

A matter of scale: some impediments to broad archaeological perspectives on post-Roman European bow brooches

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Introduction

In the first half of the twentieth century it was not unusual for archaeologists of post-Roman Europe to interpret material culture with a view to the rest of the continent. In part, this was because these archaeologists fixated especially on migrations, which naturally entailed comparing material from diverse geographical origins. It was also because with smaller corpora and less detailed knowledge, commonalities between many different parts of Europe seemed more immediate. Although there are plenty of exceptions (Gauß 2009; Hilberg 2009 to name just two), today we tend to ask more questions about local contexts with a view to understanding something from their internal structuring rather than their external comparison, a movement that perhaps has its origin in functional and processual reactions against culture history (see Trigger 2006, 314; Burström and Fahlander 2012, 1). However, there are other reasons for the narrowing of scales besides advances in archaeological theory, including practical concerns and the political baggage of early medieval archaeology. Regionalised understanding is not a bad thing at all, but it does mean that we occasionally lose sight of some striking commonalities visible on a broader scale that would benefit our understanding of the greater whole as well as more local contexts. Displaying among the most conspicuous examples of this kind of compatibility are the bow brooches of fifth- to seventh-century Europe, which were closely linked stylistically, worn in comparable manners, and deposited in comparable (grave) contexts throughout most of what is now Europe (see Figure 1). They evidently have something quite fundamental to say about the societies of this period, but we have never quite asked what that might be. Although they exemplify the issue, the perspective offered here is not necessarily specific to bow brooches. Instead, my intention is to encourage a conversation about the validity and challenges of interpretations drawn on a European scale.

Juxtaposing massive geographical scale and small objects like brooches provokes a number of important theoretical and methodological issues. Traversing between momentary bodily interactions with hand-held objects and patterns observed

across a continent is a process wrought with complexity. Although there are perhaps preconceptions about how small objects like brooches could become imperative on such a continental scale, archaeologists regularly deal with transformations of accumulated small and repetitive actions into much broader patterns. Nevertheless, we do not always give these transformations of scale adequate attention. More frequently we are guided by tradition, discipline, and the availability of data into investigating units based on our understanding of putative tribes or kingdoms or even modern nations. Somewhere in the midst of the vast transformation between object, body and continent are questions surrounding the kinds of scales through which past individuals experienced the world (individual, household, settlement, tribe). Although we will return to some of these issues, my main purpose is to show how certain methodological and theoretical tendencies have steered us into dealing with scales of investigation that are not always given due consideration.¹

The published quantity of fifth- to seventh-century European bow brooches now stands well in excess of 7,500 items. The term ‘bow brooch’ is here used to describe any brooch that has a bow, as opposed to flat plate brooches (e.g. disc or saucer brooches) or open ring brooches (e.g. annular or penannular brooches).² Most originate from mortuary contexts, recorded or not, and where associated skeletal material has been analysed the overwhelming majority of these contexts have been female graves. We can therefore say with some confidence that bow brooches were a relatively standard part of feminine dress throughout much of Europe in this period. These brooches have strong regional characteristics, the distributions of which are not neat, but some align approximately with the historically recorded territories of tribal groups. The extent to which this is true varies considerably (see Figure 2), but the fact that certain stylistic features have regional ranges remains true. It was their pervasive regional styles that put brooches among the principal evidence for the building of culture history in the first half of the twentieth century. Moreover, as well as varying region to region, these brooches also developed rapidly over time. As a consequence brooches are often prominent in European chronological phasing constructed by seriations of grave groups. Notwithstanding their geographical and chronological variation, bow brooches were still stylistically linked over a colossal geographical range from sub-arctic Norway to central Spain, and from lowland Britain to the Black Sea (Figure 1). This is what makes bow brooches an ideal instrument with which to contemplate the validity of an amalgamated archaeology of post-Roman Europe.

The total of 7,500 brooches cited above is the interim result of a project being undertaken by the author. The project has two major aims: (a) to produce a serviceable database of European bow brooches of this period and (b) to address the dispersal of brooches across Europe in the fifth to seventh centuries as a single phenomenon, if one with many different geographical and chronological variations.³ The database upon which the project is based (the Early Medieval Brooches of Europe Database – EMBED) has been mainly constructed by joining pre-existing corpora together into a single digital database. This procedure has been a complex task of data management, including aspects such as the standardisation of terminology and data cleaning which are by now becoming familiar in large-scale archaeological projects using composite datasets. As such, the work has involved challenges involving issues of scale and interpretation that would be germane to this paper. However, given their complexity and specificity they will be detailed elsewhere. This paper addresses the part (b) mentioned above, which concerns the general challenges that come into play when we begin to interpret archaeological material on scales that are much broader than those to which we are generally accustomed. Initially, this paper will address three major methodological and theoretical impediments to broadening archaeological scales.

Challenges to broadening the scale of investigation

1. Larger datasets

The first impediment to broad scale analysis that I would like to discuss is that the sizes of our datasets have grown enormously since the nineteenth century, a process that is accelerating in recent years thanks to the incorporation of metal-detected finds into archaeological studies. For instance, in 1906 Schetelig listed only eighteen cruciform brooches from lowland Britain. Twenty years later, Åberg (1926) produced a list of 238. By 1990, Catherine Mortimer had a corpus of 572 and by 2011 this had risen to 1,614 (Mortimer 1990; Martin 2011). Just four years later the corpus stood at 2,075 (Martin 2015). These figures include brooches of just one type found in one geographical locale. If we imagine the scale of a dataset that would be able to cover Europe comprehensively, the task rapidly becomes insurmountable. Archaeologists like Åberg (e.g. 1922; 1923) could study brooches from all over Europe a century ago because it was then feasible to know the available dataset intimately and to examine

every object at least by photograph or illustration if not in person. Even though such antiquated expectations are no longer humanly possible, they still occasionally persist.

There are two possible solutions. The first would be to change the manner in which we study these objects by adopting Big Data approaches (e.g. Cooper and Green 2015). This will probably happen in time, and with it geographical scope could be broadened considerably. It would also encourage us to form a deeper appreciation of the complexity of the data itself.⁴ But it would also bring limitations. For instance, there is a risk of losing touch with the material properties of brooches, such as their three-dimensionality, lustre, tactility, weight or fragility, by turning them into pure, quantified data through the automated processing that defines and is necessitated by Big Data approaches (see Edgeworth 2013, 382). There is also the more immediate practical problem that, despite current work by the author (see above) the vast majority of the most recent data has not yet been gathered in one place, let alone digitised. The second solution is to decide on how big is big enough. Spaulding (1960) once defined three possible scales of archaeological investigation: spatial, temporal and formal (the last of which refers to the range of material forms investigated). Adopting a broader geographical scale may mean compromising with a narrower chronological scale or a more focused formal range of archaeological material. It should be feasible to take a reasoned sample clearly defined by such scales, consider its strengths and weaknesses and conclude whether or not it is representative if not comprehensive. If it is not representative, then any shortcomings can be built into our interpretation. This kind of sampling is standard in scientific archaeology, and yet it is extremely rare if not unheard of in the study of brooches. In either case, the butterfly-collecting approach is now about as feasible as it is considered. Its payoffs are unlikely to outweigh its workload.

2. Increased specialism

The scales at which we can work can also be stifled by increasing levels of expertise, particularly because, for historiographical reasons, expertise tends to be limited to specific types, regions or sub-periods. It is thanks in major part to larger datasets that our typologies are now more detailed and our chronologies are tighter. Nevertheless, the enormity of growth in specialist detail can be demonstrated by looking again at the cruciform brooches of lowland Britain. While Schetelig named no explicit types in

1906, twenty years later Åberg named just five types (an average 48 brooches per type). Just under a century later, we now have more than 40 types to consider (25 complete brooches per type, Martin 2015). And cruciform brooches are by no means the most extreme example of this kind of expansion in knowledge. Alexander Koch's impressive typology of brooches from the Western Frankish region classified nearly 1,300 items (many of them identical pairs) into over 170 types (just under eight brooches per type, see Koch 1998). Contrast this with Kühn's work commenced in the 1930s (Kühn 1965; 1974; 1981), where 3,500 brooches (again, many of them pairs) were classified into only 102 types (34 brooches per type). Even as it stands Kühn's three-volume account swells with descriptive detail. It is difficult to imagine the corpulence of such a work if it were to be repeated using modern typological methods. The expectations of today's methods, applied on a European scale, would rapidly engulf any researcher in a deluge of detail. Indeed, these heights of specialism, while they are invaluable on some levels, can also unintentionally discourage communication between regions, and even between fields of study within the same region, and this is something that David Clarke observed more than 40 years ago (Clarke 1973, 6–7). Of course, deep and specialist knowledge remains extremely valuable, but it becomes less relevant the wider we cast our net. The only escape from becoming submerged beneath descriptive facts is to choose an appropriate level of detail for the research question at hand. There are of course risks. By jettisoning detail we risk homogenising the dataset into its most basic form, losing the nuance of its heterogeneity, wherein lies the whole purpose of trans-regional comparison. The question is all about what Mathieu and Scott (2004) call “scalar resolution”; the suggestion being that considerations of scale do not only include space, time and formal considerations, but also how fine-grained our data collection needs to be to answer particular questions

3. (Local) Context is everything

Bow brooches, once among the sharpest tools for the carving out of culture history, have since been somewhat blunted by the rise of processual and post-processual archaeologies. Although processual archaeology in many respects favoured large-scale cultural comparison (Trigger 2006, 394; Bürstrom and Fahlander 2012, 1), it also represented a direct reaction against culture-history. Perhaps more importantly, both processual and post-processual archaeology focused on contextual analysis.

Contextual analysis primarily refers to an archaeological context defined in its strictest stratigraphic sense, but broader scales of the environment, region and locality are also important (see, for instance, Hodder 1987). Theoretical progress has therefore also acted as a localising force in our interpretation of artefacts. For example, not only has it been realised that similar brooches found in different regional (e.g. Barbiera 2005, 155–6; Hakenbeck 2007, 21–5) or chronological (e.g. Martin 2015, 190) contexts would probably have different meanings, but even brooches buried in different graves within the same cemetery could have subtly different interpretations drawn from them. If meaning can only be derived from context, it follows that to extract it our interpretations and datasets need to be sufficiently localised. However, considering again ‘scalar resolution’, context is perhaps being considered in too narrow or specific terms. There are in fact very obvious if basic similarities in mortuary contexts throughout most of Europe in this period, and obvious compatibilities in the context of form and style. Art Historical context, while not fashionable among many archaeologists, is a context nevertheless. In terms of scale, we could hold that the widest geographical and chronological context pertains to areas or eras in which these brooches did *not* occur, such as the preceding Western Roman Empire, the contemporary Byzantine East, the Russian Steppe, North Africa, or even Northern and Western Britain. Brooches were made, used and deposited in similar ways on a striking European scale in the fifth to seventh centuries AD. This says something fundamental about how these people were communicating by making, using and thinking about objects. We lose sight of this global context when our view extends only our own immediate horizons.

Discussion: bounded cultures and bounded objects

Despite shaking off most of the apparel of culture history, our academic language retains its heritage and this brings accompanying baggage to our research questions, methods and interpretations. We still frequently investigate divisions created more than a century ago formed at least partly under the influence of various nationalist agendas. Regionally specific populations in this period are still regularly referred to as ‘Gothic’, ‘Saxon’, ‘Frankish’, ‘Langobard’, ‘Thuringian’, ‘Germanic’ or ‘Slavic’, or even terms that were entirely non-existent in the fifth to seventh centuries like ‘Anglo-Saxon’. Regional studies, even if they do not use an ethnicity-laden vocabulary preserve a similar notion of units bounded by space and time. Admittedly,

a European scale invokes a boundary that is not incomparable on an ontological level, but its greater scale at least reduces assumptions of boundedness. The same logic is applied to groups of objects given even the most mundane labels. Take, for instance, a group of closely related bow brooches largely found in Western Europe that have square headplates and rhomboid footplates with small lateral extensions just below the bow (see Figure 3). In England, there are two slightly different series known as ‘great square-headed brooches’ and ‘Kentish square-headed brooches’. Broadly speaking, their cousins from Scandinavia are called ‘relief brooches’. Another series from Western and Central continental Europe are known as ‘Continental square-headed brooches’, or confusingly ‘Scandinavian’ because of their stylistic links with the aforementioned relief brooches. Historically, these series have been treated as separate entities, if stylistically linked ones, produced by somehow different peoples and investigated by archaeologists with different regional interests, even though they are essentially all part of the same phenomenon, and their distribution over this colossal area is clearly of significant interest (Figure 4). Again, grouping all of these together into ‘square-headed brooches with a rhomboid footplate’, or perhaps even more widely under the term ‘bow brooch’, draws up divisions that are not altogether different (it excludes other stylistically related objects like belt buckles for instance), but these broader terms would once again reduce assumptions of boundedness, and permit us to explore different scales of investigation.

The underlying problem in our understandings of both people and their objects is therefore a tendency toward reductionism, or a tendency to group a prescribed amount of variation (defined by the extent of our specialist knowledge) under a classificatory label. This is the product of an attempt to deal with scale, and such categories inevitably “represent diffuse, dynamic and multi-dimensional phenomena as bounded constructs” (Lock and Molyneaux 2006, 2). At some level this reductionism is not only useful but also indispensable. Nevertheless, the repeated and uncritical use of these labels can make them seem more real than they actually are. One way to alleviate reductionism, as described above, is to work with broader or more general categories, or perhaps hierarchical, nested ones. However, this in itself does not feel sufficient. There are deeper theoretical and methodological issues at play that act toward binding people and things into artificial groups. The narrowing of scale is a symptom of this. This paper is by no means alone in observing these difficulties. One might even suggest that one of the strongest currents in

contemporary archaeological thought is a movement away from reductionism to embrace the diversity of relationships between individual entities. Perhaps the most influential among such rejoinders is the idea of networks. Network theories and methods are diverse but they are all linked by their emphasis on measuring connectedness rather than binding things or people into pre-determined groups (see Brughmans 2012 for a useful review). They also tend to focus on the qualification or quantification of the relationships between the smallest units of analysis, and from there they extrapolate to the nature of the whole (after Latour 2005). Envisioning the distribution of brooches around Europe not as bounded groups but as nested networks raises important questions to do with the fractal nature of the phenomena (Brown, Witschey and Liebovitch 2005). Are local distributions defined by fine-grained typological analyses simply smaller versions of the continental distribution defined with a lower typological resolution? How do they differ, and what does this mean in terms of the lived experience of scale in fifth- to seventh-century Europe?

Facilitating such a shift would require us to re-envision the lines of enquiry that objects like brooches have tended to inspire. The regional distribution of particular styles of brooches since the nineteenth century have provoked questions that are essentially about identity, whether these have been ethnicity-, gender- or age-based (e.g. Hakenbeck 2007; Martin 2015). Whether or not we are conceiving of these identities in an accurate manner, it seems they existed in some form, and they certainly matter a great deal. However, there is another side to the stylistic relationships between brooches that comes to the fore when we observe their connectedness rather than their differences. The fact that these brooches are closely linked by style all over Europe tells us something fundamental about how people were drawing connections between each other, but particularly about how they were using material culture to do that. One might even look at it the other way round, to show how people were drawn into the relationships between objects and became entangled in relationships of production, gift exchange and dressed performance (e.g. Hodder 2012). Fiona Coward (2010, 465–9) has discussed the expansion of human connectivity during the Early Neolithic in the Near East from a networks perspective, arguing that explosions in the quantity and variety of material culture permitted people to draw lines of connections over greater distances and in so doing they enlarged the networks in which they participated. The proliferation of large and decorative brooches around Europe between the fifth to seventh centuries AD may

suggest the dendritic growth of networks in the wake of a collapsing empire, but it is only by quantifying and qualifying these inter-regional relationships that we will make progress. Such new frontiers will not be reached by drawing up boundaries in what was evidently a highly interconnected European populace.

We should perhaps also integrate into our choice of scale a theory of how individuals and groups conceived the scale of their worlds. Regionalised behaviour patterns are reflections of unconscious and conscious strategies of dealing with scales of social organisation. Dressing in a similar manner to one's neighbours contributes to concepts of what is local and what is foreign. Imitating a Scandinavian brooch in northeast France is another way of confronting much larger scales of experience, because this brooch itself might be seen as a method of collapsing these massive geographical scales so that the foreign is made local and familiarised. It is by following lines of inquiry such as this that we will be able to investigate the two-way process by which an individual's sense of scale is not only influenced by the objects that surround their daily life, but also how they act to influence that world themselves.

Notes

1. For a more in-depth treatment of these issues readers should be directed toward various papers in Mathieu and Scott 2004, Lock and Molyneaux 2006 and Bürstrom and Fahlander 2012.
2. The German term *Bügelfibel* ('bow brooch') is often used specifically to refer to the Continental series of bow brooches as opposed to, for instance, cruciform brooches, relief brooches, and *Armbrustfibeln* (e.g. Hilberg 2009). Here, the term 'bow brooch' is applied more widely as befits such a broad perspective.
3. The project is entitled 'Origins of a European community: creating identity and networks with dress in post-Roman Europe' and is funded by the British Academy.
4. 'Complexity' is defined here in the specific sense of information originating from numerous sources under numerous selection pressures, with numerous, differentiated biases.

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Figure captions

Figure 1. Distribution map of 6,728 bow brooches in Europe, all dating to the fifth to seventh centuries AD.

Figure 2. Brooches traditionally assigned to (clockwise, starting top left): Slavs (Werner's types I and II); Franks/Alamanni (brooches with a semi-circular headplate and narrow rectangular foot); Thuringians (bird/pincer/jagged headplate, various feet); Langobards (semi-circular headplate, oval foot).

Figure 3. From left to right: great square-headed brooch from Brighthampton, Oxfordshire, England (Ashmolean Museum, AN 1966.121); relief brooch from Syre, Rogaland, Norway (Stavanger Museum, S.9269a); Continental square-headed brooch from Anderlecht, Brussels, Belgium (Bruxelles Musées royaux d'Art et d'Histoire, B000956-033); Kentish square-headed brooch from Barrington (Edix Hill), Cambridgeshire, England (Ashmolean Museum, AN 1909.284b). All photographs by T. F. Martin.

Figure 4. Distribution map of the types of brooches depicted in Figure 3.

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