

**ASPECTS OF CHANGE IN THE BRONZE AGE EASTERN BALTIC.
THE SETTLEMENTS OF THE ASVA GROUP IN ESTONIA**

Summary

Bronze Age research in the eastern Baltic was actually initiated with the very first archaeological settlement excavations at Asva and Iru in Estonia and Kļauņukalns in Latvia in the 1930s. Before the discovery of these hill fort sites the material culture remains were so minimal that researchers even expressed doubt concerning the existence of a proper Bronze Age or any remarkable settlement activity in this region. The quantity and quality of finds from these hill forts resulted in completely new insights into a fairly unknown cultural past of the eastern Baltic region. Quite soon the Estonian prehistorian Harry Moora reached the conclusion that the cultural life in the Early Metal Ages was against all expectations a very active and developed one, and vividly benefitting from intercultural contacts. Interestingly, Moora also stated that the rich archaeological material from these newly discovered sites indicated that the scarceness of grave and hoard finds (containing metals) need not necessarily correspond to the social and cultural reality of the past and that local deposition processes and customs should be considered. Consequently, there was no reason to believe that eastern Baltic societies suffered metal-poor or low-level economic conditions and cultural developments (see Chapter 1).

Unfortunately, this was just a promising start of Bronze Age research that, as the entire methodology and working practice in eastern Baltic archaeology, could not be developed further. This was mainly due to the political conditions and circumstances throughout the post-World War II period and the times of the Iron Curtain. After the continuation of excavations at Asva on the Island of Saaremaa in the late 1940s and mid-1960s and other archaeological campaigns in the newly discovered site of Ridala (with palisade structures; excavated 1961–1963) in western Estonia preliminary results only and a few minor articles have been published. In his dissertation in 1970 Vello Lõugas gave a detailed overview of the current state of research into the Bronze and Early Iron Ages in Estonia, also introducing the main results from earlier and his own archaeological investigations at Asva (years 1965–1966). The comprehensive account of facts leading to his chronological system and periodisation, particularly his interpretation and discussion of socio-economic processes and developments, were all grounded on archaeological objects, types and groups from Bronze Ages settlement sites. Because of remaining unpublished and the general isolation of Estonian archaeology in Soviet time Lõugas' work could never be received or reviewed by any

international research platform. The Bronze Age research of other Baltic Sea regions was simply denied access to the archaeological progress of the Baltic countries, also during the next decades. Lõugas had a sort of autonomous position in the field of Bronze and Iron Age research in the Soviet republic of Estonia. Being practically the only academic authority specialising in and permitted to study and investigate the heritage from these prehistoric time periods, he also had to cover a large scope of other duties in salvation and heritage management. Accordingly, there was not much room and spirit left for theoretically reflective research, not to mention the danger of being steadily confronted with political–ideological doctrines in Soviet archaeology and history sciences. When reflecting his (not always fully reproducible) applied methods in archaeological work and the missing data and documentations of significant archaeological sites and contexts, this background of political and economic circumstances needs to be reconsidered (Chapter 6). This concerns in particular the meteorite crater area of Kaali on Saaremaa and the archaeological excavations and the reporting under his direction (in 1976–1979), which have left some confusion and many open questions behind.

In the late 1980s Valter Lang initiated a proper landscape and settlement archaeology in Estonia with emphasis on palaeogeography and palaeoecology, mainly in the course of studies and fieldworks in coastal areas of north Estonia (including Iru hill fort). His micro-regional and diachronic perspective on the dynamics in the interplay of humans and the environment in this region and on the introduction and development of agriculture also used to consider multidisciplinary studies of grave monuments and funerary customs. The research into stone cist graves as sources of osteoarchaeology and forensic research also helped to formulate new subject matters of social archaeology. Thus, compared to the Island of Saaremaa primarily represented by settlements in the period of study, the north Estonian research area offered a completely different but very convenient situation for developing new theories and models explaining these social and economic processes that are of significance for studies of the Asva settlement phenomenon. The archaeological evidence of land use for animal husbandry and field cultivation made researchers aware of socio-political implications of both the territorial organisation including land ownership and the technological systems behind agriculture. The emergence of a stratified agrarian society with control and ownership over the fertile lands (limestone rendzinas) and the population growth at the end of the Bronze Age as witnessed by the stone cist graves inferred to a drastically increasing social competition. According to Lang's studies, this eventually resulted in more diverse and complex relationships in society and between settlements during the Late Bronze Age. Asva and Iru, for instance, are now perceived as central places and integral in a functionalist perception of a system of interdependent open (single farms) and enclosed (complex) settlements. It is the exclusive occurrence of bronze casting workshops in settlements of hill fort type, a general eastern Baltic phenomenon, that makes the metalwork production perceived as a subject of social power-and-

control institutions over supply and trade of metal (and the technology). With the Late Bronze Age and the metalwork activity in the eastern Baltic the social and economic processes mentioned are viewed in close interaction and connection with the Nordic Bronze Age cultural sphere, with regions such as eastern Sweden and Gotland of southern Scandinavia. These processes, with Asva as a key site, are now viewed from a macro-historical center–periphery perspective, situated in a Bronze Age world-system framework (Chapters 3 and 4).

The recent studies performed by Lembi Lõugas, Heidi Luik und Liina Maldre produced large amounts of new data and information on breeding strategies, the exploitation of animals and consumption patterns as well as on different social and technological aspects of craft production. Thus, the current Bronze Age research considers the Asva-type sites as key phenomena in the socio-economic developments in eastern Baltic's prehistory. This study is about completing the material culture studies and comparative analyses initiated by the aforementioned researchers (Lang et al.). In the course of the study, the archaeological groups of metalworking ceramics (moulds) and pottery emerged as illustrious 'materialised' sources of the social life and the economic activities, which allowed contributing to the discussion of the dynamics in the cultural development throughout the Bronze Age in the eastern Baltic region.

It was the topic of **metalwork production** and the archaeological evidence in the Estonian Bronze Age settlement sites that offered great potential for developing and discussing the much debated problems of Bronze Age research (Chapter 7). This is first of all due to the peculiar and paradoxical scarcity of archaeologically recorded metal finds in the Bronze Age eastern Baltic, particularly in Estonia. This metal-scarce situation has traditionally been viewed in research from a metal-centred perspective and that of the metal-rich Nordic Bronze Age culture in southern Scandinavia, with countless bronze depositions in graves and hoards as obvious manifestations of social and religious acts. In the eastern Baltic only the Late Bronze Age saw a slight increase in archaeological finds related to metalwork, but hoards and graves containing bronzes remained seldom. Settlement sites of hill fort type emerged at that time, with about 25 of them revealing evidence of local bronze casting production. Since their discovery there has been no doubt about the adoption and utilisation of metalworking technology in this region; however, its impact on society and economy has been perceived fairly differently in research. While emphasis has generally been put on the social significance behind the introduction and the organisation of metalworking production (with socio-political implications of power and control), the technology aspect has been either neglected, underestimated or any advancements and skilled practice in bronze casting have been regarded as minimal. However, in a kind of axiomatic way, and always ruled by the applied Nordic perspective, there has been a sort of pessimistic ('metal poor') view of the entire eastern region, namely that Bronze Age societies suffered from sporadic and poor metal supplies. In turn, the eastern Baltic has been perceived either as an economically retarded region or as socio-politically and culturally dependent on the Nordic Bronze Age sphere.

This is where the ordering and analysing of the archaeological metalwork remains of the Estonian Bronze Age sites led to critically question this paradigmatic approach of overemphasising the socio-economic significance of metals in the study area. This also concerned the neglect of culturally–regionally different depositional customs possibly distorting our image of past realities and bronze circulation. In any case, the study of a production place such as Asva leaves no doubt that metals were imported, processed and distributed (and utilised) in regular and fairly large amounts. It also became clear that the current state of research (and knowledge) does not allow yet drawing hasty conclusions about the level of technological and skilled practices in eastern Baltic metalwork. This also concerns the relationship between the bronzeworker and his environment and raises questions such as how cultural, social or religious aspects of the Bronze Age life might have affected any choices and selection of materials and resources in metal production. Thus, the material culture studies performed actually provide us with the insights necessary to assess the social significance and function of bronzes in past societies. Technological innovations as results of intercultural contact are another research issue that emerged from this material-immanent analysis and that is in need of being developed further.

Part of Chapter 7 is dedicated to the question concerning the striking preference of casting rings (ingots?) in the eastern Baltic production places and in neighbouring regions. Because the dominance of ring-shaped clay moulds is highly visible in the casting debris it is assumed that these ring moulds might reflect an intended standardisation and commoditisation in the production and distribution of bronzes. It is furthermore assumed that the bronze rings served as multi-functional semi-products that were commoditized valuables facilitating the exchange of agricultural products and livestock. However, as ring ingots they were of particular use and value for the metalworker, i.e. the person who was able to distinguish different material qualities in the processes of technical complexity such as alloying and melting that implied the manipulation of the metal's properties (malleability, colour, hardness, etc.). The ring object allowed easy fragmentation, division and portioning for the crucible melt, it simply fulfilled the requirements in the production process and in the distribution and exchange. In practicing ring casting the settlements of Asva type seem indeed to represent a stage in the metallurgy cycle of re-melting and converting scrap bronzes and primary metals to 'ingots' in accordance with the custom and usage in the interregional metal exchange. The actual amounts of objects produced, the intensity and duration of bronze casting as well as the applied skill and expertise in metalwork technology are subject matters of further material studies.

It has been acknowledged that in view of the economic foundations required for the import, exchange and production of metals, bronzework indeed points to a privileged or even elitist social craft activity, but not necessarily with the postulated implications of social power and control. In view of the social organisation of bronze casting the settlements of Asva and Ridala are remarkable examples of how production activities (not only metalwork) were subject to

several social and economic units (households) within the settlement areas. In accordance with the various, apparently simultaneously existing production places, it appears that the major part of the community was actively involved in the complex and consuming processes of bronze casting (e.g. fabrication of moulds). It seems likely that there existed a multi-tiered organisation between the contributing craft persons, those with advanced skills and technological practice able to handle the demanding and complex melting and casting conditions such as air supply, heating procedure, determination of the melting point, etc. However, in consequence the social pattern behind metalwork craft in the Asva milieu appears to have been sort of 'democratised' and bronze casting still a matter of seasonally practised community specialisation. Asva is indeed a key site in the Bronze Age context (and beyond) when it comes to discussions of the social meaning of craft specialisation in theory and archaeological praxis, particularly because of many indications of standardisation in style, design and technique of objects, semi-products and implements related to craft and production. This concerns not only the finds related to metalwork production but also those of the bone and antler industry in the Asva milieu (see also Chapter 11).

The **Asva pottery** makes up another big subject matter in the analysis of the archaeological settlement material (Chapter 8), where several morphological, technical and functional–utilitarian criteria create a picture of the emergence of various coarse and fine ceramic ware and pottery types. The burnished and profiled bowls, some with handles, are distinctive of the Asva-type ceramics and enrich the range of eastern Baltic pottery groups. They also speak of an advanced technology of ceramic processing. Remarkably, the external influences highly visible in the bowls and their manufacture, design and use seem to have only affected the pottery that represents the sphere of eating and drinking customs, which quantitatively makes up only a minor part in the Asva-type pottery. The jars, food containers and/or cooking pots as the most numerous and homogeneous group (coarse ware pottery) are way less advanced in design and stylistic individuality, and also the creative effort invested in their manufacture seems somewhat restricted. The coarse ware pots, discernible by the shape of the neck and rim parts and particularly by the applied techniques of surface treatment (smoothed, striated or textile imprints) seem to be modest in terms of quality (ware, temper), but apparently sufficient for their usage. The coarse pots, constantly decorated with horizontal rows of pits pressed in neck or shoulder parts of the vessels, display a tradition of the Bronze and Early Iron Age pottery of the north-eastern European forest zone and appear to have been resistant to any innovations or implementation of stylistic features. This speaks in favour of a behaviour in style and technique following strict conventions and rules, all manifesting a local pottery tradition where the jars were allowed only very restricted concessions to outside influences (rusticated surfaces, knobs, cordon applications).

As it is likely that the fine as well as the coarse ware pottery in the settlements of Asva type was locally produced, presumably by both native potters and new arrivals in the community, the causes of this dichotomy have been discussed.

First, it has been assumed that the fine ware bowls, showing distinct traits of a central European Urnfield culture milieu, that of the Late Bronze Age Lusatian tradition, might signify or express aspects of both personal use and social identity behind these dishes. The specific use of the Asva-type bowls and their possible (ritual?) contexts of utilisation have also been discussed, but it remains a subject matter to be cleared with further chemical analysis of organic residues (e.g. lipids). However, the dichotomy and exclusive application and combination of decorative elements (pit stamps or striation on jars and imprints of twisted bronze rings and burnish on bowls) were rooted in a cultural–traditional disposition. These rules and conventions in regard to style and technique of ceramic work and function were perceived and communicated in the given Bronze Age society, and therefore keenly respected by the potters. That is why it has been assumed that both the persistence and the openness for innovation or implementation of foreign elements highly visible in these two ceramic groups of the Asva-type sites are the results of a collective and dualistic habitus, a phenomenon that has been described in socio-anthropological literature. Accordingly, the coarse pots and large bowls could be understood as complementary representatives of two realms: that of the inner, the domestic, and that of the outer, the public. The jars as multi-purpose vessels used for storage and preparation of food on the one hand, and the hanging and the cup-like bowls used to prepare and serve special liquids or ingredients on the other, seem to represent different spheres of closed and private household activities against ‘exclusive’ table and drinking manners (as open and communicative acts).

Furthermore, the interconnection and coexistence of old and new elements in style and technique of the Asva-type pottery illustrate not only the integration of the coastal regions of western Estonia in a large interregional contact network, but also the complex ways and mechanisms in the transmission and diffusion of cultural stimuli and innovations eventually manifested in local ceramic groups (or style/culture provinces). The foreign characteristics and features on the bowls in the Asva pottery seem to be distributed in diverse and eclectic ways, with stylistic influences deriving from various geographical regions such as western and central Poland, southern and eastern Sweden and Gotland. In sum, these different, rather sporadic and changing directions of cultural influences and contacts give the Asva-type bowls an odd impression of a creolisation in style and technique. Their exclusive occurrence in the Estonian Late Bronze Age sites (Asva, Ridala, Kaali and Iru) only, while missing in Latvian and Lithuanian hill forts, and their sudden disappearance from the record with the decline of this very settlement type make them appear as evidence and symbols of social gestures.

In the final conclusion the **changes in society, economy and settlement** in eastern Baltic Bronze Age have been discussed opposing the theories of the current research with the author’s own material culture studies (Chapter 13). Places such as Asva, occurring in the Late Bronze Age on the archaeological map, do not only represent a new settlement type of permanent stationarity and centrality. Characteristic is the agrarian and maritime-based subsistence economy,

complemented by various branches of secondary product processing and exclusive crafts (e.g. metalworking production). It has been asked whether the archaeologically studied settlements and the various production activities correspond to the postulates of sociopolitical relations determined by power and control based primarily on agriculture and metalwork. The Island of Saaremaa seems to reveal a slightly different, complex picture in comparison with hill forts of the eastern Baltic mainland: with Asva and complementary all-season activities, with hunting and fishing practices not only widening the range of subsistence practices. Particularly seal hunting and seasonality give reason to reassess the society relations and the settlement organisation behind this complex subsistence and craft production pattern. Both seasonality (i.e. climate and environmental aspects) and community specialisation (seal hunting strategies) need to be considered when applying theoretical concepts of hierarchisation and multi-tiered social organisation to the eastern Baltic Bronze Age cultural milieu, that is when implying chieftdom-like structures, elites or craft professionals.

In dealing with the causes and factors of the societal change an attempt at an alternative explanation of the emergence of the Asva-type settlements against the neglected background of the role of seal hunting in Bronze Age settlement economy has been made. Accordingly, the maritime character of the studied sites on Saaremaa has been viewed from the perspective of seal exploitation as one of most eminent (marine) resources. The large percentage of seal bones among the rich osteological find material is undoubtedly a clear indicator of the extensive use and exploitation of seal products (blubber, leather). In any case, the subsistence of the Asva and Ridala hill forts was apparently not based on mixed farming and processing of secondary agrarian products alone like in the hill forts of the mainland. It seems also likely that seal populations and hunting grounds in south-eastern Saaremaa (and the Gulf of Riga) have determined the location selection of the Bronze Age sites, particularly in a geographical landscape with limited, rather sporadic distribution of fertile soils (*alvar* or *loo*) for field cultivation and grazing cattle. Furthermore it has been hypothesised that settlements such as Asva and Ridala might have emerged from the fusion of conglomeratic, regionally dispersed single farms or households that might have constituted seasonal hunting sites. The merging and culmination of various economic and crafting activities and skills, the sort of communal and 'democratised' participation in exclusive crafts such as metalwork plus the versatile interregional cultural contacts and influences visible in the material culture are aspects and phenomena that could be understood from the perspective of community specialisation. Thus, the marine subsistence and the seasonal hunting trips to far regions in the Baltic following coastal routes could be the main determinant of the changing development in society and economy of Bronze Age Saaremaa. Not only the form of settlement organisation and the nature and complexity of social relations in community but also the character and the practice of a maritime settlement economy of Asva and its participation in the communication network of the Bronze Age Baltic Sea appear in a new light.

This study provides a presentation, order and analysis of archaeological findings and contexts that are treated as representative, ‘materialised’ sources of social and economic activities and that are considered as significant for the understanding of the major cultural processes taking place in the local settlement milieu throughout the Late Bronze Age. With this material immanent approach applied to archaeological remains of an outstanding quality and informative value and in connection with current and forthcoming insights from archaeozoological and -botanical research we possibly will be able to reconstruct the basic conditions, actions and choices of Bronze Age communities when adapting to their environment. This all leads to discussing the possible causes and factors behind these societal changes primarily visible in the archaeological settlement milieu. However, in regard to the social patterns behind settlement economy and craft as well as the territorial use and perception of the surrounding landscape, many questions on the entire Estonian Bronze Age settlement phenomenon still remain to be answered.

In any case, the Asva site has the potential of taking a key position in future Bronze Age research. The reason is the quality and spectrum of the archaeological material and the data and information available. Considering the excellent conditions of preservation of bone material, for instance, the current interdisciplinary methods of research provide a large set of applications and solutions in approaching the above-mentioned problems and subject matters of research. Some of the formulated questions and hypotheses in connection with the Bronze Age technologies and economic strategies are already subjects of current or applied research projects involving various archaeological subdisciplines (e.g. materials science, experiments, archaeobiology) and building up international research platforms. As the ongoing archaeological excavations at Asva (since 2012), in collaboration with Valter Lang and Lembi Lõugas, reveal, a new stage of Bronze Age research in Estonia has already begun.