

Northern Aegean in the Bronze Age*

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Until the end of the 5th millennium, the northern Aegean communities were dynamic partakers in the cultural processes which transformed southeast Europe and the Aegean during the Neolithic. At the beginning of the 3rd millennium, however, the dramatic developments in settlement organization, in elaboration of material culture, in technological advancement, and in exchange shifted their focus to the south and to the east. As a result, the northern Aegean found itself on the borders of this new, dynamic world for the rest of the Bronze Age. This shift does not mean, however, that northern communities froze in ways of life, which mainly referred them back to the Neolithic past. Instead, during the following millennia, the people in the different regions of Macedonia, Thrace, and the neighboring islands were active in developing varied ways of living, through the manipulation of local traditions and the selective adoption of cultural forms and technological novelties from the surrounding regions.

The survey which follows will concentrate on the regions of the north, which present the strongest evidence for contacts with the cultural developments in the Aegean during the Bronze Age (Fig. 54.1). These include the islands of Thasos and Samothrace, coastal Thrace, the coastal plains of central and southern Macedonia, and the peninsula of Chalkidiki. The discussion will also focus on parts of the inland basins of eastern, central, and western Macedonia, leaving out northern Macedonia, which remained outside the reach of significant Aegean influences (cf. Mitrevski 2003). Groups living in these regions took advantage of inland passes to establish and maintain at some points of their early history strong contacts with the areas further to the south. It cannot be overemphasized, though, that throughout their early history, communities in this part of

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the Aegean also developed and maintained strong contacts with their neighbors to the north, taking advantage of the major river routes and the numerous mountain paths.



Figure 1. Map of the northern Aegean with Bronze Age sites mentioned in the text. 1. Aiani. 2. Servia. 3. Koilada. 4. Mandalo. 5. Arhondiko. 6. Pella. 7. Spathes. 8. Kastanas. 9. Assiros. 10. Ayios Athanasios. 11. Thessaloniki Toumba. 12. Kritsana. 13. Petralona. 14. Ay. Mamas. 15. Toroni. 16. Kriaritsi. 17. Faia Petra. 18. Pentapolis. 19. Sitagroi. 20. Dikili Tash. 21. Potamoi. 22. Skala Sotiros. 23. Kastri. (Map drawn by Nikos Valassiadis)

With the exception of two pioneering archaeological expeditions in the first half of the 20th century, the archaeological record regarding the Bronze Age in the north has been collected primarily during the last 40 years. Consequently, information is limited, compared to many other Aegean regions, and data are largely incompletely published and unequally distributed, temporally and geographically (Andreou *et al.* 2001).

The Third Millennium

New ways of living become evident in the north Aegean at the end of the 4th millennium. The new manners incorporated some features of Late Neolithic life, which were, however, re-interpreted and placed in a new frame of values and beliefs.

The evidence for a disruption of life between the late 5th millennium and the end of the 4th is strong as in most other regions of the Aegean and the Balkans. Habitation was interrupted for a period of several centuries in Servia, Mandalo, Sitagroi, Dikili Tash, and several other tell sites (Manning 1995; Andreou *et al.* 2001; Ozdogan 2003b). The

discontinuity may be related to a radical change in settlement numbers, size, organization, endurance, and setting during the earlier part of the 4th millennium. The extent to which the phenomena of settlement dislocation had to do with a breakdown of traditional social structures in communities and the disintegration of the widespread regional networks of the 5th millennium or were induced by an episode of climatic disruption remains to be investigated (Manning 1995; Mayewski *et al.* 2004). Former explanations, however, attributing the changes to widespread population displacements caused by an invasion of Proto-Indo-European language speakers, have gradually lost their theoretical and archaeological support (Whittle 1996).

More than half of the Early Bronze Age (ca. 3100-2000 BC) sites in the Serres basin in eastern Macedonia were new foundations of very small settlements. New settings were often chosen on higher elevations with less or no access to the richer soils of traditional LN habitation (Fotiadis 1985). The same pattern was observed in other regions as well (Andreou *et al.* 2001). The expansion of settlement was probably facilitated by a more diversified subsistence strategy, while the growth of maritime traffic and the resurgence of overland communications was eased, among other factors, by the novel use of donkeys (Becker 1986; Becker and Kroll 2008; Valamoti 2007). Several new EBA settlements were short lived, leaving elusive traces or were occasionally signified by small cemeteries (Kotsakis and Andreou 1992b [1995]; Asouhidou *et al.* 1998 [2000]; Mavroidi *et al.* 2006 [2008]).

The re-occupation of Neolithic mounds, such as Servia, Mandalo, Sitagroi, and Dikili Tash, however, indicates that during the same period other groups were marking their presence in the landscape more visibly. A rise in settlement numbers during the second half of the 3rd millennium was observed in coastal Thrace and in the almost insular peninsulas of Chalkidiki. Recent research has shown a significant increase of small EBA sites. They were often located on tiny islands, coastal hills, and promontories with access to secure ports. Some were surrounded by fortifications, reminiscent of 3rd millennium sites in the rest of the Aegean (Grammenos *et al.* 1997; Papadopoulos *et al.* 1999; Ozdogan 2003a; Smagas 2007).

Skala Sotiros on Thasos is an excavated example of such a small settlement. The near coastal site was surrounded by a fortification wall, with a façade adorned with armed

anthropomorphic grave stelae in second use and stones arranged in herringbone pattern. The material culture displays several eastern Aegean features, including the characteristic “depas” cups (Davis 2001; Papadopoulos 2001 [2003]). It shows that the effects of the rising, mid 3rd millennium, maritime network were also felt in the northern Aegean. Signs of these effects are evident up to the northern tip of the Thermaikos gulf, which in the BA stretched beyond ancient Pella (Aslanis 1985; Schulz 1989; Mavroidi *et al.* 2006 [2008]; Vouvalidis *et al.* 2003; Akamatis in press).

Defensive walls are not evident in continental northern Aegean settlements. A typical feature of EBA habitations, however, which was shared with adjacent regions, was the elongated house with or without an apsidal end. Most were post-framed, but mud-brick structures are also attested. Working areas, food storage and processing installations and food consumption were consistently placed inside such houses in Sitagroi, Agios Athanasios, and Arhontiko (Elster 1997; Mavroidi *et al.* 2006 [2008]; Pilali and Papanthimou 2002). The variety of cultivated and wild plants and fruits, including grapes and acorns, and the remains of domesticated and wild animals, including large quantities of fish-bones and shell found in the dwellings of tell sites, demonstrate the pursuit of self-sufficiency (Bokonyi 1986; Renfrew 2003; Valamoti *et al.* 2005; Theodoropoulou 2007).

The architecture and persistent inclusion of maintenance activities in houses stressed the autonomy and the social identity of households, which were further underlined by infant burials underneath floors and by the reconstruction of houses on top of their predecessors. The plans of Arhontiko and Ayios Mamas during the later part of the period, with narrow paths separating insulae of long buildings with shared walls, and identical facilities for storage and food preparation, suggest the existence of an intermediary level of grouping between the household and the community and reveal distant affinities in terms of space organization with EBA settlements in the eastern and central Aegean (Pilali and Papanthimou 2002; Aslanis 2006 [2008]; Becker and Kroll 2008). Compact settlement plans, uniform house plans and orientations, clear settlement boundaries, and minimal dislocation of structures through time suggest planning in advance and the existence of well defined social rules and practices, which regulated life and prevented the expression of strong inequalities in communities.

The emphasis on the autonomous households in settlements was counterbalanced by the symbolic stress on collective identities in the idealized world of cemeteries. Small groups of compactly arranged stone circles containing individual cremations or inhumations and few, identical offerings under a common stone tumulus, signalled small, short lived communities, which were colonizing the peninsulas of Chalkidiki in the middle of the 3rd millennium.

The commemoration of the collective past through tumuli was probably significant for the coherence of the fragile groups, for the display of their identity in the regional landscape, and for comparison with other groups. Occasionally it was amplified by the use of large anthropomorphic stelae depicting the mythical ancestors in the form of gigantic, idealized, male warriors (Asouhidou 2001; Tsigarida and Mantazi 2003 [2005]; Smagas 2007). Similar stelae have been found in second use in Thasos and several locations in Macedonia. Along with tumuli and cremation burials, they formed widely spread third millennium phenomena, which demonstrate the extensive contacts of the region (cf. Whittle 1996; Bailey 2000).

In the slightly later single burial cemetery of Koilada in western Macedonia, the collective identity and cohesion of the community, despite some variability in grave types and practices, were stressed by the allocation of a special area for post-funerary rituals, the consistent orientation of graves and burials, and the lack of differentiations in burial offerings. In this case, the community was identified in the landscape through stone piles heaped primarily over male single inhumation burials. They indicate the significance and possibly hierarchical relationship of gendered identities, which were also displayed during funerals through the consistently opposite placement of male and female bodies in the grave (Ziota 2007). Interpersonal antagonisms are, however, slightly more evident through the display of wealth and access to distant contacts in the cemeteries of large coastal communities such as Pella and Ayios Mamas (Pappa in press; Akamatis in press).

The novelties in life and death during the 3rd millennium are also evident in the new forms, techniques, and contexts in which material culture was produced and used. By the beginning of the 3rd millennium, the elaborate wares of the Neolithic had been completely replaced by coarser, dark, burnished vessels rarely decorated with channelling or incisions (Fig. 54.2). The most common types suggest a particular emphasis on the

consumption of liquids--among which wine, known in the area from the 5th millennium, must have held a vital position--and on the storage of grains (Sherratt 1986; Valamoti *et al.* 2007).

The novel forms may be partly attributed to dietary changes, but the decrease in elaboration signifies major readjustments in the symbolic significance of vessels and in the contexts of their use. The emphasis on the autonomy of households increased the importance of the display of stored agricultural wealth and the significance of food and drink serving in occasions of hospitality in the secluded space of houses. While the ceremonial aspect of these occasions was highlighted by the specialized use and the standardization of the employed vessels, the new context of display transferred the focus of symbolic expression from the vessels to the acts of storage or commensality with significant consequences for the appearance and technology of the pottery (Sherratt 1986).

Analytical evidence suggests that some northern Aegean silver and copper deposits may have been exploited during the 3rd millennium (Stos-Gale and Macdonald 1991; Renfrew and Slater 2003). Depositional preferences and the low intensity of research, however, may have been responsible for the paucity of metallic finds. Despite this, there is some evidence that the significance of metalworking for the lives of people increased and that technological innovations, such as arsenical copper and the use of two piece moulds, were adopted in the course of the period.

The hoard of ca 40 chisels and four sleeve-shaft axes found in a jar near the village of Petralona offers a glimpse into the invisible part of northern Aegean metalworking (Grammenos *et al.* 1994). Moulds and several axes found in different sites suggest that the production and circulation of large tools was not unusual in communities during the mid-3rd millennium and copper and gold slugs in settlements indicate local metalworking related to the production of jewellery and other small metal finds (Heurtley 1939; Malamidou 1997; Renfrew and Slater 2003; Ziota 2007). The fact that all axes belong to a Circumponic type, which was rare in the rest of the Aegean, demonstrates the resurgence of access to far-flung continental exchange networks after the 4th millennium disruption.

The tin bronze awl, however, in mid-3rd millennium Sitagroi, dates from a period of westward maritime movement of Anatolian prestige objects in the form, among other things, of finished tin-bronzes (cf. Nakou 1997). Objects such as the latter or the faience jewellery from the cemetery and the settlement of Ayios Mamas (among the earliest instances in the Aegean), the marble bowls from Pella and Pieria, the zoomorphic axe from Sitagroi, the EH III patterned ware tankard from Kritsana, and the eastern “depas” cups from Pella and Thasos derived their value from the biographical implications of their circulation in long distance networks and could have played a significant role as objects of display in the muffled antagonisms for prestige between household heads during the second half of the millennium (Heurtley 1939; Renfrew *et al.* 1986; Besios 1993 (1997); Akamatis in press; Pappa in press)

The Second Millennium

The incomplete archaeological record for the first centuries of the 2nd millennium BC does not allow the understanding of phenomena, such as the abandonment of settlements in the western part of the Thermaikos Gulf during the Middle Bronze Age (Hänsel 1989; Pilali and Papanthimou 2002). Important tell settlements, however, such as Assiros Toumba were founded in the same period, during which the upland migration of sites in western Macedonia was also initiated (Wardle 1980; Stefani and Merousis 2003).

At Ayios Mamas, the late EBA insulae of single spaced buildings were replaced at the start of the MBA by complex, post-framed structures. Communities in Chalkidiki and Pieria, as opposed to the rest of Macedonia, continued their involvement in maritime networks, which were now focusing on the elaborate wheel made Minyan bowls originating probably in coastal Central Greece (Hänsel 2002; Aslanis 2006 [2008]; Becker and Kroll 2008; Psaraki and Andreou in press). A novel and isolated phenomenon was the Minoan involvement in Samothrace at the end of the MBA, which was probably triggered by the interest for northern Aegean metal sources (Matsas 1995; Davis 2001).

The Late Bronze Age (ca. 1650-1050 BC) is the period with the highest number of known settlements. Sites in most regions exhibit a strong tendency to move from coastal plains, basins, and valleys to hills and spurs on higher elevations, in less

hospitable or rugged terrain (Stefani and Merousis 2003; Lespez 2008) The example of the Langadas basin shows, however, that habitation of lowland sites was not interrupted in central Macedonia, and the LBA expansion of settlements to new ground led to a substantial increase in the number and density of sites (Andreou 2001). Fortified settlements have only been confirmed in western Thrace, but new habitation sites on elevated points and defensible heights in other regions offered protection and good control of the surrounding terrain (Fotiadis 1985; Andreou *et al.* 2001). Expansion to marginal lands was also triggered by the occasional extension of marsh lands, by further diversification of farming, a greater emphasis on animal resources, and a renewed emphasis on hunting, particularly during the end of the period (Bottema 1982; Becker 1986; Lespez 2008).



Figure 2. Thessaloniki Toumba (Thessaloniki Toumba excavation archive)

The increased mobility probably contributed to the disintegration of tell settlements in all other regions, except for central Macedonia. In the latter, tells not only persisted, but became the sole type of habitation site during the LBA (Fig. 54.2). Stone and mud brick walls and clay banks were constructed at various levels along the periphery of several tells. It is not clear if the early LBA, casemated, perimeter wall on the slope of the Thessaloniki Toumba and the clay bank, and wall which surrounded

Assiros Toumba were defensive or retentive or both. They created, however, steep sided mounds, which mark clearly the places of the LBA communities in the central Macedonian landscape. Moreover, while sizes of mounds rarely exceeded 1 ha, their constructed prominence may have served as a basis for comparison among local communities. The transfer of habitation to the higher terraces in Thessaloniki and Assiros during the early LBA may have also served practical as well as symbolic considerations (Andreou 2001; Stefani and Merousis 2003; Wardle and Wardle 2007).

Reliable information regarding planning and intra-settlement organization derives from a few systematically investigated tell sites in central Macedonia. There are evident inequalities between communities, but at the same time fluctuations in the spatial organization of individual settlements indicate the volatility and the restricted scope of the economic and political structures, which influenced life in the region during the second half of the 2nd millennium.

Communal planning and rules regulating life in settlements are manifest at Assiros, Thessaloniki, and Ayios Mamas, through the definition of community boundaries and the regular network of parallel streets which separated large, rectangular blocks reaching over 150 m² and up to 15 spaces each, in the first two sites. Post-framed mud brick walls on stone foundations were evident at Ayios Mamas and Thessaloniki Toumba by the end of the MBA and they became the rule for the rest of the period in several settlements. Other building techniques, however, well established in the area since the Neolithic, remained also in use and occasionally alternated with mud bricks in the same settlement (Andreou and Kotsakis 1996 [1997]; Hänsel 2002; Videski 2005; Chrysostomou and Georgiadou 2007).

The replication of the same house and settlement plans, with some alterations, in Assiros and in Thessaloniki between the 14th and the 11th centuries BC and between the 13th and the 10th centuries BC respectively, confirmed the underpinning of the established order by ancestral values. The entrenchment of all maintenance activities in the houses emphasized the autonomy of each block, but the strong similarities between buildings suggest the existence of rules, which prevented the overt expression of inequalities between groups and stressed the collective identity of the community. The dispersal of facilities and spaces related to storage, food preparation, and living in the 12th century BC

blocks of Assiros and the 11th century complexes of Thessaloniki Toumba provides some clues regarding the organizational structures of the groups which were inhabiting them (Wardle and Wardle 2007). The blocks may have been shared by small semi-autonomous descent groups. The fact that a similar pattern may be seen in a 15th century BC building in Ayios Mamas could indicate the long history of such a model of habitation in central Macedonia, which may go back to the late EBA insulae of Arhontiko and Ayios Mamas (Hänsel 2002).

On the other hand, the quantity and variety of stored charred crops in the blocks of late 14th century BC Assiros suggest that the community of the time had the ability to store foodstuffs, which may have exceeded the needs of its members (Jones *et al.* 1986). The concentration of pithoi and bins in 12th century BC buildings in Thessaloniki Toumba may point to a similar situation there in a later period (Margomenou 2008). So far, there is no evidence to suggest the operation of institutional, centralized political and administrative structures in 14th to 12th centuries BC central Macedonia, which would be able to secure the mobilization of labour and the pulling of agricultural produce to local centers and ~~the~~ administer the redistribution of regional production to smaller tell settlements.

Instead, the occurrence of luxurious drinking sets, the evidence for vinification in Thessaloniki and Assiros, and the extensive cooking facilities and large cooking pots may suggest that hospitality and feasting could have been the mechanisms which strengthened bonds between communities and facilitated the recruitment of labour and the pulling and redistribution of food by successful communities. Such processes probably resulted in asymmetrical economic and social relations among settlements in the regional level (Andreou 2001). The untidy plan, the simple houses, the limited storage space, and the periodical setbacks in the spatial organization and building techniques of Kastanas Toumba, which was located on an island in an estuary of Thermaikos gulf, indicate a community which must have often depended for its survival on the contiguous large tell of Axiohori (Hänsel 2002). Similar local networks of sites connected by loose, hierarchical bonds are evident in several regions of central Macedonia and Chalkidiki during the later part of the LBA.

Hardly any information exists regarding the LBA treatment of the dead in central Macedonia. Although it cannot be excluded that the invisibility of funerary remains may be accidental, there are strong indications for a real lack of interest in formal places and practices for the dead at LBA tell sites.

On the contrary, burials became the main context for the definition of social identities in most northern Aegean areas outside central Macedonia after the late 14th century BC. A new emphasis on descent is suggested by the rows of graves in Aiani in western Macedonia, the cist graves with multiple burials at Spathes on Mount Olympus, the tumuli cemeteries in western and southern Macedonia, and the multiple burial enclosures in Faia Petra and Kastri in Eastern Macedonia and Thasos (Koukouli-Chrysanthaki 1992; Poulaki-Pantermali 1988 [1991]; Besios and Krahtopoulou 1994 [1998]; Karamitrou-Mentesidi 2000 [2002]; Triantafyllou 2001; Valla 2007). A greater standardization of burial practices--primarily crouched inhumations and few cremations--is contrasted by the growing variability of burial offerings. Precious local artifacts and imports or imitations of foreign products, such as jewellery of gold, silver, amber, or glass, Mycenaean type swords and seals, Mycenaean and Danubian style aromatic containers, and luxurious matt painted ceramic drinking sets occurred often as prestige items in tombs.

The wall surrounding a group of burials in Aiani and the placement of the burial enclosures on a prominent hill top in Faia Petra suggest that spatial segregation of the burial grounds may have also been used to emphasize status differences. While many details are still missing, some cemeteries seem to signify the rise of elites at the end of the 14th century BC in certain inland sites, located on prominent positions or along vital passes in western and eastern Macedonia. The control of the circulation and the funerary display of prestige valuables, which often showed affinities to the Mycenaean world or the Balkans, must have been significant elements in this process (Poulaki-Pantermali 1988 [1991]; Karamitrou-Mentesidi 2000 [2002]; Valla 2007).

Significant changes are also evident in the material culture of the LBA, despite the strength of traditional values and structures in northern Aegean societies. Bronze tools, weapons, and smaller implements were widely used and manufactured at least in the later part of the LBA. Traces of metalworking have been found in all excavated settlements,

suggesting a pattern of small scale local production dispersed in communities, irrespective of their size or significance in the regional networks (Hochstetter 1987; Koukouli-Chrysanthaki 1992; Wardle and Wardle 1999; Mavroidi *et al.* 2004 [2006]).

Positive evidence exists also for gold working and analytical results suggest the exploitation of various local gold deposits. Besides, the weak analytical indications for the origin of silver artifacts found in Grave Circle A at Mycenae from the lead mines of Chalkidiki may gain some support by the incidence of early Mycenaean pottery imports in Toroni (Papadopoulos 2005; Vavelidis and Andreou 2008). Gold and silver jewellery, however, occurring mainly in selected graves, were quite simple in form, while personal objects made of copper, bronze or bone, found in settlements and in tombs, display a variety of types known also in the Balkans and in the southern Aegean (Hochstetter 1987; Mavroidi *et al.* 2004 [2006]).

Small scale production of purple dye from murex shells, a new expressive technology, was first attested in the late MBA levels at Ayios Mamas and Thessaloniki Toumba. It continued to be produced and used in the various buildings of the latter site until the beginning of the EIA (Becker 2001; Veropoulidou *et al.* 2005 [2007]; Becker and Kroll 2008).

Throughout the period, a reduction in the variety of shapes of the handmade undecorated table wares and a growing standardization in terms of technology are evident, reflecting greater consistency in production practices (Fig. 54.3). Observations on the pottery of Thessaloniki Toumba, however, suggest a pattern of small scale ceramic production by several potters (Kiriati 2000). The very limited employment of two handmade decorated wares at the beginning of the LBA, one incised and encrusted and another matt painted, with distinct geographical distributions, signals the introduction of important morphological and technological innovations to the local ceramic traditions (Psaraki 2004). The incised ware has strong Balkan affinities and analytical evidence tentatively suggests that one of its main shapes may have been used for aromatic substances (Roumbou *et al.* 2008). The matt painted ware, on the other hand, displays stylistic affinities with the transitional MBA-LBA painted ceramics of Thessaly and central Greece (Horejs 2007). Its repertory of shapes suggests luxurious drinking sets, probably for the consumption of wine.

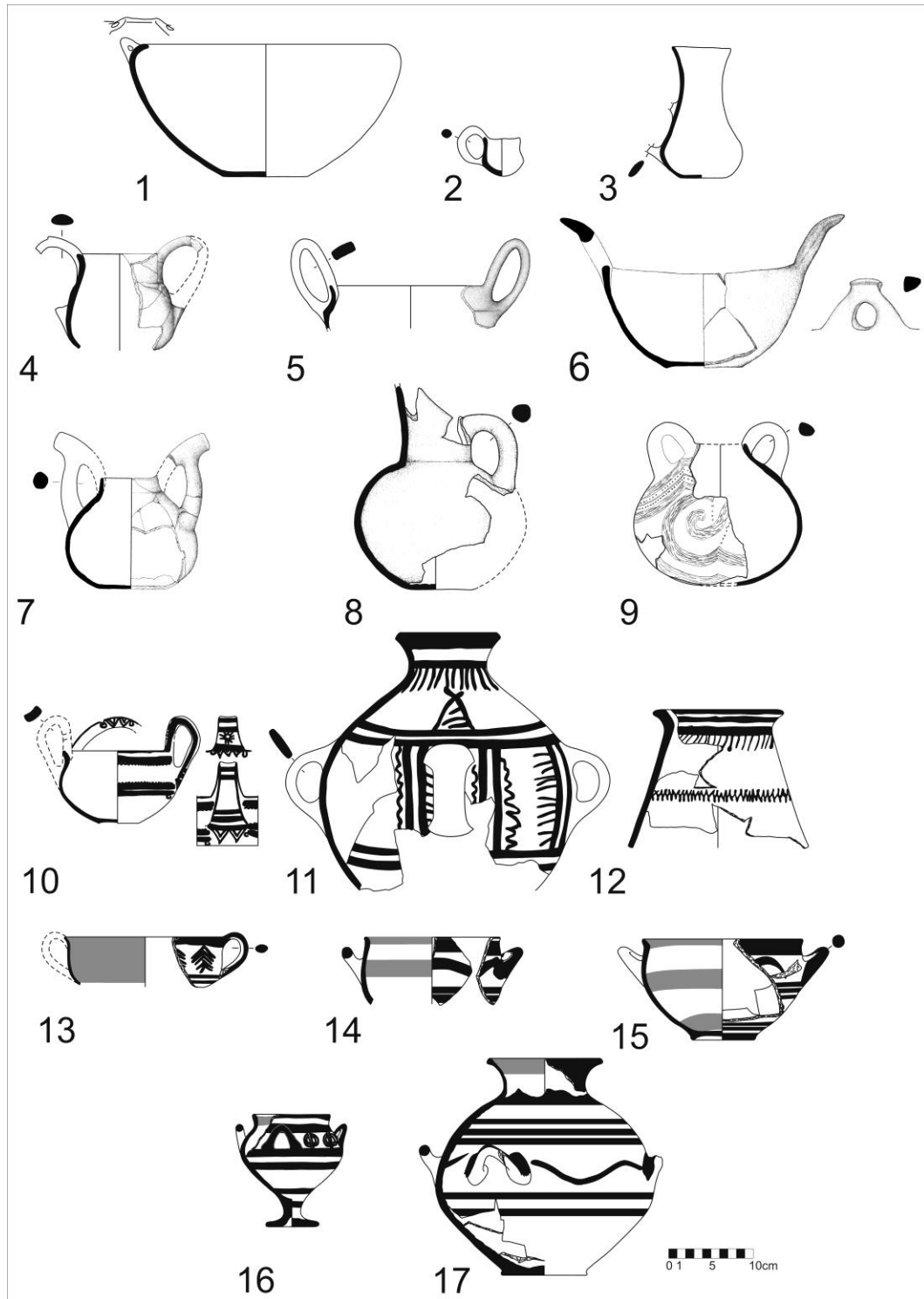


Figure 3. Bronze Age Pottery from the northern Aegean. EBA: 1-3; EBA/MBA: 4-5; LBA brown burnished: 6-8; LBA incised and encrusted: 9; LBA matt painted: 10-12; Mycenaean: 13-17. Ayios Athanasios: 1-3; Thessaloniki Toumba: 4-17 (1-3 drawn by Ioanna Mavroidi, 4-17 drawn by Rania Exarhou).

The new decorated wares, then, were intended for display at social events of feasting and body cleansing, which could have provided opportunities for distinction to those who were in a position to fund the occasions (Andreou and Psaraki 2007). It is noteworthy that the above innovation coincided with the reorganization of certain major settlements, with further indications of elaboration of the material culture and with the appearance of southern and central Aegean imports and influences in coastal sites beyond Chalkidiki (Hänsel 1989; Psaraki and Andreou in press).

The adoption of wheel made, Mycenaean-style, decorated vessels after the 14th century BC in central, western, and southern Macedonia, and later in Thasos marks a major innovation in the material culture of the northern Aegean, which also sheds some light on the interactions of the local communities with the Mycenaean world (Wardle 1993; Andreou *et al.* 2001; Jung 2002). Soon after their first appearance as imports, Mycenaean decorated vessels were imitated locally. Nevertheless, despite the intensification of local production in the 12th century, the ware always occupied only a small part of the table wares in the communities of the area. The repertory of shapes was confined to few decorated tableware forms, primarily those which were being used in the Mycenaean world for the consumption of wine and to a lesser extent as containers of aromatics. Furthermore, the wheel made ware was clearly demarcated in terms of technology, production and function from the traditional handmade undecorated wares. Production of Mycenaean pottery, however, remained equally dispersed regionally and of small scale.

It is likely that the decorated Mycenaean vessels were introduced in the area in the same ceremonial contexts of feasting and body cleansing as the slightly older handmade matt painted and incised wares. Their biography, however, which connected them with luxurious symposia and funerals in their esteemed places of origin and perhaps their technological qualities, provided the Mycenaean vessels with a higher prestige than their handmade equivalents, which they soon started to replace in the ceremonial contexts of use (Andreou 2003).

In inland western Macedonia, the employment of Mycenaean vessels seems to have been restricted to the highest levels of the elite, while the rest continued to use the matt painted ware (Karamitrou 1999; Karamitrou 2003). Uncontrolled access to the coast,

however, and to incoming ships and the collective rules regulating life in tell sites, probably impeded a similar control over the circulation of the wheel made pottery--and other incoming imports--in central Macedonia and Thasos, and this probably facilitated the wider adoption of Mycenaean vessels in these regions and the consequent faster retreat of the handmade decorated wares (Koukouli-Chrysanthaki 1992; Kiriati *et al.* 1997; Andreou 2003).

Dramatic developments, such as those seen during the LBA in the southern Aegean are missing from the north. Nevertheless, it is evident that several significant changes occurred in most aspects of social and material life. They involved a constant interplay between long established structures, new social demands, and the selective implementation of external stimuli from a widening zone of communications and exchange. The outcome was the emergence of a variety of social formations with distinct features, which differentiated northern Aegean societies from their outside neighbors, but also distinguished developments in the various northern Aegean regions from each other. Another outcome was the employment of a series of new complex technologies in a less rapidly changing organizational setting and the production of a richer than before material culture to be used in the new social contexts of consumption.

The absence of dramatic developments in the north is evident in the lack of a significant break in settlement and material culture at the end of the period and the transition to the Early Iron Age. Changes did occur, however, and they included the expansion of cemeteries to all regions of the northern Aegean, the reorganization of tell sites in central Macedonia, some of which grew considerably in size after the middle of the 9th century BC, and the further geographical expansion and increase in the number of settlements in all regions. At the same time, there are indications for the rise of clearer and more stable hierarchical social and political structures on the regional and the community level. These developments may not be unrelated to the reorganization of craft production and the considerable enrichment of most aspects of the material culture after the 10th century BC.

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