most recent studies, both long-lasting (*i.e. evolution*) and punctual (*i.e. revolution*) factors in the explanation of palatial state formation in particular areas of Crete (e.g. Renfrew 1972; Cherry 1983; 1984; 1986; Sherratt and Sherratt 1991; Branigan 1995; 2001; Haggis 2002; Schoep 2002; 2006; Schoep and Knappett 2004; Watrous *et al.* 2004, 261–276; Whitelaw 2004 a; Whitely 2004; Parkinson and Galaty 2007; Manning 2008).

Systems of S–N circuits (MBI–II). Regional patterns and the first dynamics of Minoanization. The increasing evidence for the ‘long route’

The Middle Bronze Age is a sort of a formative period, an intense laboratory, in which the premises of all following BA phases are defined: identities and politics emerge through reciprocal negotiation and intense interaction; local and regional powers establish their influence (e.g. Broodbank 2000; Watrous 2001; Rutter 2001; Felten *et al.* 2007; *Mesohelladika*). From a climatic point of view, from the beginning of MBA, a period of more favourable conditions and increased moisture seems to have taken hold; these will last, with some variations, until the first phases of the LBA, and constitute the background for a range of crucial developments, especially the intensification of economic activities in general, and agriculture in particular, in palatial Crete (Halstead and Frederick 2003; Watrous *et al.* 2004, 266–267; Moody 2005a; 2005b; 2009 with references; Rosen 2007; Rohling *et al.* 2009).

Contrasting trends

Two contrasting tendencies seem to coexist: on the one hand, there are strong regional patterns, based on coherent regional *foci*, which are the development of the previous peer-ranked hubs, but which now have a clearer geographic definition and increasing inequalities. In particular, the structuring of cultural identities and localized trading circuits can be detected in the following areas: central Mainland, north-eastern, southern and western Peloponnese, Aegina, Central Cyclades, southern Dodecanese, Crete, Pagasetic Gulf and Chalkidiki (e.g. Broodbank 2000; Watrous 2001; Rutter 2001; Felten *et al.* 2007; *Mesohelladika*). On the other hand, the increasing influence of proto-palatial Crete fosters the progressive structuring of three main south–north ‘dendritic’ circuits in the southern Aegean: the Crete – Kythera – southern Peloponnese route, the ‘Western String’ (connecting Crete to Attica through the central Cyclades) and the ‘Eastern String’ (connecting Crete to the Dodecanese through Kasos, Karpathos and Rhodes) (e.g. Broodbank 2000; 2004 with references) (Fig. 3.4). Crete is indeed now fully linked to the rest of the Aegean and to the Levant, and, with its impressive ecological, agricultural, demographic and social stock imposes itself as a major actor within the Aegean system. As a matter of fact, Crete acts as a ‘filter’ between the Aegean and the Mediterranean external connection (e.g. Sherratt and Sherratt 1991; Broodbank 2000; 2004).

Some major strategic options which emerge during this phase can be viewed as somehow connected to

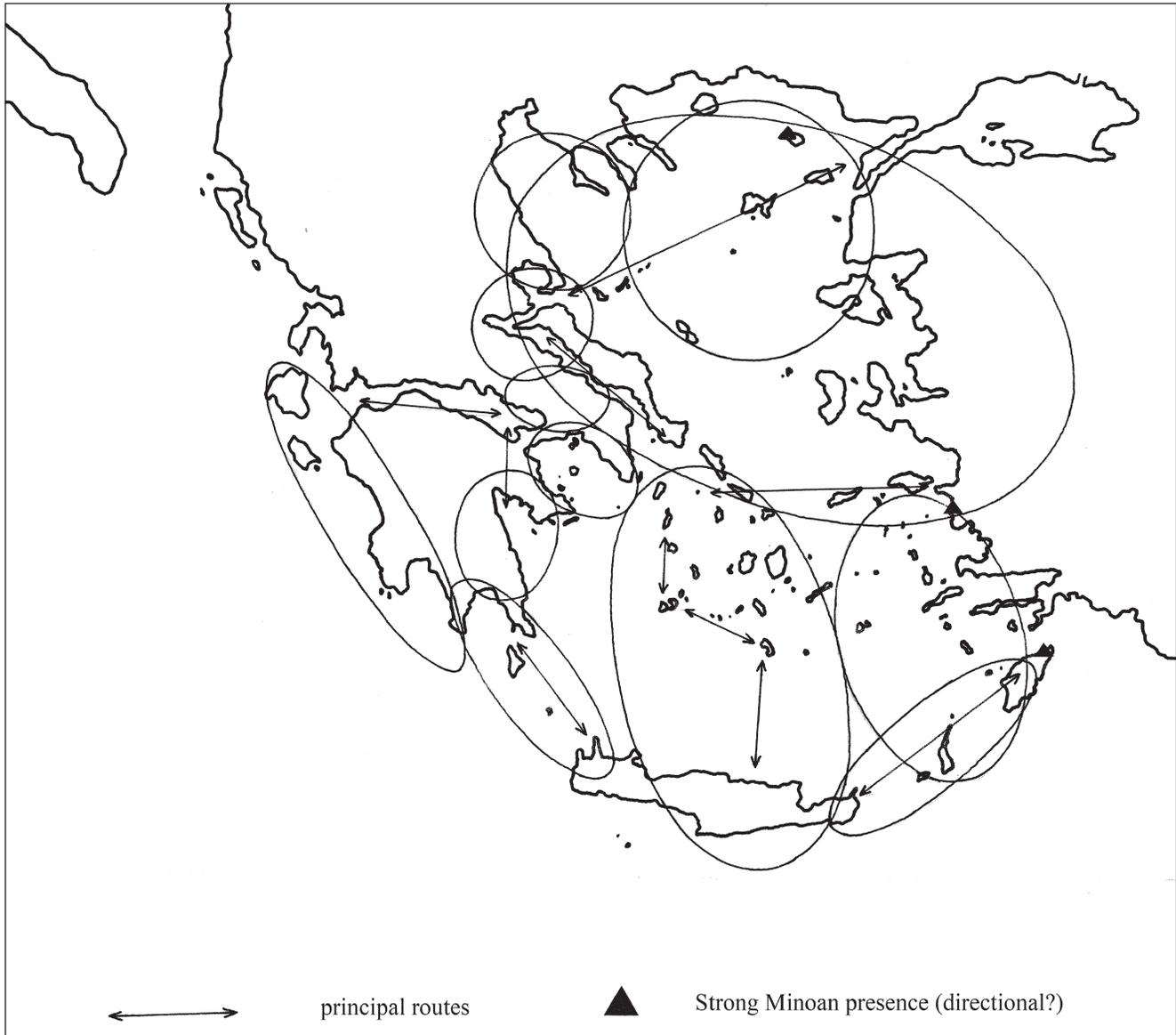


Figure 3.4 MBA. Principal circuits and routes in the Aegean: the N–S ‘dendritic system’ (ill. M.E. Alberti and G. Merlatti).

the existence of this gravitational core of the system as well as to the new increased Mediterranean projection: that is, the increasing importance of the Laurion mines, with, as the same time, the decreasing importance of the Cycladic ores, as well as the general adoption of bronze metallurgy, which implies a structural link with the Mediterranean routes for the supply of tin (e.g. Day and Doonan 2007; Gale and Stos-Gale 2008 with references).

Minoan influence seems to be a gradual, multifaceted and highly variable phenomenon, attested earlier and in a stronger manner at Kythera, in the southern Cyclades (*i.e.* MMIA Minoan pottery at

Akrotiri, Thera) as well as on Kasos and Karpathos; it seems to start later and to be more variegated in the northern (Ayia Irini, Keos) and western (Phylakopi, Melos) Cyclades, and even more diverse and variable in the eastern Aegean.⁷ Indeed, most of the phenomena traditionally linked to the so-called ‘Minoanization’ can be traced back to this phase, including the possible presence, among the wide range of contact evidence, of more directional and substantial Minoan initiatives directed towards strategic locations, especially at the articulation points of the sea-circuits: Kythera, Trianda on Rhodes, Miletus in Caria and Samothrace (e.g. Warren 2009). The rise of the Aeginetan power

is due both to the strategic location of the island, at the intersection of various circuits, and to the trade-oriented economy of its society, which produces and imitates specialized pottery for exportation on a considerable scale (e.g. Niemeier 1995; Lindblom 2001; Felten 2009 with references). If ever a core-periphery-margin perspective had to be adopted for the Aegean, it is in this phase: Crete would be the core, the Cyclades and Aegina dynamic peripheries, and the Mainland areas a highly differentiated margin (e.g. Sherratt and Sherratt 1991, Sherratt 1993).

On the Mediterranean side, relationships with Egypt and Levant become increasingly evident: the mentions of *Kaptara/Kaphtor* in Near Eastern sources of the period (especially Mari, end of the XIX century and XVIII century BCE), the distribution of Minoan and Minoanizing artefacts overseas as well as of Near-Eastern imports in the Aegean underline both the role of 'filter' played now by Crete and the existence of a 'long route' from Syria to Cyprus, Crete and Egypt. Minoan *fresco* techniques and iconography are widespread within the eastern Mediterranean, dictating a new fashion code, variously adopted and declined by local elites and artists (e.g. Alalakh, Mari, Tell Kabri): a significant transcultural (and hybridization) phenomenon, probably based to some extent on the presence of travelling artisans.⁸

Pottery production and trade activities

These two contrasting trends – regional dynamics and increasing Minoan influence – are clearly illustrated by pottery production and distribution (e.g. Zerner 1986; 1993; Zerner *et al.* 1993; Nordquist 1995; Lindblom 2001; Felten *et al.* 2007; Rutter 2007; *Mesohelladika*). Aegean MB fine wares can be roughly grouped in three major classes: various types of interconnected Dark Burnished and Matt Painted Wares are produced in the Mainland, at Aegina and in the Cyclades (with Mainland Matt-Painted possibly being of later date than the others and inspired by the Aeginetan and Cycladic influences), while the Minoan production follows its own path, and is known outside of Crete especially for the Kamares and derived types. At the same time, local variability is an important factor: each major site has its own particular production in the frame of the most popular classes. Moreover, and this is extraordinary important for the present discussion, various sites are often imitating the particular productions of other sites or regions, especially the central Mainland Grey Minyan, the Cycladic Cycladic White, the Aeginetan Matt-Painted and the Minoan Kamares, thus leading to a *plethora* of Minyanising and Minoanizing productions (see Warren in Felten *et al.* 2007, 361; Sarri 2010b; Spencer

2010), of which the Minoanizing classes of Aegina or the Red Lustrous from southern Peloponnese/Kythera are only the most famous examples (e.g. Felten *et al.* 2007 with references; Taylour and Janko 2008). Major centres are apparently engaged in a well-established pottery production, on considerable scale, intended both for local consumption and external trade: the appearance of potters' mark systems at various sites (Ayia Irini, Phylakopi, Kolonna and Malia; potters' marks are present also on the Red Lustrous production) reflects the necessary repercussions on the work-organization (e.g. Overbeck and Crego 2008; Renfrew 2007; Lindblom 2001; Poursat 2001; Poursat and Knappett 2005). Without surprise, the most important production sites are located at the interface between southern Aegean and Helladic Mainland (Aegina and Red Lustrous production area): a fact which underlines the intensity of the economic interaction in the fringe and the vitality of the Mainland markets (Zerner 1993). In this framework, Minoanizing productions appear more as one market option among a variegated range of products than a mark of cultural influence. All these classes are then widely and intensively exchanged, both within and outside the closer regional circuits: this is clear for example in the central Cyclades, where the evidence from various sites shows trade relations at a local level (pottery exchanged between Melos, Thera, Naxos, Thera, *etc.*) as well as through a wider Aegean area (imports from the Mainland, Aegina, Crete and the Dodecanese) (e.g. Crego 2007; Nikolakopoulou 2007; Renfrew 2007). The same is true for other important sites, such as Lerna and Kolonna (Aegina) (e.g. Zerner 1993; Felten 2007; Gauß and Smetana 2010).

Crete and the 'Eastern String'

In Crete, the protopalatial era is marked by an intense marginal colonization, which sustains the economic growth of the Minoan societies: palatial centres in the largest agricultural plains (Knossos, Phaistos and Malia) and minor polities of less clear-cut definition in the east (Gournia, Petras, Palaikastro and Kato Zakros). An extended route system constitutes the back-bone of the development: in the far east it is specially connected to the exploitation and control of particular environmental niches ('watchtower' system) (e.g. Cunningham 2001; Driessen 2001; Watrous 2001; Schoep 2002; *Monuments of Minos*; Cunningham and Driessen 2004).

The three peer-ranked First Palaces control a limited territory and centralize specialized manufactures: textiles at Knossos (e.g. more than 400 loom-weights from the *Loomweights Basements*, MMIIB), seals, pottery and metalworking at Malia (*Quartier Mu*, MMII),

pottery, textiles and metalworking at Phaistos (West Court and Palace West Wing, MMII). Large-scale purple-dye production is firstly attested in this period, especially in eastern Crete (at Palaikastro, Kouphounissi and other areas, but also Kommos), and it is possibly connected to a textile industry intended for exportation. Storage facilities and containers, which are abundantly attested in the palaces and other types of sites, point to the transformation of agricultural products such as cereals, wine, oil (and possibly also some derived, such as perfumes – a probable unguentary workshop is attested at Chamalevri in the immediate previous period, MMIA). The specialized production of the ‘Kamares’ pottery and connected types (especially at Knossos and Phaistos) provides an important medium-prestige category of goods, intended both for internal and external circulation. New administrative tools appear: various sealing systems, as well as the Hieroglyphic and ‘Proto-Linear A’ writing systems. At Malia (MMII), weighing standards seem to combine both Levantine and new, Minoan units (Alberti 2009 with references). Elite burials are regularly attested at the developing settlements: Knossos, Archanes, Malia, Gournia and in the Messara.

In strict connection with Cretan developments, in the islands of Kasos and Karpathos a wave of agricultural colonization and a new settlement pattern emerge, and will become more visible during LBI (Melas 1985; 2009; Platon and Karantzali 2003; Broodbank 2004; Warren 2009; Pentedeka *et al.* 2010).

Cyclades

In the major islands of the ‘Western String’, the previously started general reorganization of the settlement continues (*e.g.* Barber 1987; *TAW III*; Broodbank 2000; Davis 2001; Berg 2007; Sotirakopoulou 2010), with a tendency towards nucleation only in few major centres or towns, which increase their extension, complexity, as well as the range and intensity of their economic activities, although not at the same pace: Ayia Irini on Keos (refounded only in full MBA, phases IV and V early; *e.g.* Cummer and Schofield 1983; Davis 1986; Overbeck 1989; Crego 2007; Overbeck 2007; Overbeck and Crego 2008; Crego 2010), Phylakopi on Melos (the developing City II; *e.g.* Whitelaw 2004b; 2005; Renfrew 2007 with references; Brodie *et al.* 2008; Brodie 2009), Akrotiri on Thera (apparently founded or expanded at the end of the EBA on the location of a EB necropolis; *e.g.* Nikolakopoulou 2007; Doumas 2008; Knappett and Nikolakopoulou 2008; Nikolakopoulou *et al.* 2008; Nikolakopoulou 2009) and Paroikia on Paros. Minor settlements in the same islands are also present, but they are far less numerous than during the previous phases. The towns, which are important

‘knots’ in the ‘string’, centralize various manufactures: pottery production (the famous Cycladic White and related classes and the Dark Burnished in their local variations) and metallurgy (lead, silver and copper from Laurion) are the most widely attested activities. The production and exchange of large barrel-jars between the islands point to an economic intensification and to an increased importance for the trade of bulk commodities. The social reorganization, with a new articulation and a possible hierarchical structure, implied by these phenomena is also attested by the evidence for some elite burials in some place (*e.g.* Ayia Irini).

In this period of intense interactions within the Aegean, islands material cultures develop remodelling external influences within their own traditional heritage, giving birth to a range of parented but different local assemblages, in continuous transformation and redefinition (*e.g.* recently Berg 2007). Especially thanks to the recent deep soundings at Akrotiri, it is now clear how the inception of Minoan material influence is a gradual and not equally distributed phenomenon, and cannot be directly linked to the social and settlement changes in the islands (*e.g.* Whitelaw 2005; Nikolakopoulou 2007; 2009 with references; see above the discussion and references for Minoanization).

Aegina

On the north-west part of the southern Aegean, the Aeginetan circuit in the Saronic Gulf and beyond plays a key-role, both as motor of economic intensification in the local and surrounding areas and as mediator among Cycladic, Peloponnesian and Mainland circuits. Aegina, with the multi-stratified and fortified site of Kolonna (VII–IX), is in this phase a real maritime and trading power, based both on the strategic geographical position of the island and its intermediation activities and export-oriented production (*e.g.* Walter and Felten 1981; Kilian Dirlmeier 1995; 1997; Niemeier 1995; Lindblom 2001; Felten 2007; 2009; Gauß and Smetana 2010). Just as the other major centres of the period, Kolonna has imports from all the Aegean area (including typical or regional specialized pottery and various imitations-hybridization products) and produces a large range of pottery (including the so called ‘Gold Mica Ware’, with specialized utilitarian vessels, and pottery of Minoan and Cycladic type; *e.g.* Hiller 1993; Zerner 1993; Nordquist 1995; Lindblom 2001; Rutter 2001; Gauß and Smetana 2007 and 2010). Aeginetan wares were widely distributed on the coastal sites of the Helladic Mainland and also in the islands and Crete, contributing to the circulation of models and fashions. Aeginetan Matt-Painted ware is obviously linked to the Cycladic Matt-Painted classes

and has also a strong influence on the Helladic Matt-Painted, especially in the following phases (MBIII and LBI). Pottery analyses suggest that at Kolonna the production was almost large-scale organized, with specialized workshops, potter's marks, *etc.*, characteristics which points to an export-oriented production (Lindblom 2001). The presence of large transport and storage containers, the 'barrel jars', some of them bearing a depiction of boats, shows the importance of sea-fare and trading activities for the island, along with the possibility of large-scale storage practices, probable 'mobilization' phenomena and hypothetical riding and war practices. The existence of an elite burial ('Shaft-Grave') at the entrance of Kolonna and of a 'central' building (*Großsteinbau*) in the town (phase IX) gives a glimpse on social dynamics and phenomena of wealth concentration which were taking place in the island (MHII Middle or Late); these phenomena anticipated, and are somehow connected to, similar developments in the Mainland during the following periods (MBIII and LBI).

Kythera and the southern Peloponnese

In this period, the link between these two areas becomes stronger, with some typical cultural traits developing in the region from the blending of regional Helladic and Minoan heritages (see *e.g.* the evidence from Ayios Stephanos and Geraki, Laconia), such as the production of Red Lustrous (also known as Lustrous Decorated) and related wares, which circulate then in the rest of the western Aegean (*e.g.* Taylour and Janko 2008; Crouwel 2010; Hitchcock and Chapin 2010). However, during this phase the circuit remains substantially separated from the Aeginetan – Cycladic sphere. The local Helladic tradition is seemingly quite different from what is known from the rest of the Helladic Mainland (especially in comparison with the Argolid, Attica and Boeotia). According to most recent research, Kythera (with Antikythera), known since a long time as the most Minoanized area out of Crete, is now to be substantially considered as part of the Minoan world; its material culture develops its own character within the range of various regional Minoan identities (*e.g.* Bevan 2002; Bevan *et al.* 2002; Broodbank 2004; Broodbank and Kiriatzi 2007; Pentedeka *et al.* 2010; Kiriatzi 2010). In this period, the area of Kastri is the only one inhabited, while the rest of the island, where during the previous phase local Helladic materials were attested along the Minoan ones, is now almost deserted: in this case it is not easy to disentangle ethnic dialectics from a general trend to settlement nucleation (*e.g.* Broodbank 2004 with references; Broodbank and Kiriatzi 2007).

Southern and central Mainland

The early and central phases of MH mark the maximum level of depopulation in the Mainland and the first new steps towards a demographic increase. As usual, in the various areas material evidence illustrates complex dialectics between regional and external elements: different regional identities are progressively shaped through time and space, especially in Boeotia, Attica, Argolid and Laconia (*e.g.* Rutter 2001; Wright 2004; 2008; Voutsaki 2005; 2010; Felten *et al.* 2007; Taylour and Janko 2008; Bintliff 2010; Crouwel 2010; Philippa-Touchais 2010; Wright 2010; Zavadil 2010).

The Argolid seems to have a special place, being a connecting region between southern Peloponnese, the Aeginetan circuits and central Mainland, as attested by the extraordinary import-export balance from Lerna (phase V; *e.g.* Zerner 1986; 1988; 1993; Lindblom 2001) and Asine (Nordquist 1987 with references; Wells 2002). Some sites in central Mainland and especially in Boeotia (*e.g.* Orchomenos) are important pottery production centres: they constitute the core of the fashionable 'true' Grey Minyan wares development area (*e.g.* Sarri 2010a; 2010b). In the late MHII period, a first settlement hierarchy is apparently in place in many regions, with nucleation around some 'central places' (*e.g.* Lerna, Argos and Asine in Argolid). Some elite burials in tumuli are perhaps attested in this late phase (*e.g.* Kilian Dirlmeier 1997), but their chronology is not certain and they should more probably be dated to a later period (*i.e.* MHIII, Voutsaki 2005).

South-eastern Aegean ('Lower Interface')

In the eastern Aegean ('Lower and Upper Interface') as well new identities are shaped by the local, regional and inter-regional interactions. The progress of excavations and studies in Rhodes, Miletus, Iasos and Kos indicates that in the MBA local, Anatolianizing, Cycladic and Minoan features were already been blended, including important site variations (*e.g.* Mee 1982; 1998; Dietz and Papachristodoulou 1988; *Emporia*; Macdonald *et al.* 2009). Exchange on local and regional scale has obviously the best part in local interactions. Minoan presence once again seems to follow a strategic and directional approach: at the pivot-points of the south-eastern circuit, both Trianda on Rhodes (*e.g.* Girella 2005 with references; Marketou 2009 with references) and Miletus in Caria (*e.g.* Niemeier and Niemeier 1997; Kaiser 2005; 2009; Niemeier 2005; Raymond 2005; 2009) show a strong Minoan cultural component. It should be stressed, however, that the pottery and domestic assemblages from Trianda and Miletus reveal articulated phenomena of transculturation with strong local roots, which can in no way be mechanically reduced to the Minoan presence. In other

sites of the area, Minoan elements are at the moment less prominent and possibly due, at least in part, to secondary interactions (e.g. Warren 2009).

North-eastern Aegean ('Upper Interface')

In the major sites of the Pagasetic Gulf, the most fashionable products from central Mainland (Gray Minyan and Matt-Painted) and southern Aegean (Aeginetan wares) circulate, leading to the local production of similar classes, widely distributed in the area: the best known is the so-called 'Magnesia Polychrome class', a matt-painted polychrome ware inspired by the imported southern pottery, which has been found so far as Koukonisi (Lemnos) (e.g. *Poliochni* 1997; Maran 2007; Collins *et al.* 2008–2010; Macdonald *et al.* 2009; Dakoronia 2010). Settlement patterns around the Pagasetic Gulf point to the existence of a network of emerging sites (Pefkasia Magoula, Iolkos and Velestino), apparently without a 'central' one (e.g. Maran 2007; Dakoronia 2010). Parallel phenomena of focused importations and local imitations are attested in the Chalkidiki, where some sites apparently start a medium-scale production of purple-dye (e.g. Horejs 2007; Veropoulidou 2008; Psaraki and Andreou 2010; *Mesohelladika*). Further east, in western Anatolia, mutual interactions between the parallel potting traditions of the established Aegean Dark Burnished wares and the developing Anatolian Grey wares are particularly strong in this phase, with some Aegean-related shapes appearing within the Anatolian repertoire in coastal areas (e.g. Pavúk 2005; 2007; 2010).

Anyway, in this 'Upper Interface' relationships with the southern Aegean are obviously not so strong as they are in the 'Lower Interface', and they remain somehow indirect. Similar dynamics of interaction and hybridization do occur, both relating to local productions and pattern of circulation and southern influences (from the 'Lower Interface' and central Aegean). The island of Lemnos plays a pivotal role in the area, being connected to both north–south and east–west routes, as the rich and multiform evidence from Koukonisi points out (including traces of metallurgical activities) (*i.e.* Boulotis 1997; 2009; 2010). An exception is possibly represented by Samothrace, where a particular Minoan presence has been detected, including not only pottery but also some objects related to measurement (*i.e.* a balance weight) and administrative activities (*i.e.* roundels and nodules) and metallurgical debris (*i.e.* Matsas 1991; 1995; 2009). This could point towards the existence of an organized Minoan outpost, possibly connected to the exploitation of the metallic ores of the area (which is however not attested archaeologically). Such evidence would thus suggest the existence of some Minoan strategic directional initiatives in the

framework of more nuanced and multi-faceted trading and exploring activities (e.g. Matsas 1991; 2009).

Following developments: Minoanization, Mycenaeanization and northern shift

In general terms, in the following phases the major trends of mature MBA develop, giving way to a more integrated and less regionalized system, where the leading economic and cultural traits are represented by Neopalatial Crete and Minoanization phenomena for MBIII–LBI (e.g. *BAT*; Dietz 1998; Graziadio 1998; Mountjoy and Ponting 2000; *Emporia*; Felten *et al.* 2007; *Horizon* 2008; Macdonald *et al.* 2009; see also above, on Minoanization) and palatial Mycenaean Mainland polities and Mycenaeanization for LBII–IIIB (e.g. *TMM*; *BAT*; Schallin 1993; Cline 1994; 2007; Mountjoy 1998; 2008; Sherratt 1998; 1999; 2001; Georgiadis 2003; 2009; *Emporia*; D'Agata and Moody 2005; Rutter 2006; Langohr 2009). The pattern of trade-circuits is substantially the same as in the MBA. During the Neopalatial period, along with the increasing weight of Crete to one extremity (reinforcing the 'dendritic' aspects of the network), Helladic pole(s) develop on the other one. With the advanced Mycenaean palatial era (LBIIB), the core of the trading system moves to Mainland (e.g. Cline 1994; 2007; Rutter 2006), followed by a possible northern shift of trading routes in the last part of the period (end of LBIIB2) and the beginning of the post-palatial phase (LBIIC Early) (e.g. Sherratt 2001; Rutter 2006; Borgna 2009; Moschos 2009 with references). Some major changes are detectable in LBIIC Middle, when the general structure of the main trading routes seemingly change definitely from a north–south to a west–east direction (e.g. Mountjoy 1998; Deger-Jalkotzy and Zavadil 2003; 2007; Crielaard 2006; Deger-Jalkotzy and Lemos 2006; Dickinson 2006a; 2006 b; Thomatos 2006; 2007; Bachhuber and Vlachopoulos 2008; Roberts 2009; Borgna and Càssola Guida 2009; Deger-Jalkotzy and Bächle 2009).

On the wider Mediterranean area, eastern Mediterranean economic system(s) reach(es) its maximum extension and intensification during LBA, strongly interfacing the Central Mediterranean and European world. But these phases will be the object of other contributions.

It seems clear that the basic structure of regional identities and interactions of the II millennium BCE in the Aegean was formed during the MBA: trading contacts and hybridization phenomena had large part in the process. Dialectics between local socio-economic structures and traditions and external economic inputs and cultural innovations were at the base of

identities definition and continuous renovation and transformation.

Geographical constraints and resources distribution were also determinant for the regional trajectories, as it was the case of the 'Western String', Kythera or Samothrace. The economic reorganization attested in some areas (Crete, Cyclades and Aegina), with the development of intermediation and export-oriented activities, is a fundamental step in the structuration of Aegean societies.

Aegean history is a history of interactions and contaminations in a definite land and seascape, and MBA represents a crucial moment of this history.

Notes

- 1 I will adopt a South Aegean-centered point of view. For the sake of simplicity, all relative chronologies have been translated into Aegean terms, unless not otherwise stated. Given the broad topic being developed in the present contribution, in many cases preference is given to more recent bibliography, where references to previous works can be found. My warmest thanks to Teresa Hancock Vitale, Giuliano Merlatti, Françoise Rougemont and Serena Sabatini for their help during the last phases of redaction of the present contribution.
- 2 MBA and LBA Aegean and Mediterranean trade system: *TMM*; *TAW III*; *Thalassa*; *BAT*; Oates 1993; Cline 1994; Davies and Schofield 1995; Cline and Harris-Cline 1998; *Eastern Mediterranean* procc; *Simposio*; Kriti-Aigypso; Pare 2000; *Ploes*; Stampolidis and Yannikouri 2004; *Emporia*; Niemeier 1998; Knapp 1990; 1991; 1993; Melas 1991; Sherratt and Sherratt 1991; 1998; Wiener 1991; Rehak 1998; Sherratt 1998; 1999; 2001; Parkinson and Galaty 2007; Betancourt 2008 b; Davis 2008; Højen Sørensen 2009; *Mesohelladika*.
- 3 See especially Iacono, Kneisel, Papadimitriou and Kriga and Sabatini, this volume, with detailed bibliography. See *endnote* 2 and the following: Renfrew 1972; Cherry 1983; 1984; 1986; Sherratt and Sherratt 1991; Yoffee 1993; Barrett and Halstead 2004 (especially Whitelaw 2004a); Watrous *et al.* 2004; Whitely 2004; Parkinson and Galaty 2007. Issues from post-colonial studies, such as hybridity and the 'third space' have only recently entered the main stream of Aegean scholarship: see Berg 2007; Papadatos 2007; Pavúk 2007; Psaraki 2007; Knapp 2008; Langohr 2009 (but see already Mountjoy 1998).
- 4 'Deconstruction' seems the *mot d'ordre*. See e.g. Broodbank 2004; Schoep and Knappett 2004; Whitelaw 2004a; Berg 2007; Davis and Gorogianni 2008; Manning 2008. This is also an outcome of the development of landscape, palaeoenvironmental and archaeometric studies, which added substance and depth to the previous historical reconstruction.
- 5 Agouridis 1997; Papageorgiou 1997; 2008a; 2008b. See also Broodbank 2000; Sherratt 2001; Broodbank and Kiriati 2007; Davis 2008. The terms 'Upper' and 'Lower Interface', with reference to an east Aegean–western Anatolia Interface, have been used by Penelope Mountjoy (1998) to define phenomena of the Mycenaean period, but can be usefully employed also for other phases, to individuate these areas and their various local systems as different from the rest of the Aegean and underline patterns of interaction between Aegean societies and Anatolian world. The same is true for the terms 'Western String' (Davis 1979), 'Eastern String' (Niemeier 1984) and 'Northern Crescent' (Boulotis 2009), originally meant to identify dynamics of the late MBA–early LBA.
- 6 I would like to emphasize the last point, the production for exportation of 'international' or external success products: it is the mark of a strongly market-oriented economy and the result of a complex intercultural phenomenon. It also indicates where real economic entrepreneurship and commercial initiative were located in each phase.
- 7 Minoanization: Branigan 1981; *MTMR*; Wiener 1984; 1990; Melas 1988; 1991; Davis and Cherry 1990; Broodbank 2004 with previous bibliography; Whitelaw 2004b; 2005; Knappett and Nikolakopoulou 2005; Niemeier 2005; 2009; Berg 2007; Broodbank and Kiriati 2007; Davis 2008; Davis and Gorogianni 2008; Macdonald *et al.* 2009; Warren 2009; Cadogan and Kopaka 2010; Van de Moortel 2010.
- 8 See *note* 2. See also: Kemp and Merrillees 1980; Wiener 1991; Betancourt 1998; Watrous 1998; Carter and Kilikoglou 2007; Phillips 2008; Barrett 2009; Højen Sørensen 2009. Minoanizing frescoes: Niemeier 1991; Niemeier and Niemeier 1998; Brysbaert 2008.

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