Anna Sörman

Gjutningens arenor: Metallhantverkets rumsliga, sociala och politiska organisation i södra Skandinavien under bronsåldern

[Casting Spaces: The Spatial, Social and Political Organisation of Metalworking in Southern Scandinavia during the Bronze Age]

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Review by Christopher Prescott

Anna Sörman's *Gjutningens arenor* is a recently defended PhD thesis that primarily deals with Late Bronze Age refractory materials found on sites in Sweden's Mälar valley region, and their interpretation. The present review outlines the book's contents and arguments, but also discusses some issues that arise – for this reviewer – from the study. The monograph starts with an outline of the subject, delimitations, research history, theoretical premises, and aims. The subsequent discussion of bronze casting and presentation of the archaeological material is an exhaustive presentation of the Mälar valley's Late Bronze Age metallurgical materials, followed by briefer descriptions of sites from Sweden's east coast, Norway and western Sweden, and southern Scandinavia. The next chapters explicate the patterns built from the data (objects, production remains and depositional contexts), and these patterns are contextualised in contemporary Bronze Age narratives. Analogical and theoretical premises help to generate interpretative conclusions about metallurgy practices, and the meaning of objects, places and practices in Late Bronze Age society. The study concludes with scenarios about space and social relations, and the political and ritual role and meaning of metalworking.

Bronze Age research has generally privileged objects, their circulation and deposition. When production refuse is discussed, there is a tension between the premise of high-status and esoteric workshops and the empirical pattern of nondescript and recurrent traces of on-site production. Sörman's data do not support ideas of metal production located at centralised workshops, nor products strictly controlled by and distributed from workshops by elites. Nor is there a clear socio-spatial divide between production of prestige objects and everyday tools. To address how the production of metal objects was organised, Sörman pursues three levels of inquiry:

- 1) What does the refractory refuse represent and how do refuse depositions relate to places of production?
- 2) Where were the socio-spatial arenas for casting located, and what was the relation between casting arenas and other settlement structures?
- 3) How can answers to the above questions provide insights into the social role and meaning of the production of bronze objects?

Many of the numerous large-scale Bronze Age excavations in the Mälar region during the last 30 years have applied sophisticated recovery and mapping methods. These excavations have yielded important in-context refractory finds, and the main section of this book is dedicated to the presentation, review and patterning of this data. Sörman has reviewed *all* the material – hundreds of reports – to identify 27 'secure' sites and 13 with probable evidence of metalworking. The broad distribution in the Mälar valley: 'confirms the picture that bronze working was conducted at many sites in the region [...] Refuse from bronze casting is relatively common at grave and settlement complexes from the Middle and Late Bronze Age' (p. 61).

The sites are divided into categories and examined individually. The 'key sites', based on the quality of the recovered evidence, are Apalle and Ryss-gjärdet. They represent two main Late Bronze Age contexts: settlements and graves/cult houses. A 'lead group' of nine sites (including Hallunda and Skälby) provides evidence that is more irregular. The results from Apalle stem from settlement areas and substantiate that metalworking was spread around the site and metal melting took place in open pits. Casting was located in houses and open spaces, and even the one concentration of refractory finds near building K₃₃ is re-examined and found not to represent an enclosed production area. Ryssgjärdet represents graves/cult houses, and here recurrent casting was carried out on raised arenas, visible for bystanders. The nine lead group sites corroborate the patterns identified at Apalle and Ryssgjärdet. Skälby, previously interpreted as a workshop, is reinter-

preted as a longhouse. Structures at Hallunda are also re-examined and no support is found for older assertions of a workshop or furnaces. This context is redefined as a cult house, while the 'furnace bases' are reinterpreted as large postholes.

The expanded survey of other parts of Scandinavia supports the Mälar valley patterns. The conclusion is that metalworking was an activity at settlement and cult sites and was not conducted in specialised workshops. Melting metal was done in open hearths positioned in or near houses, in yards between houses, near graves, and in or near 'cult houses'. Metalworking was visible, potentially on display, and the whole range of objects and technologies were present. Despite the above, Sörman maintains that metalworking was not a profane or everyday task, but something conducted on auspicious occasions.

Sörman translates these results into social organisation, and holds that two social arenas, longhouses and cult houses, structured choice of casting sites. She maintains that what was cast, and where, is a function of the meaning of the object, the place and the person who would receive the obiect. This socio-spatial structure was not a dichotomy between 'prestigious' and 'practical', but guided by gender and elements in a horizontal social 'heterarchy'. Vertical hierarchy is expressed in the difference between large composite sites (with a range of techniques and objects) and single farm sites (mainly producing axes). Theoretical premises are adopted from Gell (1998) and DeMarrais (2013), and an important feature of *skilled crafting* practices was *performance*; production and use of metal objects are termed social projects. Spatial context, performers, objects, rituals of production and the status of the person to receive the objects constitute meaning. A critical point here is that the artefact associations held to vary between cult and longhouse contexts represent a tendency based on small numbers. Based on Sörman's data (table 12), most objects seem to be produced in both environments.

The empirical patterns that Sörman outlines provide a robust platform for studies of practical metalworking, spatiality, the role of metal and the social context of metallurgical practices. The text is well-organised (if at times repetitive) and jargon-free, and figures are informative. The empirical section could have been shortened, allowing concepts like *heterarchy*, *social project* and *ritual* to have been explored and operationalised better. Likewise, a broader set of analogies and anthropological models could have improved interpretative perspectives, and a fuller discussion of Bronze Age research would have provided a more responsive context.

A perfunctory handling of areas outside the Mälar region is defensible. Still, as someone familiar with the Norwegian data, I would maintain that this material could compensate for some skewing inherent to the Mälar valley data, both reinforcing and challenging Sörman's conclusions. An example is the distribution of a limited number of metal objects in light of the far-flung occurrence of moulds and crucibles, the implication being that the significance of Bronze Age metal was greater than the objects suggest. The 'outfield sites' missing in the Mälar region are represented in the Norwegian material, for example at seasonal sites along the coast and in the uplands, e.g. Ruskenest and Skrivarhelleren (Melheim 2015). Such Norwegian finds, recent studies of European metal trade, and the on-site metal production that Sörman describes underscore the ubiquity of metalworking and metal. These data challenge notions of esoteric metalworking and could indicate that metalworking was more 'profane' than Sörman allows for. On the other hand, the production site AL89 at Hunn is not only associated with burials, *it was buried*, pointing in a sacred direction. As so often, the BA evidence seems to point in multiple directions, and whether metalworking was a special occasion or a common event seems unresolved.

Sörman echoes a concept of the sacredness of metal, and argues that the Late Bronze Age represents small-scale, local communities. Even the most centralised states are physically local and have localised material expressions, so perhaps hands-on archaeological perspectives like Sörman's a priori skew against other outlooks? There is data that indicates that European Bronze Age societies were large-scale, not only in terms of abstract networks between small-scale polities, but in terms of the number of people mustered at any one place. Contemporary estimates running into the thousands in connection with slightly older events like ritual gatherings at Stonehenge or the battles at Tollense are examples. What would 'profane' but local metal production in a large-scale hierarchical social organisation entail for our perception of the Bronze Age?

Sörman's moving of metallurgy out of confined spaces populated by secretive practitioners is important. The European scale of the Bronze Age is probably dependent on open flows of knowledge. Ritual specialists approach knowledge in different ways, as described by Fredrik Barth (1990) through ideal types like the 'conjurer' (conserves and covets knowledge) and the 'guru' (learns and disseminates). These different knowledge managements produce very different 'informational economies', and 'propel a multiplicity of actors to do quite different things, and take quite things into consideration' (Barth 1990:641–642), with significantly different consequences for historical trajectories and scale. Could the on-site practices that Sörman describes represent dynamic approaches to technological knowledge that inherently counterpoise mystification – and interpretative 'myopic localism'? Could this be an approach to move beyond Sörman's phenomenological model, and help bridge gaps between data, patterns and interpretations?

If the study is described on a line from the empirical to the interpretative, the study's patterning and conclusions run on a scale from solid to speculative. This is not necessarily a problem, as data, theory and interpretation should perhaps not completely overlap, but it is a problem if the gap is so large that there is not real tension between the data and interpretation – to push them both forward? Dealing with 'the gap' is a methodological issue, but it is also a question of ontology, analogy and concepts.

'Identity' is important to the study, but the concept is in a way taken for granted. To paraphrase Barth's discussion of ethnicity, identity *is* important but it is a function of social relations, not a primordial characteristic. Identity is expressed through 'overt signs and signals – the diacritical features that people look for and exhibit to show identity'. Unfortunately for archaeology 'one cannot predict from first principles which features or cultural content will be made organizationally relevant by the actors' (Barth 1969:14). What signs convey information, or even whether metallurgy communicates identity, is not given. This is not to say the social identity perspective that Sörman adopts is irrelevant or invalid, and the clarity of her comprehensive narrative is valuable, but sometimes interpretation seems to be more based on choice than an argument. Would the complexity and contradictory expressions of the Bronze Age been better addressed if empirical and theoretical points of resistance were explored?

Bronze Age research is a dynamic field in European archaeology, driven by important finds, the 'Third science revolution' and theoretical discourse. The comments here are not so much a critique as a testimony of this study's relevance to issues central to evolving study of the Bronze Age. A strength is the robust empirical foundation and the impressive systematization of a large body of report data. The ensuing patterns form a solid platform for engaging problems in metallurgy and social, anthropological and historical issues. The interpretation section stands on its own feet, but is also a point of departure for developing research practices and conceptualisations of the Bronze Age, and some of the theoretical and methodological issues that confront us.

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