NEW PERSPECTIVES ON THE BRONZE AGE

PROCEEDINGS OF THE 13TH NORDIC BRONZE AGE SYMPOSIUM HELD IN GOTHENBURG 9TH TO 13TH JUNE 2015

edited by

Sophie Bergerbrant and Anna Wessman
Preface

I wish to express my sincere gratitude to all who participated in the 13th Nordic Bronze Age symposium. Thank you for attending the conference, for presenting excellent papers and for asking stimulating questions and sharing a wealth of specialist knowledge, all of which led to a successful, and memorable, conference. I am especially grateful to the session organisers for leading interesting sessions with lively discussions. I am also grateful to Johan Ling for organising the excursion to Tanum on the last day, and to Anna Wessman for leading the excursion to the so-called Bronze Age Strait. In addition, heartfelt thanks must also go to GAST, the student society, and to the student helpers who volunteered during the symposium.

A further round of thanks must go to the contributors to this volume, both for taking the time to write and revise the articles, and for having patience with the numerous small questions that always arise in finalising an edited volume. I would also like to thank my co-editor, Anna Wessman, who assisted until the start of her maternity leave in April 2016. Thanks are also due to Kristin Bornholdt Collins for assisting with matters of language and in the task of adopting the style guidelines of the publisher, and to Rich Potter for setting the volume. I am also grateful to Archaeopress for showing interest when I approached them about publishing the volume.

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Gothenburg, March 2017

Sophie Bergerbrant
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Nordic-Mediterranean relations in the second millennium BC

Serena Sabatini and Lene Melheim

Introduction

When we started planning this session proposal it was our intention to provide a forum in which to discuss new results and perspectives on the very old question of long-distance connections and exchange throughout Europe and the Mediterranean. Participants were asked to first consider provenance analysis of both raw materials and manufactured goods as a means to shed light on mobility and connectivity between Bronze Age societies. Secondly, they were asked to explore the implications of long-distance connectivity at both a local and regional level. The call was well received, resulting in a series of very interesting papers followed by lively discussion in a crowded room at the Bronze Age Symposium in Gothenburg.

Indeed, a discussion about contacts between Scandinavia and the Mediterranean is nothing new in European archaeology; pages and pages have been written on the issue since the pioneering works of Oscar Montelius (1843–1921; 1922, 1986). The theme is far from being exhausted, though; on the contrary, new and refined methodological and theoretical tools allow us to approach this issue from new and sometimes surprising angles.

For a very long time archaeology was bound to the ‘formal’ characteristics of material culture. One could say that typological and decorative patterns provided the main basis for scholars to work out their assumptions on the characteristics of international exchanges and contacts. And, indeed, a number of seminal chronological-typological studies and broad surveys provide an invaluable foundation for any further investigations into this topic (e.g. Aner 1962; Baudou 1960; Herner 1989; Harding 2000; Jacob-Friesen 1967; Jensen 1997, 2002; Kaal 1998; Kristiansen 1998; Larsson 1997; Pydyn 1999; Sherratt 1993; Sherratt and Sherratt 1991; Sprockhoff 1956; Thrane 1975; Vandkilde 1996). Subsequently, several groundbreaking studies appeared in which archaeological methods were applied to test the origin of metals (e.g. Cullberg 1968; Gale 1989; Junghans et al. 1968a, 1968b, 1968c, 1974; Krause 2003; Liversage 2000; Stos-Gale and Gale 2009). In recent years, innovative approaches and advances in science have provided yet more opportunities for testing the provenance of raw materials and humans, reinvigorating the discourse and sparking a fresh interest in the subject (e.g. Allentoft et al. 2015; Frei et al. 2015; Haak et al. 2015; McKinley et al. 2014; Ling et al. 2014; Mukherjee et al. 2008; Murillo-Baroso et al. 2012; Nessel et al. 2016; Varberg et al. 2015, 2016).

It seems that the time has come to explore and develop new theoretical perspectives and interpretative models in order to utilise new results and to investigate the various social and cultural aspects characterising long-distance exchange patterns (e.g. Alberti and Sabatini eds. 2013; Anfinset and Wrighglesworth eds. 2012; Earle and Kristiansen eds. 2010; Earle et al. 2015; Koch 2013; Kristiansen and Larsson 2005; Kristiansen and Schukowska-Ducke 2015; Melheim et al. eds. 2016; Monroe 2011; Vandkilde 2014; 2016; Vandkilde et al. 2015).

Recent papers (Kristiansen 2014; Vandkilde et al. 2015) have promoted the idea of a new paradigm shift in archaeological studies. Thanks to developments in various scientific fields, a growing number of new data sets are now available to researchers. Lead, strontium and oxygen isotope analyses, ancient DNA and protein studies are just some of the new sources of information. In one way or another, most of the papers of the session dealt with these methods and their outcomes. Our understanding of Bronze Age trade and exchange patterns is largely affected by the results of these new multidisciplinary investigations, and the topic is more complex than ever, even difficult to make sense of at times. At the same time, thanks to these new challenges, the subject is increasingly intriguing and interesting to study. In other words, archaeologists today must be prepared to process, handle and incorporate the information emerging from such advances in scientific analyses in their studies of the archaeological evidence. The Gothenburg Bronze Age Symposium was one of the first scholarly international meetings, if not the very first, in which this turning point in archaeological studies was acknowledged, applauded and widely discussed.

Trade and exchange patterns

The session was especially fruitful in two important ways. Firstly, it was widely discussed and shown that
in the second millennium BC the Euro-Mediterranean zone was an arena for a complex system of variously-sized networks aiming to supply, among other things, a generally large demand of metals, but also of other raw materials such as textiles, glass, amber, as well as ready-made artefacts. Secondly, we wish to highlight an emerging consensus on the need to place a greater emphasis on the role played by continental Europe in the economic development of the entire Euro-Mediterranean region. Further studies are needed to understand the characteristics and scope of the exchanges between the two areas, but it is clear that continental societies were mobile, active and mighty actors, who — as the case studies demonstrate — made simultaneous use of both maritime networks and land communication. Finally, it was also made clear that the various networks and communication channels were to a certain extent complementary and/or competing with each other.

Plentiful written sources from the Near East and the Mediterranean (e.g. Michel and Nosch eds. 2010; Moran 2000; Shelmerdine 2008; Voutsaki and Killen 2001) bear witness to the complexity and extent of such exchanges, at least in the southern part of the continent. The outstanding finds from e.g. the Uluburun shipwreck (e.g. Pulak 2008; Yalcin et al. eds. 2005) demonstrate archaeologically the impressive quantity and quality of goods that were circulating in the Mediterranean during the Late Bronze Age. In a continental Europe lacking written sources, the archaeological evidence plays a major role in studies of trade and exchange. Also, the application of new scientific technology enabling provenancing undoubtedly represents a superb opportunity to better investigate movements and connectivity.

**Metals**

Recent studies from Scandinavia have been at the forefront of new research, demonstrating the challenges that the archaeosciences may present to the archaeological community. The study of a sequence of lead isotope analyses on metal artefacts from Sweden suggested that a significant amount of copper reached northern Europe from far-flung sources such as Spain, Sardinia and Cyprus during the second millennium BC (Ling et al. 2012, 2014). The same study revealed a chronological pattern of shifting suppliers. It seems that the supply of raw materials was contingent on economic, political and technological transformations that facilitated or blocked the convenience of specific ores and/or commercial routes during certain periods of time (Earle et al. 2015; O’Brien 2015: 279–302; Pernicka et al. 2016; Rowlands and Ling 2013).

Similarly, provenance analyses of Danish metalwork presented at the session but published elsewhere (Melheim et al. forthcoming) show an origin of the copper from a variety of ore regions that were previously not taken into account. While filling in and adding nuances the picture created in the groundbreaking study by Ling and co-authors (2012, 2014), in addition to the eastern Alpine and Iberian ore sources, this study points to the Italian Alps as well as the British Isles as substantial supply areas. Interestingly, this and other recent studies (Pernicka et al. 2016) demonstrate that the Austrian Mitterberg mine district does not seem to have been the main supplier of copper to Scandinavia, as previously hypothesised on the basis of elemental analysis (e.g. Liversage 2000). Still, it seems clear that ore sources in the eastern Alps supplied Scandinavia with metal, especially in the early and late stages of the Bronze Age (Melheim et al. forthcoming; Vandkilde forthcoming).

The overall conclusions strengthen hypotheses pointing to copper supplies having originated in areas that have been of little or no importance in previous studies. They also strengthen the hypothesis according to which a maritime and Atlantic network must have been crucial for the Northerners in their interaction with other European regions (Earle et al. 2015; Rowlands and Ling 2013). The impression is that the demand for metal must have been of massive proportions, and that metal reached Scandinavia from a wide variety of sources, including apparently the eastern Mediterranean (Ling et al. 2014), and thus indicating that land and riverine communication were equally important (Earle et al. 2015) and could reach to very distant sources.

All in all, the evidence from metal trade studies indicates that European Bronze Age societies were engaged in complex patterns of exchange, and that various networks must have been at work at the same time, embracing the whole continent. An investigation involving analyses of the non-Mediterranean oxhide and oxhide-like ingots, which was presented at the session, but published elsewhere (Sabatini 2016a), presents further proof. The formal and, to a certain extent — when available — geochemical characteristics of the non-Mediterranean oxhide ingots, as well as their distribution patterns and chronology, suggest that they are likely to be connected to the well-known oxhide ingot phenomenon in the Mediterranean (Gale 2011; Gale and Stos-Gale 2012; Kassianidou 2012; Lo Schiavo et al. eds. 2009; Sabatini 2016b). While the latter seems to be, with the exception of its initial phase (Stos-Gale 2011), the direct evidence of the Cypriote copper trade, the numerous continental ingots have been tentatively interpreted as tokens of local attempts to connect to wider networks using the internationally well-known oxhide ingot ‘brand’ (Sabatini 2016a). In other words, at least some of the non-Mediterranean oxhide ingots suggest that there might have been room for economic competition between networks, thus strengthening the hypothesis of ongoing brand economies during the Late
Bronze Age (Bevan 2010). This idea has recently been strengthened by a philological study (Ferrara and Bell 2016) of the Cypro-Minoan signs carved on miniature oxhide ingots from Cyprus. The analyses based on philological arguments suggest that the signs could in fact be interpreted as promoting the brand of Cypriot copper.

The idea of an occurrence of well-known shapes and possible brands that were familiar to people over vast areas appears to be supported by the study of wheel pendants presented in this volume by Gori and De Angelis (this volume). Our understanding of the considerable presence of such items all over the continent and throughout the Bronze Age becomes more precise when examining the combination of depositional patterns and technological aspects. The analysis of central European wheel pendants from metal hoards seems to suggest that many were actually not used as ‘pendants’; they appear instead to have had the characteristics of ingots, easy to transport and to recognise due to their distinctive shape and colour.

To sum up, the material presented at the session shows that not only was there a massive demand for metal, but that it was circulating in various forms, from very pure raw ingots to ingot-like objects with specific compositions, and that various actors probably attempted to protect and brand their products over very large areas, adopting shapes that were particularly easy to recognise.

Glass and amber beads

A source of broad-ranging discussions during the Bronze Age symposium was represented by recent studies on glass provenance, which showed that glass is one of these materials with a large geographical distribution and a relatively limited number of original production centres (Kaul and Varberg this volume; Varberg et al. 2015, 2016). The recorded glass from continental Europe and in particular Scandinavia is known in the form of beads, and is thus generally found in burial contexts, belonging to bracelets and necklaces. Thanks to the geochemical investigations carried out on the Danish beads, this often overlooked material recently shifted from being considered just a decorative object to becoming another category of evidence for long-distance exchange. There is still much to be done to achieve a better understanding of how the material reached northern Europe, and the reasons and patterns that guided it. However, as discussed by Kaul and Varberg (this volume), the material from the Romanian Cioclovina cave hints at the existence of developed land routes between the southern and the northern part of the continent (Varberg et al. 2016). Interestingly, this very same route seems to match, at least from the geographical point of view, the distribution of the non-Mediterranean oxhide and oxhide-like ingots (Sabatini 2016a: fig. 1).

The glass study leads to another very exciting issue. As noted, the Scandinavian glass beads are often associated with amber beads. Paradoxically, while being indigenous to parts of the Nordic region, amber seems to be a rarer material in the Nordic Bronze Age than in the Mediterranean (see Whittaker, this volume). Whether being due to an intense export or to value systems that regarded amber differently, the relationship between amber and the exotic Mesopotamian and Egyptian glass has prompted several questions on the value of such materials and their social and cultural meaning (Kaul and Varberg, this volume).

Two presentations approached the amber issue, both from a ‘southern’ point of view (Schallin, this volume; Whittaker, this volume), exploring in particular the much debated evidence from mainland Greece. It is widely acknowledged that most of the amber from the Bronze Age Mediterranean, including the pieces from the Uluburun shipwreck, has a Baltic origin (see e.g. Mukherjee et al. 2008; Murillo-Baroso and Martínón-Torres 2012). Amber is among the clearly precious raw materials that Scandinavia could offer to the rest of the continent in exchange for a large number of imported goods. As already mentioned, during the Bronze Age amber tends to disappear from local contexts where it had been very common in the previous Neolithic period (e.g. Ramstad et al. 2015). The distribution of amber beads in continental Europe and the Mediterranean suggests the shifting, both geographically and chronologically, presence of centres of manufacture and complex patterns of exchange and consumption (Bellintani 2015; Rahmstorf 2014). Nonetheless, amber pieces from the Aegean in particular continue to fuel a debate regarding whether it is possible to consider them as a convincing evidence for large exchange networks stretching across the continent, or just as a sporadic presence (e.g. Czebreszuk 2013; Whittaker, this volume). Further studies are necessary, taking into account that the value of amber lies also in its characteristics when being burnt, and thus taking into consideration that a portion of the exported material might have been consumed in ritual activities of some sort (see Schallin, this volume; Whittaker, this volume).

Textiles

Although no papers on the topic of textiles per se were presented during the session, textile production, trade and exchange were mentioned several times during discussions, due in particular to the astonishing results that have emerged on this front through new methods in provenance studies relating specifically to textiles. In
recent decades, thanks to several international projects and not least to the work of the Centre for Textile Research in Copenhagen, textiles in general, and wool production in particular, have been the focus of multidisciplinary research, demonstrating their enormous value and the complexity of their systems of production (Breniquet and Michel eds. 2014; Gillis and Nosch eds. 2007; Gleba and Manering eds. 2012). While written sources from the Aegean and the eastern Mediterranean provide records as to the complexity of organisation and size of the local production and trade systems (Michel and Nosch eds. 2010; Waetzoldt 1972), archaeological evidence in these same areas and elsewhere remains more difficult to interpret (Andersson Strand and Nosch eds. 2015; Gleba and Manering eds. 2012; Sabatini and Bergerbrant forthcoming). Textile remains are very few, and tools for the production of textiles only partially reflect the enormous input of labour that was necessary to produce them. In continental Europe, where the written sources are completely lacking, textile research is gradually getting a completely different profile thanks to the opportunity to broaden the scope with the help of environmental and isotope analyses. Recent studies, again from Scandinavia, suggest that a highly-developed wool trade must have been in place on the continent during the second millennium BC (Bender Jørgensen and Rast-Eicher 2016; Frei et al. 2015; Frei et al. in press). In Scandinavia, the modest signs of local textile production (Bergerbrant 2007: 49; Søfaer et al. 2013: 480), combined with the fact that the analysed wool clothing from the Early Bronze Age Danish oak coffins seem to be of non-local origin (Frei et al. 2015, in press), suggest that wool was a traded commodity. Further studies are necessary in order to understand the characteristics and scope of the Bronze Age textile trade and exchange — including the trade in and exchange of raw materials. However, the multifarious archaeological evidence from both continental Europe and the Mediterranean bears witness to a textile economy involving Bronze Age societies in various ways (e.g. Gleba and Manering eds. 2012; Michel and Nosch eds. 2013; Sabatini and Bergerbrant forthcoming).

For example, recent evidence from the highlands in Norway (Prescott and Melheim, this volume), speaks in favour of developed pastoral communities that may also have been engaged in some phases of the long opératoire involved in textile production.

Indeed, the very existence of a large-scale trade of organic materials such as wool, fibre and textiles is a useful reminder of the great potential of this area of research for providing a ‘missing link’ in our understanding of mobility and long distance trade in the Bronze Age. The circulation of specific goods or styles will become more clearly delineated and better understood as scientific advances in textile studies continue to be applied in future work.

Conclusions

Although, as noted at the beginning, Nordic-Mediterranean relations have been at the core of heated debates in archaeology for more than 100 years (see e.g. Nordquist and Whittaker 2007; Kristiansen and Larsson 2007; Klejn 2008), the session at the 13th Nordic Bronze Age symposium gathered for the first time researchers from various regionalised branches of Bronze Age archaeology to participate in a focused discussion on the ‘fruits’ of the third science revolution in archaeology (Kristiansen 2014). Emerging from this discussion, and now at the forefront of our attention, is the idea that Scandinavia and continental Europe rightly deserve to be a major focus in wider Bronze Age scholarship. It is now clear that Mediterranean societies must have been well-aware of the potential offered by populations north of the Alps, and their high demand for both goods and raw materials as well as being providers of raw materials that were exotic to the Mediterranean region. The non-Mediterranean oxhide ingots, the glass beads and the copper of Mediterranean origin in Scandinavia and the Baltic amber in the Mediterranean are just a few examples that clearly demonstrate this mutual interest. This discussion will undoubtedly continue into the future, and it will deepen and expand with the development and fine-tuning of more exact provenance indicators as well as broader sets of reference data. It is hoped that this will be paired with theory-driven discussions and increasingly sophisticated models of travel and exchange in the Bronze Age.

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Landesmuseums zu Hannover 17. Hildesheim, August Lax.


New Perspectives on the Bronze Age Nordic-Mediterranean relations in the second millennium BC

broncoalder (periode IV-V). Copenhagen, National Museum.


