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Project Gallery

Cemetery at Store Frigård, Bornholm: society, exchange and alliance systems in the Baltic area at Early Iron Age

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Extraordinary finds from the Store Frigård cremation cemetery on the Danish island of Bornholm suggest that the society that used the site played a key role in supra-regional contacts and in the distribution of goods and people across the Baltic Sea between the Continent and Southern Scandinavia during the Iron Age.

Keywords: Scandinavia, Bornholm, Iron Age, cemetery, supra-regional contacts

Introduction

The central location of Bornholm Island in the Baltic Sea makes it an obvious nexus for exchange, mobility and intercultural contact between continental Europe (Poland and northern Germany) and Jutland and southern Scandinavia (including Öland and Gotland), especially in the Iron Age. Yet the scale, temporal and regional fluctuations of the contacts, their significance for local communities and their impact on other cultural regions in the Baltic area remain unclear, despite numerous partial publications (cf. e.g. Rasmussen 2010; Heidemann Lutz 2010 refers only to part of the Roman period).

Greater understanding may be gained from unpublished data from the cemetery at Store Frigård, excavated 1954–1963 (preliminary: Trolle 2021) and stored in the National Museum in Copenhagen. The 1256 cremation (and one inhumation) graves, dating from the early pre-Roman Iron Age to the late Roman period (500 BC–AD 400), make Store Frigård the largest and longest-functioning cemetery on Bornholm (Figure 1) and in the entire Baltic area. The international research project 'Bornholm – the island in the middle', which brings together researchers from Denmark, Sweden, Poland and Norway, aims to shed light on social and economic transformations of the local community (also in the context of the whole of Bornholm) and on contacts and alliance systems in the Baltic Sea region in the Early Iron Age, based on the material from Store Frigård. The core research questions

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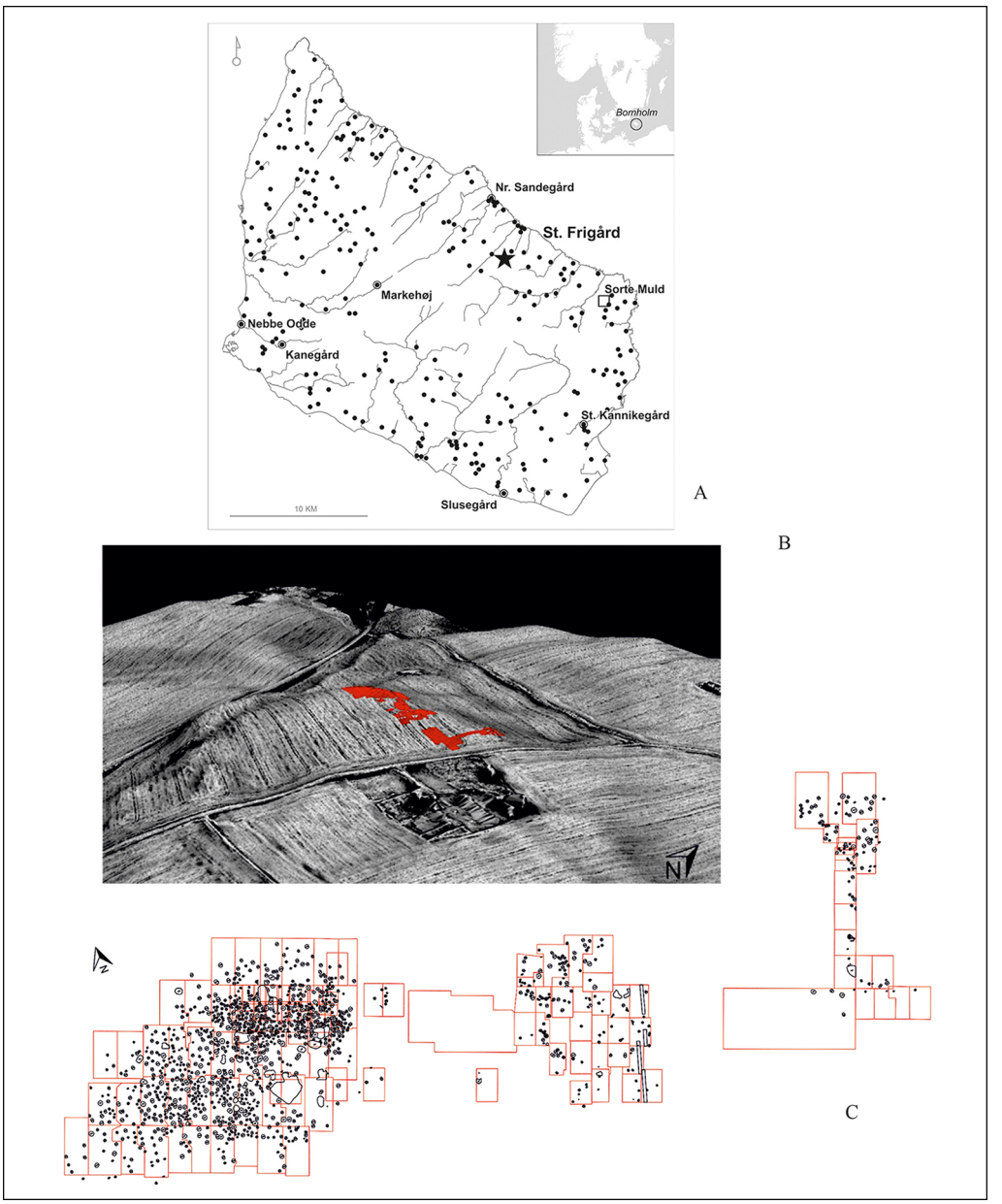

Figure 1. Map of Bornholm (A) showing the location of Store Frigård and other cemeteries from the Early Iron Age. B and C show a 3D map and plan of the cemetery, respectively (figure by A. Pihl).

are: Which overseas economic and cultural connections can be identified at Store Frigård? In consideration with other material from the island, what does this say about the role of Bornholm and its population in the Baltic Sea area in the Early Iron Age? How did this change throughout the cemetery's 900-year history with the dynamics and cultural shifts seen in

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the outside world? And how can these connections contribute to hypotheses about the dynamics of long-distance exchange in the Early Iron Age in general?

The cemetery

The importance of the Store Frigård cemetery can be compared with such centres in the Baltic during the Roman period as Himlingeøje, Slusegård and Sorte Muld (e.g. Lund Hansen & Bitner-Wróblewska, 2010). The spatial distribution and chronology of burials at Store Frigård indicate that the cemetery developed in three groupings concentrated around three highly visible ridges in the local landscape. At least 650 metal finds (approx. 95% are made of iron) were recorded in the graves (Trolle 2021). The preservation of iron artefacts (ornaments and parts of clothing, tools and weaponry) varies considerably; it is generally better than seen at more recent excavations on Bornholm but earlier conservation methods do not meet modern standards.

Store Frigård, with its centuries of continuous use, is one of the few places on Bornholm and the Baltic Sea which so clearly illustrate trans-regional connections and human mobility. This can be seen, for example, in the so-called 'Scandinavian belts' (Becker 1992), with decorative, multi-part iron fittings (Figure 2), present across southern Scandinavia in the late

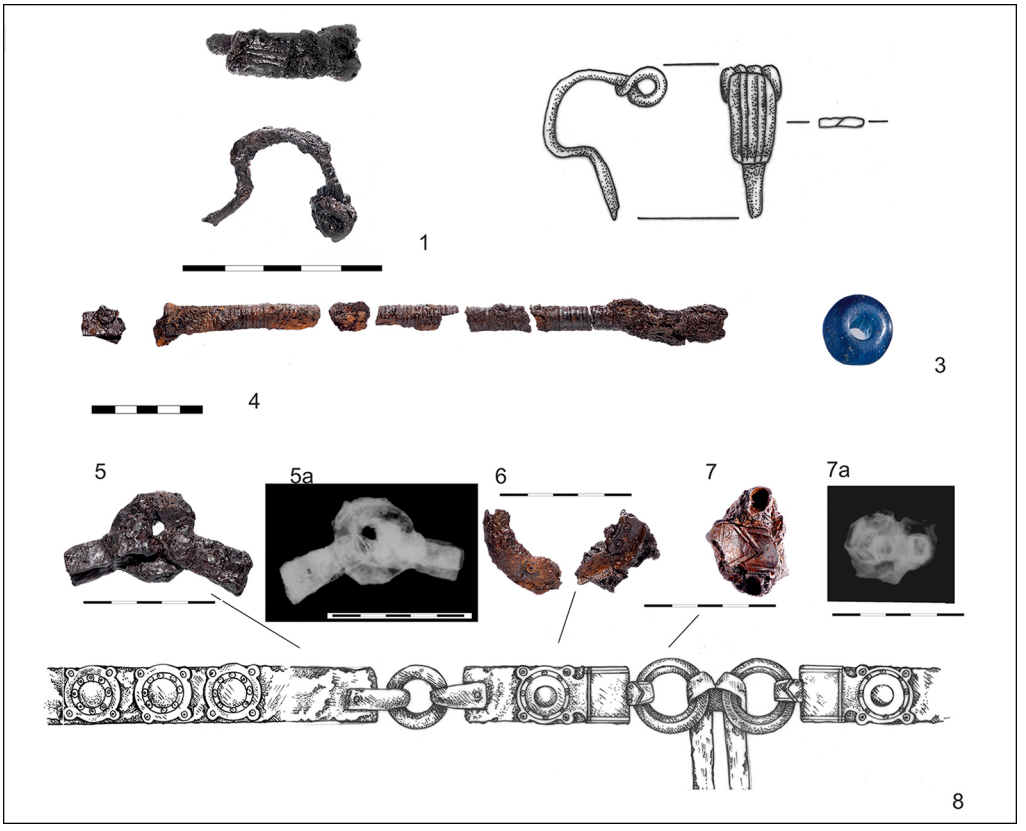

Figure 2. Finds from grave 94 and a possible belt reconstruction (8). With the exception of the glass bead (3), all the artefacts are made of iron (photograph by R. Fortuna; x-ray by A. Jouttijärvi; drawing by A. Kuzioła).

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pre-Roman Iron Age and early Roman period. Grave inventories and anthropological analyses indicate that these were elements of women's clothing. Although typological analysis suggests that the fitting sets from Store Frigård originate from Gotland or mainland Sweden (Västergötland), it is possible that they were produced locally on Bornholm (based on external originals). Such far-reaching intercultural contacts are also reflected in the unprecedented

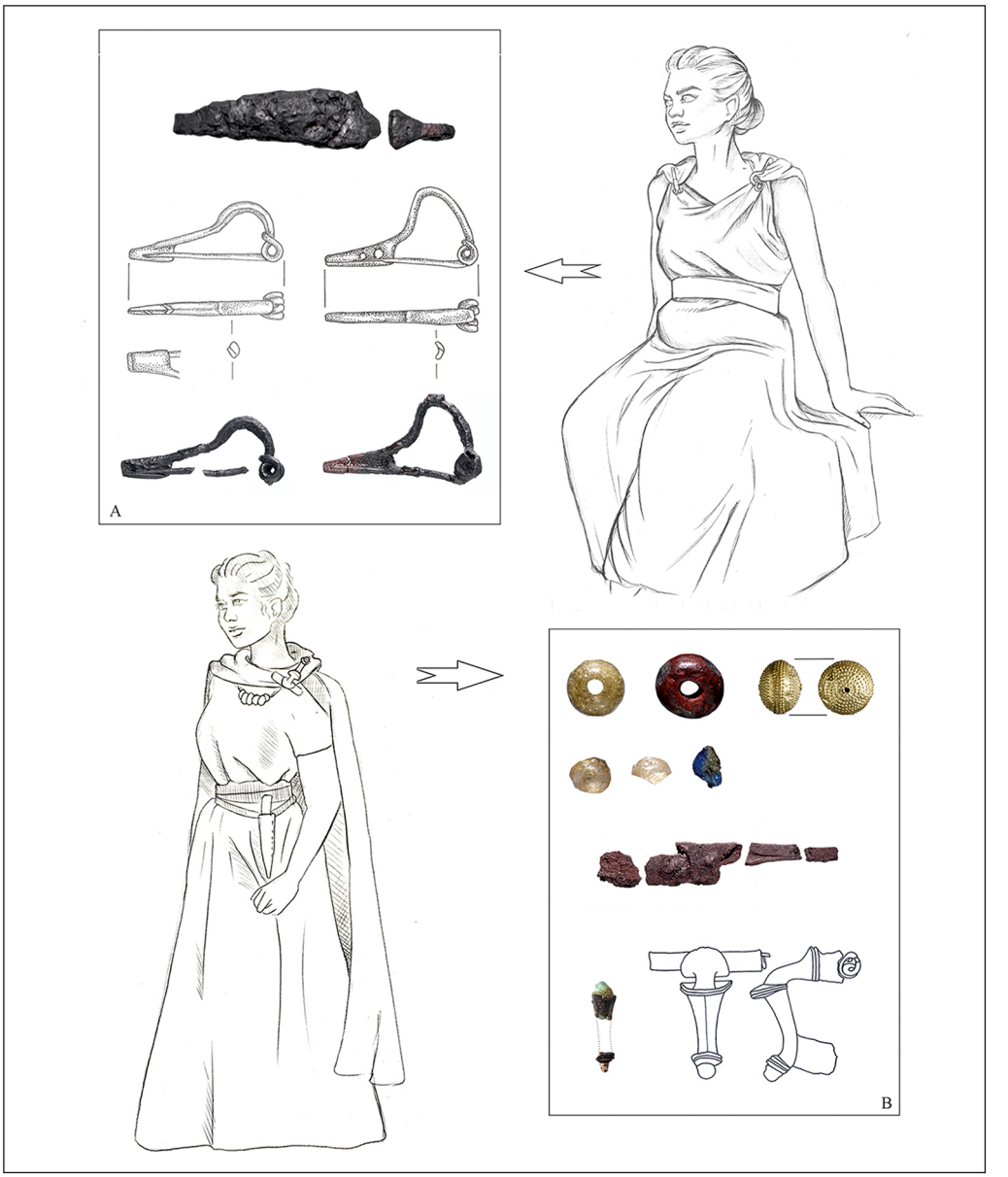

Figure 3. Grave furnishings and reconstruction of supposed costumes. A) grave 93: iron brooches, belt hook; B) grave 158: iron knife, copper-alloy brooch, glass and gold beads (drawing by A. Kuzioła; photograph by R. Fortuna).

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number of brooches in Scandinavia, i.e. with a triangular bow or a curved bow (so called "geschweifte" brooches), typical mainly of central and northern Poland and Germany in the late pre-Roman Iron Age (Figure 3A); this cultural unification is also witnessed in brooches from the Roman period (Figure 3B). Regarding weaponry, the same types of spearheads, shields and swords were used on Bornholm, on Öland, in Gotland and in southern Scandinavia (Figure 4).

Figure 4. Iron shield boss from grave 869 (1) and iron sword from grave 909 (2) (drawing by A. Kuzioła; photograph by R. Fortuna).

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The presence of foreign clothing elements can be interpreted as an indication of the diffusion of cultural patterns, exchange and/or trade, and the mobility of people (including artisans), including long- or short-distance exogamy and alliance building. Similarities in weaponry may also indicate the existence of large networks and military alliances. Such large-scale contacts can only be clarified by combining archaeological methods, such as typology, chronology and dispersion of forms, with various modern methods from natural science.

All artefacts and archival finds from the cemetery will be analysed. The project also includes a large number of physical and chemical analyses. The sampling strategy is that the results must be relevant to specific research problems (e.g. local production, human mobility), if possible covering the entire period of cemetery use. Osteological and statistical analyses, with graves grouped according to attributes (e.g. elements of equipment), should help to identify and interpret *inter alia* social differentiation in the living community (Trolle-Lassen 1987). Palaeogeographical studies also aim to reconstruct the local landscape over the period of cemetery use based on georeferenced plans, lidar and three-dimensional models, and to evaluate the scale of its later transformations.

The large number of iron objects from Store Frigård (more than 600) permits metallographic research into provenance and technology, to examine whether the island had the raw materials, local craftsmen and know-how to be self-sufficient, or whether the community was dependent on imports, for example from Sweden. Glass beads were almost certainly not locally produced (Figure 2, no. 3), and analysis of about 20 per cent of the iron objects, all of the copper-alloy and gold objects and most of the glass beads will provide insights into their origins and manufacture.

Pottery was found in approximately 533 graves, though the number of vessels varied. Some of the vessels resemble pottery forms from neighbouring regions in the southern Baltic Sea area. Inductively coupled plasma mass atomic emission spectrometry (ICP-MA/ES) of 50 samples from 34 graves will confirm whether they have a local origin or if some vessels were brought to Bornholm from the surrounding areas.

This will be complemented by stable isotope analysis of bone samples from 25 graves that included both local and possibly foreign equipment. Although such studies have been successfully applied to Iron Age societies in other part of the Baltic area (e.g. Wilhelmson & Price 2017; Łuczkiewicz *et al.* 2022), no analyses have yet been conducted on the Early Iron Age population of Bornholm.

Conclusion

The variety of artefacts at Store Frigård and the interdisciplinary approach of the project provide an insight into almost a millennium of the history of Bornholm and the Baltic Sea area, its dynamics and the changing relationships and alliances between Iron Age societies. Open to extending the existing research network and to further research ideas, the project also contributes to the understanding of local networks on Bornholm, and future publications will fill a gap in our knowledge of Iron Age Bornholm.

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References

Becker, C.J. 1992. Studien zur jüngeren vorrömischen Eisenzeit auf Bornholm. *Acta Archaeologica* (København) 63: 1–38.

Heidemann Lutz, L. 2010: *Die Insel in der Mitte: Bornholm im 2. - 4. Jahrhundert. Regionale und vergleichende Untersuchung der jüngerkaiserzeitlichen Grabfunde* (Berliner Archäologische Forschungen 9). Rahden/Westf.: Marie Leidorf.

Lund Hansen, U. & A. Bitner-Wróblewska (ed.). 2010. *Worlds apart? Contacts across the Baltic Sea in the Iron Age. Network Denmark-Poland 2005–2008* (Nordiske Fortidsminder C7). København: Det Kongelige Nordiske Oldskriftselskab.

Łuczkiewicz, P., Ł. Pospieszny, Z. Belka, S. Łukasik, M. Krenz-Niedbała, A. Kuzioła & J. Kleemann. 2022. Elusive Goths in northern Poland: initial isotopic insights of the pre-Roman and Roman period populations from the Wielbark Culture cemetery in Malbork-Wielbark. *Praehistorische Zeitschrift* 97(2): 609–23. https://doi.org/10.1515/pz-2022-2030

Rasmussen, B.M. (ed.) 2010. *Slusegårdgravpladsen V: Fundoversigt og genstandstyper* (Jysk Arkæologisk Selskabs Skrifter 14/5). Moesgård: Aarhus Universitetsforlag.

Trolle, T. 2021. Store Frigård – Bornholm's largest cremation cemetery from the Early Iron Age. Presentation of two graves from the Late Pre-Roman Iron Age and a research project underway, in A. Michałowski (ed.) *Typologia dziejów – dzieje w typologii*: 117–34. Poznań: Adam Mickiewicz University.

Trolle-Lassen, T. 1987. Jernaldergravpladsen ved Vogn. En arkæologisk – osteologisk undersøgelse. *Kuml* 35: 105–63. https://doi.org/10.7146/kuml.v35i35.110470

Wilhelmson, H. & T.D. Price. 2017. Migration and integration on the Baltic island of Öland in the Iron Age. *Journal of Archaeological Science: Reports* 12: 183–96. https://doi.org/10.1016/j.jasrep.2017.01.031