Christian Horn, Knut Ivar Austvoll, Johan Ling, Magnus Artursson, *Nordic Bronze Age Economies*. Cambridge Elements: Elements in Ancient and Pre-modern Economies. Cambridge University Press, Cambridge 2024. 94 pages, 16 colour images, hardback, ISBN 978-1-009-47583-9.

Nordic Bronze Age Economies (NBAE) is a *Cambridge Elements* volume that explores a wide range of aspects directly or indirectly related to the Bronze Age (BA) economy of the so-called 'Nordic area' – an archaeological region encompassing present-day Denmark, Sweden, Norway, southwestern Finland and the northernmost part of Germany. The book is authored by Christian Horn, Knut Ivar Austvoll, Johan Ling and Magnus Artursson, four of the most experienced and influential scholars working on Nordic rock art, archaeometallurgy, social organization, trade and maritime archaeology.

This review paper is divided into two parts. The first part summarizes the various sections of NBAE, highlighting the main arguments and the archaeological evidence presented. This summary does not strictly follow the order of the pages; however, when I refer to specific sections, I clearly indicate them in the text. In the second part, I position the book within the ongoing debate on European Bronze Age economies and introduce some critical remarks.

NBAE is presented as 'a readable and easy-to-use account that helps to understand the economies of the Nordic BA'.[1] It offers a clear and accessible overview of the Nordic archaeological evidence used to reconstruct domestic and political economies across different regions, interconnected through relationships of interdependence and competition. The volume is well-suited for a broad audience, ranging from graduate students to advanced scholars in archaeology, anthropology and political economy.

The research primarily focuses on the BA, following the Nordic chronological framework: Period I (1800/1700–1500 BC), Period II (1500–1300 BC), Period III (1300–1100 BC), Period IV (1100–900 BC), Period V (900–700 BC) and Period VI (700–500 BC). Periods I–III are classified as the Early Bronze Age (EBA), while periods IV–VI constitute the Late Bronze Age (LBA). After a brief historical overview of these phases, Section 2 offers an extensive discussion of the macroeconomic perspectives that frame the volume's analytical approach. The history of research on the Nordic economy reveals that, at the dawn of European prehistoric studies, Scandinavia was often regarded as a peripheral region – either passively adopting technological and cultural innovations following migrations or mirroring developmental trajectories devised for other parts of prehistoric Europe. This paradigm has been challenged by more recent research emphasizing micro-regional dynamics and the growing importance attributed to interdependent networks of alliances and exchange. In recent years, alternative models of economic organization have been theorized, many of them inspired by World Systems Theory and highlighting the role of bronze within an early globalized Bronze Age Europe.[2]

In NBAE, the authors propose an alternative economic model, carefully outlined and supported by a variety of case studies and diverse forms of archaeological evidence. The Nordic economy is conceptualized as the integration of two embedded economic spheres: domestic and political. The Nordic region is characterized by low-density settlement patterns and decentralized farmsteads. These farmsteads were largely self-sufficient in food production and – albeit to varying degrees depending on the region – in technological resources. This domestic economy involved the majority of households (Section 3), whereas elite farmsteads were capable of financing boat-building, long-distance trade and raiding activities (Section 4). These elite groups were the primary agents of the political economy, exercising control over wider territories and extracting surplus from surrounding micro-regions.

The model suggests that different micro-regions were able to maximize their 'comparative advantage' – arising from imbalances in resource availability, technological access and mobility – by investing surplus in trade and raiding. As a result, Nordic micro-regions tended to specialize their production based on their locally available assets. All these dynamics are subsumed under what the authors term the 'Maritime Mode of Production',[3] in which interconnected regional economies exploit their comparative advantages within a complex network of chiefdom confederacies, characterized by both cooperation and competition.

1 p. 1.

2 Vandkilde 2016.

3 Ling, Earle, Kristiansen 2018.

The domestic economy was shaped by environmental opportunities, which in turn influenced the social organization of individual micro-regions (Section 3). This relationship is explored in detail through selected micro-regions presented as exemplary case studies (Section 6), including Limfjord (northern Jutland), Jæren (southwestern Norway), Inner-Sogn (western Norway), and Tanum (western Sweden). It is not my intention here to enumerate the numerous differences across the Nordic landscape, reflected in variations in crop selection, livestock strategies and the exploitation of region-specific resources. What emerges is a coexistence of both sea-based and land-based communities, with forms of social organization ranging from coercive to cooperative.

All these regions experienced a growing demand for metal during the Nordic BA – a resource not locally available and accessible only through trade or conflict with other European regions.[4] This shared need likely fostered forms of sustained economic interdependence among the Nordic micro-regions.[5]

The authors define three spheres of exchange, differentiated by distance (Section 4): 1) Micro-regional exchange required approximately a day's journey and typically involved neighbours and kin bound by long-standing ties of friendship; exchanges within this sphere were therefore primarily governed by principles of reciprocity. 2) Macro-regional exchange entailed journeys lasting several days. Although not based on kinship, these exchanges generally occurred within established networks characterized by shared Nordic cultural uniformity. Materials such as stone suitable for tools or mould production and timber for boat-building circulated through these spheres. 3) Long-distance exchange extended beyond the Nordic sphere, involving the export of flint and amber across Europe and the import of copper and tin (in alloyed form as bronze), gold and glass into Scandinavia. Other materials – such as salt, textiles or foodstuffs, though absent from the archaeological record – were likely part of one or more of these spheres of exchange.

Among the various materials, bronze emerges as the most archaeologically attested metal. As the authors note, bronze was 'used to produce weapons and prestige goods,' and 'its presence in burials and sacrificial depositions, alongside its near absence in settlements, demonstrates its significance as a prestige and ritual material'.[6] The demand for metal and the geographical distance from metal sources required considerable investment, thereby offering elite groups an opportunity to consolidate political and economic control. In this context, long-distance exchange played a central role in the 'political economy' of the Nordic BA. The exchange of raw materials, finished products and services took place within non-monetary economies, primarily through mechanisms of gift exchange and barter.[7] In addition to trade, raiding and looting also played a role in the movement of both materials and people.

Section 5 addresses the role of violence in the Nordic BA. According to the authors, the scale and significance of warfare during the BA are likely underestimated. Even in archaeological contexts where a high incidence of violence might be expected – such as the Tollense Valley battlefield (Period III) – the relatively low number of skeletal remains bearing trauma is striking.[8] As direct evidence does not offer a reliable proxy for assessing the prevalence of warfare in BA Europe, the authors argue that attention should instead be directed toward indirect indicators in the Nordic archaeological record. These include the presence of hillforts strategically located along maritime routes and interpreted as defensive structures, as well as the rich corpus of Nordic rock art, which features scenes of warriors, combat, raiding and slaving. Ultimately, violence likely functioned both as a means to redress imbalances between polities and micro-regions, and as a strategy to acquire resources – such as slaves, metals and other valuable commodities – that were not necessarily accessible through trade alone. Section 7 is devoted to the direct evidence of Scandinavian individuals abroad, based on isotope analysis, and offers a detailed overview of the seafaring technologies that may have been employed during the Nordic Bronze Age.

The volume is set within the field of Nordic archaeology and makes a significant contribution to the broader body of literature on social organization and economic systems in Scandinavia during the Nordic Bronze Age.[9] Particularly valuable is the authors' effort to provide readers with a comprehensive overview of the Scandinavian landscape, emphasizing the distinct characteristics of various micro-regions through the integration of palaeobotanical, archaeozoological, paleoenvironmental and archaeological data, spanning from the Late Neolithic onward.

Importantly, the Nordic BA is not portrayed as a homogeneous bloc of regions valued only for their peripheral participation in broader European trade. Instead, the book highlights the internal diversity and complexity of Nordic

4 Nørgaard, Pernicka, Vandkilde 2021.

5 pp. 52–53.

6 p. 30 after Horn 2018.

7 p. 36.

8 Brinker et al. 2016.

9 Earle et al. 2015. – Ling, Earle, Kristiansen 2018. – Nørgaard, Pernicka, Vandkilde 2021. – Vandkilde et al. 2024.

economic systems. The authors' stated goal of readability is fully achieved, thanks to the clarity and coherence of the exposition. *Nordic Bronze Age Economies* is, in my view, a highly informative volume that offers valuable new insights for both specialists in the Nordic Bronze Age and scholars more broadly interested in ancient economies.

As mentioned, the existence of different political systems across micro-regions is suggested. The goal of chiefly households was to extract as much surplus as possible from the domestic economy in order to invest in raiding and trade. The return for the elites came not only in terms of wealth but also in terms of prestige. Farmsteads, on the other hand, also benefitted from these expeditions through forms of redistribution. In micro-regions where a top-down control by the elites is assumed, there is stronger evidence of power display by the chiefs, also visible in the size of longhouses or in funerary monuments. Conversely, in regions where a more cooperative, bottom-up political structure is hypothesized, such evidence is absent.

The purpose of household economies, beyond self-sufficiency, was to generate surplus in order to acquire resources not locally available, such as metals. Authors frequently invoke the concept of 'comparative advantage' to account for regional economic differences, attributing them to unequal access to resources, knowledge and technology. As stated, 'Key factors determining comparative advantages among economic units included environmental advantages, the freedom of movement, ownership of resources and technologies of transport. Each can be seen as a transaction expenditure making economic dependency more costly'.[10] In several instances throughout the text,[11] the advantage of certain micro-regions over others is primarily explained by the uneven distribution of specific resources or by exclusive access to them. In such cases, the logic appears to diverge from David Ricardo's notion of comparative advantage,[12] which presupposes the existence of opportunity costs and productive alternatives between which economic agents can choose.[13] Where resources are simply absent or inaccessible, such choice does not exist. Instead, the type of advantage described here rather resembles Adam Smith's concept of 'absolute advantage',[14] i.e. one region is able to produce a good more efficiently due to lower production costs – determined by the availability of natural resources, environmental conditions, labour costs, technology and other factors – rather than because of a relatively lower opportunity cost.

According to the authors, the long-distance trade described in NBAE involves the non-monetary exchange of bulk goods with European communities. The book, however, does not engage in debating scientific literature that claims the opposite.[15] This raises a few critical issues: 1) Contrary to what the authors state – i.e. 'the existence of a generalized value equivalent in the European Bronze Age is in doubt, and nonmonetized gift exchanges and barter including bulk goods seem more fitting modes of exchange'[16] – weight systems in Europe, especially from the second half of the 2nd millennium BCE onward, are well documented. Over 700 balance weights and at least 18 weighing scales have already been recorded,[17] and metrological analyses clearly show the existence of continental weight systems, reaching as far as Northern Germany. 2) There is evidence for metal money objects as early as the late 3rd millennium BCE[18] and for the widespread use of weight-based bronze money at least from the mid-2nd millennium BCE.[19]

It remains unclear whether, and to what extent, this phenomenon also applied to the Nordic area, as available research never focused on this part of Europe. Although research on weighing devices and weight systems in Scandinavia is currently lacking, it is well established that objects now identified as balance weights were present in the Nordic countries.[20] Moreover, it is certain that BA European agents were familiar with weighing instruments and, based on current evidence, made use of bronze in a monetary fashion. Expanding research into regions not yet investigated in this regard will be essential for refining our understanding of these phenomena.

I found the book strongly oriented toward emphasizing the hegemonic role of warrior elites in the economy, while those outside these elites are portrayed primarily as herders, farmers or fishers, subject to the payment of shares of their products – a kind of taxation – in exchange for the commodities/technology they needed for self-sustenance. The archaeological indicators employed to identify the presence of elites – such as longhouses, monumental burials and material wealth – provide valuable insights into economic

10 p. 12.
11 pp. 32, 38, 44, 49.
12 Watson 2017.
13 Ricardo 2004 [1817–1821].
14 Smith 1981 [1776–1784].
15 E.g. Baron, Millhauser 2021. – Blanton, Feinman 2024.
16 p. 36.
17 E.g. Hermann et al. 2020. – Ialongo, Hermann, Rahmstorf 2021. – Ialongo 2025.
18 E.g. Kuijpers, Popa 2021.
19 E.g. Ialongo, Lago 2021. – Ialongo, Lago 2024.
20 Horst 1981.

inequality and hierarchical social structures.[21] However, the existence of social hierarchy and economic disparity alone does not appear sufficient to justify the near-total absence of economic agency and initiative among non-elite groups implied in NBAE.

The importance of bronze also appears somewhat biased toward its use in weapon production, with an emphasis on its prestige and symbolic significance.[22] I am not in a position to quantify the proportion of weapons relative to other object types, as – to the best of my knowledge – no large-scale and heterogeneous database of this kind is available for the Nordic BA. However, as the authors themselves acknowledge, weapons are undoubtedly overrepresented in rock art depictions. As a matter of fact, when examining hoard catalogues and burials,[23] such a disproportion between weapons and tools, ornaments or raw copper ingots does not seem to emerge as strongly as suggested in the book. In Europe, from the second half of the 2nd millennium BC onward, bronze appears to have circulated at least as frequently as 'small change' as it did as a bulk material,[24] suggesting a possible role in everyday economic transactions.[25] While research on the monetary use of metal is not yet available for Scandinavia, I am not convinced that the evidence presented by the authors is sufficient to rule out all forms of micro-regional exchange beyond kin- and neighbour-based reciprocity.

My final remarks aim to further underscore that *Nordic Bronze Age Economies* represents a highly valuable scholarly contribution and a most welcome addition to research on Bronze Age economic systems. The study of ancient economies is increasingly enriched by the availability and interpretation of new evidence from other disciplines, which the authors have successfully integrated into their research. Some of the observations offered in this review are intended as reflections that provide an alternative perspective and seek to stimulate further discussion on the topic of ancient economies and economic modelling. I am confident that this book will become a key reference in the coming years for scholars working on ancient economic systems and the Nordic Bronze Age. Moreover, comparable research in other European regions is highly desirable, as it would contribute to a deeper understanding of the differences, particularities and interconnections that characterized the complex world of the European Bronze Age.

21 This and other assumptions on the topic should also be compared with the recent work by Ortman et al. 2025.

22 pp. 30–31.

23 E.g. Levy 1982. – Nessel 2019.

24 Primas 1997. – Hansen 2016. – Lago 2020.

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