

DRESS AND IDENTITY IN
IRON AGE BRITAIN

A STUDY OF GLASS BEADS AND OTHER
OBJECTS OF PERSONAL ADORNMENT

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Cover: Replica of the Queen's Barrow necklace from Market Weighton, East Riding of Yorkshire.
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Preface

The following monograph was originally written as my doctoral thesis whilst at Durham University. I did not change substantial amounts of text, but I did adjust the organisation slightly and I completed some minor edits. The biggest change is the figures, the majority of which I remade for consistency. I have also included my site catalogue and bead catalogue as a text file, which I hope will be in a usable format and will help future researchers.

I owe a lot to the work of Margaret Guido, whose catalogue of Iron Age glass beads formed the initial data-set for this research. As much as possible, I tried to track down each bead in museum collections in order to view them first-hand. In some cases this was not possible and I have relied upon Mrs Guido's descriptions and measurements. This is clearly indicated in the data download available at <http://bit.ly/2iea1Ke>.

The data collection of the thesis and resulting monograph could not have been achieved if it were not for the generous grants provided by the Rosemary Cramp fund, the Prehistoric Society, and the Association for the History of Glass. I wish to thank these organisations for their financial support, as without it the resulting research would have produced a very different outcome.

I must also extend a heartfelt thank you to a number of museums, Historic Environment Record office staff, and other organisations for their patience and help during data collection. These include: The British Museum, The National Museum of Scotland, The Museum of Somerset, Wiltshire Heritage Museum, Dorchester Museum, Gloucester Museum, Poole Museum, Gillingham Museum, Bristol City Museum, Red House Museum, Corinium Museum, Stroud Museum, The Ashmolean, Norwich Castle Museum, The Yorkshire Museum, Hull Museum, the Marishcal Museum collection at the University of Aberdeen, Forres Museum, Elgin Museum, The Hunterian Museum, and Inverness City Museum. The HERs visited span the following: Dorset, Somerset, Gloucestershire, Bristol City, Norfolk, Suffolk, North Yorkshire, North Yorkshire Moor National Park, Humberside, City of York, and the Royal Commission on the Ancient and Historical Monuments of Scotland.

I would also like to thank the following individuals for their extraordinary assistance: Stephen Minnitt, Fraser Hunter, Jody Joy, John Davies, Alice Cattermole, and Paula Gentil. For access to unpublished material, thanks are due to: Jody Joy and J.D. Hill at the British Museum, Damian Evans at Bournemouth University, Steve Malone formerly at Archaeological Project Services, Paula Gentil at the Hull Museum, Fraser Hunter at the National Museum of Scotland, Ross Murray formerly at Headland Archaeology, and Angela Wardle at the Museum of London Archaeology. Thanks are also due to John Dent for answering my questions about Wetwang Slack.

For their willingness to listen to me ramble on about glass beads, a huge thank you to my husband, Freddie Foulds (who had to put up with most of it!), as well as: Fraser Hunter, Martina Bertini, Steve Minnitt, Jody Joy, Mel Giles, Arthur Anderson, Jo Zalea Matias, Mhairi Maxwell, Lindsay Büster, Rachel Reader, Paul Murtagh, Tom Crowther, Emma Cunliffe, Jocelyn Baker, Jo Shoebridge; and, of course my wonderful supervisors: Tom Moore and Richard Hingley.

Finally, a big thank you to my family and friends. I don't think I would have ever finished this work without your support! However, any errors of course remain my own.

Elizabeth M Foulds
Durham, May 2016

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5. Bredon Hill, Gloucestershire
6. Burn Ground, Gloucestershire
7. Cadbury Castle, Somerset
8. Cannard's Grave, Somerset
9. Catsgore, Somerset
10. Chalbury Camp, Dorset
11. Cirencester, Gloucestershire
12. Claydon Pike, Gloucestershire
13. Clevedon, Somerset
14. Conderton Camp, Worcestershire
15. East Chisenbury, Wiltshire
16. Glastonbury Lake Village, Somerset
17. Ham Hill, Dorset
18. Hengistbury Head, Dorset
19. Chesil Mirror Burial, Dorset
20. Lidbury Camp, Wiltshire
21. Maiden Castle, Dorset
22. Meare Lake Village, Somerset
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East Yorkshire (Figure 12)

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3. Bugthrope, East Riding of Yorkshire
4. Burton Fleming, East Riding of Yorkshire
5. Castleford, West Yorkshire
6. Cowlam, East Riding of Yorkshire
7. Dalton Parlours, West Yorkshire
8. Dane's Graves, East Riding of Yorkshire
9. Garton Slack, East Riding of Yorkshire
10. Rudston, East Riding of Yorkshire
11. Staple Howe, East Riding of Yorkshire
12. Sutton Common, West Yorkshire
13. Wetwang Slack, East Riding of Yorkshire

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2. Birnie, Moray
3. Candle Stane, Aberdeenshire
4. Cawdor, Highland
5. Culbin Sands, Moray
6. Culduthel Farm, Highland
7. Forest Road, Aberdeenshire
8. Sculptor's Cave, Moray
9. Tap o'Noth, Aberdeenshire
10. Thainstone, Aberdeenshire
11. Wardend of Durriss, Aberdeenshire

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Chapter 1

Introduction

Of all the Britons by far the most civilised are the inhabitants of Cantium, a purely maritime region, whose way of life is little different from that of the Gauls. Most of those inhabiting the interior...clothe themselves in skins. All the Britons dye themselves with woad, which produces a blue colour, and as a result their appearance in battle is all the more daunting. They wear their hair long, and shave all their bodies with the exception of their heads and upper lip.

(Julius Caesar (1st c. BC), Gallic War V, 14)

Most of (northern) Britain is marshy...For the most part they are naked... Also, being unfamiliar with the use of clothing, they adorn their waists and necks with iron, considering this an ornament and a sign of wealth, just as other barbarians do gold. They tattoo their bodies with various designs and pictures of all kinds of animals. This is the reason they do not wear clothes: so as not to cover up the designs on their bodies.

(Herodian (3rd c. AD), III, 14, 6-8)

In many ways we are at a disadvantage for understanding the people that inhabited Britain during the Iron Age (c. 800 BC - AD 43). In the past, textual evidence from classical authors has been taken for granted and presumed to be more-or-less accurate representations of everyday life in Iron Age Britain (Hingley 2011). While seemingly informative and almost ethnographic in nature, these sources are quick to belittle the inhabitants of Britain and construct stereotypes that portray their distant neighbours as outrageously different in both appearance and mannerisms. If these sources were to be taken at face value, they would have us believe that people in the British Iron Age wore no garments or, at best, covered themselves with animal pelts and hides, which of course was considered uncivilised (see above quotes). Historically, classical texts have formed a framework where the archaeological evidence has been manipulated to fit the textual narratives with little critical awareness. These classical sources have provided the basis for which studies of Iron Age tribal ethnicity and social hierarchy, as well as settlement sites, such as *oppida*, have been viewed within both Iron Age and Roman period studies of Britain (e.g. Wheeler's (1954) interpretation of Stanwick in North Yorkshire). On its own, archaeological evidence clearly points to the contrary and within recent years, this topic has been subject to a growing debate regarding the ways in which we should interpret archaeological evidence, and the applicability and validity of classical sources to supplement our understanding of the past (Collis 2003; 2011; Hill 2011; Hingley 2011; James 1999; Karl 2004;

2008; Megaw and Megaw 1998; Moore 2011; Pitts 2010; Woolf 1993).

If it is not possible to rely solely on the written classical texts in order to understand how the people living in Iron Age Britain dressed, then what kind of evidence do we have available? How can we answer the question: how was visual appearance materialised? The most obvious sources of information for appearance in the past is the representation of humans in art and the placement of people and objects within burials. Unfortunately for the study of the Iron Age period in Britain, neither of these sources are found abundantly, as there is very limited evidence for human representation in material form, and formal inhumation was limited geographically and to specific periods of time (Carr and Knüsel 1997; Whimster 1981). However, we can at least draw on evidence for appearance from preserved bog bodies, such as Lindow Man (Stead, Bourke et al. 1986) and others from Britain (Turner and Scaife 1995). Bog bodies are extremely rare, but none-the-less provide an unparalleled line of evidence.

Instead, a study of dress for this period requires a *mélange* of archaeological sources utilising differing avenues of evidence from which we can piece together an approximation of how people may have looked. For example, in contrast to the classical author's assertions, there is evidence that people wore textile garments. The actual fibres do not often survive in the archaeological record, but can be found as impressions in metal corrosion.

Indirect evidence comes from the manufacturing tools used to produce textiles, for example: spindle whorls, loom weights, and weaving combs (DeRoche 1997). Other evidence for dress is derived from the objects that were worn on the body. Two of the best known artefacts from this period are both objects that were worn: the torc and the brooch. Other artefacts include finger-rings, beads, and bracelets. These objects were made from a variety of materials, including copper alloy, iron, glass, jet, and shale. In contrast to earlier and later periods, materials such as gold, silver, and amber were not used extensively in the Iron Age, but do figure in some limited geographical areas and periods. Artefacts, such as tweezers, and 'nail cleaners' hint that the body was carefully managed (Eckardt and Crummy 2008; Hill 1997), while small mortars and pestles are thought to have been connected to woad-based body paint or tattoos (Carr 2005).

Some of these objects would have been worn in close juxtaposition to the body and communicated information to the viewer about the identity of the wearer, perhaps regionality, community, family, and even the individual, such as gender or age (Roach-Higgins and Eicher 1995). Finally, there is evidence that the manipulation of hair and its presentation in different styles would have been important during this period (Aldhouse-Green 2004). Connections between objects and the human body are not restricted to these objects of dress, as other artefacts worn or utilised by a person may also have communicated information about the individual's identity. For example: a blacksmith wielding their hammer, a farmer holding a plough, an individual holding a sword or shield, or even a person holding a weaving comb would have imparted an immediate notion of the person's identity and role within society. While these objects are no less symbolic of a person's identity, they are tools or utilitarian objects that are much larger in size than the objects that attach to or otherwise modify a person's appearance. This research is primarily concerned with the objects sometimes referred to as objects of adornment, bodily adornment, or body ornaments, although their sole purpose may not have been to adorn the body.

Materiality during the Iron Age is generally considered to increase throughout the period as evidenced by the somewhat scarce numbers of artefacts in the earlier period, and the larger frequency and broader range of artefacts in the later Iron Age (Hill 1995a). For example, a greater range of pottery is available in the Later Iron Age of southeast Britain compared to earlier periods along with changes in the level of production intensity (Hamilton 2002), and in earlier periods cosmetic implements were relatively scarce compared to the number that are known from the Later Iron Age and Early Roman period (Eckardt 2008). Brooches too have been shown to follow this general trend as Early and Middle Iron Age brooches are fewer in number compared to the examples from

Late Iron Age and early Roman Britain (Haselgrove 1997; Jundi and Hill 1997). However, recently excavated sites, such as at Grandcourt Quarry in Norfolk, may contradict this pattern. An exceptionally high number of brooches were found at this site in a deposition act(s) that may have occurred as early as the Middle Iron Age. Part of a wider change in foodways and eating habits, these brooches, along with the cosmetic equipment articles, are thought to indicate a changing attitude towards the body and establishing identity through the manipulation of appearance (Carr 2005; Hill 1997). This comes at a time when the archaeological record suggests greater contact with Europe in southern Britain and the circulation of a larger body of material culture after the Caesarian invasion in 55 BC and eventual conquest in AD 43. However, a comprehensive analysis of the differing types of artefacts of dress that cross type and material boundaries is currently lacking.

While many studies of Iron Age material culture related to dress frequently focus on metallic objects (e.g. brooches, pins, torcs, mirrors, cosmetic and toilet equipment), glass beads provide an interesting contrast as they are made from a different raw material. Glass, as with copper alloys, melts when heated to approximately 1,000°C, depending on the exact composition (Henderson 1985, 272). Although, from a modern standpoint it would be agreed that glass (being silica based) is different from copper alloy (derived from tin and copper ores), the melting properties of both materials may have meant, within the Iron Age world-view, that these two materials were more closely related than iron (un-meltable at this time, but still manipulated through heat) and copper alloy. This association is supported by the combination of these two materials on objects, such as some brooches and horse equipment. As a material, glass is made through the combination of three key ingredients: silica, soda, and lime. Unlike other meltable materials, the colour and opacity can be manipulated through the addition of oxides and minerals.

Beads are one of the earliest glass objects to be found in Britain. They are found in very small numbers from contexts that date to as early as the Bronze Age, for example, at the Wilsford G42 Bell Barrow (Guido, Henderson *et al.* 1984). Some Bronze Age beads are made from another 'glass-like' substance called faience, sometimes referred to as 'Egyptian faience' to distinguish it from a type of modern pottery. It is also a silica-based material, although not heated to a molten state as with true glass. Both Bronze Age and Roman period examples (the ubiquitous melon beads) are coated in a glaze, but they have a rougher texture than true glass and are always opaque. Beads made from true glass, however, are different. They range in size from very small (only a few millimeters in diameter) to very large (several centimeters in diameter). They come in several shapes, are made from different colours of glass, and

some are decorated. They are found in Iron Age contexts in extremely large numbers (100+) at three key sites discussed throughout this work: Meare Lake Village in Somerset, Wetwang Slack in East Yorkshire, and Culbin Sands in Morayshire Scotland. However, these are unusual compared to the majority of sites discussed throughout the book where between one and twenty glass beads would be more usual. Unfortunately, many of the beads that have been recorded to date are old stray finds and can only be generally attributed to a known Iron Age site, or sometimes only to a village or parish.

This study has specifically chosen to focus on glass beads, as opposed to beads made from other materials, or other glass objects, for a number of reasons. Other glass objects, namely vessels, are confined to the very latest Iron Age and began to flourish from the Early Roman period (Frank 1982). Roman period glass vessels in Britain have been the subject of a long-standing history of study (e.g. Price and Cottam 1998). Glass beads, on the other hand, date to a much earlier period, as they have been found in Bronze Age contexts (albeit in extremely limited numbers) and the Iron Age, where they occur in relatively larger numbers (Guido 1978a). Beads made from other materials (i.e. clay, jet, amber, other types of stone; and possibly wood or bone), however, are problematic. They are found in very small numbers throughout the Iron Age and because they lack stylistic characteristics, they are very difficult to date without contextual information (c.f. the 62 examples from Grandcourt Quarry (Malone 2010), which may change our perspective on this). In cases where they appear to be deposited within Iron Age contexts, it is unclear as to how they were used in society at that time, or perhaps as to whether they were manufactured at an even earlier date. Interestingly, there does not seem to be a strong tradition of using beads made from other materials that was eventually replaced by what became a tradition for using glass beads. The previous significant period of major bead use in Britain dates back to the Early Bronze Age and the utilisation of intricate jet necklaces (Sheridan and Davis 2002). Therefore, it seems that the use of glass beads during the Iron Age was an entirely new type of bodily adornment, as it not only drew upon a new raw material, but was also formed into a new type of object that was not used in significant numbers immediately prior to this period. In the future, a study that includes beads of other materials will be an interesting area of further research.

Despite the recognition of glass beads from Iron Age contexts, there is a limited appreciation of their broader implications. Why were they made in specific colours? How were they used? Where are they found? And more generally, how can we incorporate them into a wider understanding of Iron Age dress in Britain? This chapter will introduce some of the background to the previous approaches to the study of glass beads, followed by a

discussion of the aims of research, research methodology, and finally a roadmap to the contents of the work.

An Introduction to Previous Studies of Glass Beads

In comparison to other Iron Age artefacts (pottery, coins, brooches), the study of glass beads has been largely neglected. Some of the earliest mentions of Iron Age glass beads come from records of donations published in society proceedings (e.g. *Proceedings of the Society of Antiquaries of Scotland*), but they were also listed within early excavation small finds reports. However, it seems that glass beads were not considered to be important for dating or understanding site chronology in the same way that other objects, such as brooches or pottery, were used. In most early site reports glass beads were simply listed with other objects, but analysis or interpretation did not often go beyond this, for example at Glastonbury Lake Village (Bulleid and Gray 1917).

In the mid-twentieth century, Margaret Guido (1978a) undertook a project to catalogue prehistoric glass beads from Britain and Ireland. This subsequently led to the creation of a typology based on visual characteristics. The corpus has been the only major published work on glass beads from Britain as a whole. Drawing on Guido's typology, Julian Henderson (1982) examined the chemical composition of Iron Age glass beads using x-ray fluorescence (XRF). One of the aims of his research was to use his scientific analyses to expand on Guido's visual classification by adding a composition component. More recently, Martina Bertini (2012) has pioneered work on Iron Age glass beads by combining several different types of analyses. This has allowed her to examine the chemical composition and to map the morphology of Guido Classes 13 and 14 beads, which indicates the process of manufacture (all three studies are discussed in more detail in Chapter 2).

Guido's work was an important foundation for all subsequent studies of glass beads. Her catalogue alone is a valuable resource, as it presented a fairly accurate list of all known Iron Age glass beads at the time of publication, except for contemporary ongoing excavations. Her distribution maps suggest that the concentration of glass beads across Britain was varied (discussed further in Chapter 2). Generally, southern Britain was distinguishable from the rest of Britain in terms of overall density, but the Somerset area has long been identified as an area where glass beads have been found in particularly large numbers. However, other areas have been recognised as areas of high glass bead density, such as East Yorkshire and Northeast Scotland. Although, recent finds (e.g. Llandygai in North Wales in Kenney 2008; and Grandcourt Quarry in Norfolk in Malone 2010) suggest that the Britain-wide distribution is continually changing and re-assessment is necessary.

The manufacturing origin of glass beads continues to be an enigma. Comparisons with known European material by Guido suggested that some glass beads found in Britain were not found in Europe, leading to the hypothesis that some of these beads were actually manufactured in Britain. Guido (1978a, 32-7) proposed several possible major production centres (Meare Lake Village, Somerset; Culbin Sands, Morayshire; Glastonbury Lake Village, Somerset; Glenluce Sands, Dumfries and Galloway; Traprain Law and Newstead in the Scottish Borders, and Wilderspool near Warrington), and a number of less probable sites (Covesea Cave, Morayshire; and Caerhun, Clwyd). Her suggestions appear to be based solely on the higher frequency of glass beads at these particular locations. A number of glass beads, however, bear a striking resemblance to examples found in European Iron Age contexts. The similarity was taken to indicate that the movement (migration/invasion) of people could be tracked by the dispersal of glass beads. At the time of her publication, there was very little in the way of other archaeological material that could support her hypothesis that glass bead manufacturing occurred in Britain (see Chapter 2).

Despite the assertion in the Iron Age research framework that the subject of glass beads is an area where a 'substantial understanding has been achieved' (Haselgrove, Armit *et al.* 2001, 22), as with any research, the time that has elapsed since Guido's publication has resulted in many unanswered questions. Since her publication, there has been an explosion in archaeological excavation resulting primarily from the implementation of PPG16 in England in 1990 and NPPG5 in Scotland in 1994. Despite the increasing amount of data regarding prehistoric settlements and material culture that this has produced (Bradley 2007), there has been no recent published attempt at creating a major synthesis of recently discovered glass beads, nor has there been any critical discussion of the Guido typology and interpretations (cf. Armit 1991 for Atlantic Scotland).

Aims of Current Research

As introduced above, a comprehensive understanding of Iron Age dress in Britain is currently lacking. In order to address this issue, the present study focuses on glass beads from this period, to provide a useful contrast to the often metal-dominated studies of artefacts related to dress (e.g. Fox 1958; Garrow and Gosden 2012; Jacobsthal 1969; Jope 2000; MacGregor 1976; Piggott 1970). However, it is essential to go beyond one type of object and instead to draw on many types in order to understand the full assemblage of material culture used in dress throughout Iron Age Britain. Therefore, there are three main aims to this research:

1. To undertake a systematic review of the appearance, chronology, and deposition of glass beads;

2. To place glass beads within the wider context of other objects used in dress;
3. To develop a narrative of dress in Iron Age Britain.

The first aim not only draws on data regarding the physical appearance of glass beads, but also on the wider circumstances of where they were found. It seeks to answer questions about glass beads, such as: their appearance, the date of the context that they were found in, and the kinds of sites they were found at. The second aim examines how the beads were used and how they relate to other objects of dress. For this comparative aspect, five other key types of objects are included: brooches, bracelets, finger-rings, torcs, and pins. Finally, the third aim seeks to contextualise beads by drawing together multiple lines of evidence from artefacts, and burial data as it is recognised that artefacts should not be seen in isolation.

Methodology

This section discusses the methodology employed prior, during, and after the collection of data. The material presented here is pertinent to understanding the following data analysis chapters. It will first examine a number of issues identified during two pilot studies. Then it will discuss how the four study regions were selected, followed by a discussion of how the data was obtained and organised within a database. The terminology used throughout the analysis chapters is then detailed, and finally, this chapter will discuss the methods used during analysis.

Identified Issues

The methodology and terminology used here was developed out of preliminary work on glass beads and other artefacts during a pilot study conducted between 2008-09 for a Masters degree (Schech 2009). This study examined the use of glass beads during the Iron Age and Roman period within the Tyne-Forth region. One of the interesting results from this preliminary study was that glass beads were more numerous at Roman forts rather than at other settlements, whether Roman or non-Roman in style. From the bead data, there was not a strong difference between 'Roman' identities in this region and what have sometimes been referred to as 'native' identities. However, compared to other types of objects related to dress, they were the most abundant object. A second, smaller, pilot-study was conducted during the initial stages of the present research, which focused on Northeast Scotland. The aim was to test the proposed methodology that developed out of the MA research over a different region. The methodology was further refined and subsequently used over three additional regions.

It is from these initial analyses that some issues became apparent that would need to be addressed during the

course of the research. Although this study is about glass beads and Iron Age dress, it also seeks to bring to light a number of issues with the study of artefacts. In the past, studies have often been limited to catalogues, description of types, and descriptions of their distributions (e.g. Fowler 1960; Fowler 1953; Mackreth 2011; Stead 2006). While these basic studies are clearly needed to provide fundamental information about material culture during the Iron Age (Haselgrove, Armit *et al.* 2001), they need to move beyond these tools in order to develop an understanding of not only production and methods of distribution, use, and finally deposition, but also what we can learn about society from artefacts.

A second topic that was identified during the pilot-studies was the use of terminology used to designate chronology or cultural periods. This includes terms, such as ‘native’, ‘Roman’, and ‘Romano-British’, which at times refers to the date of the artefact (i.e. pre-Roman or post-Roman conquest), and at other times refers to the culture of the object (i.e. pre-Roman, post-Roman conquest but non-Roman, or Roman). The issues of identity and cultural interaction during this period has long been a topic of discussion (e.g. Haverfield 1915; Mattingly 1997a; Millett 1990; Webster and Cooper 1996), and while these labels might be convenient, it does create confusion as to how the occupants at these sites thought of themselves. In addition, the idea of degrees of Romanisation further complicates this issue as it is often implied that this was something desirable and the natural course of society. In the case of glass beads, what would usually be considered typical ‘Iron Age’ examples that have been found on ‘Roman’ sites are explained as being residual, rather than suggesting that social interactions at such sites may have been more complex than a native/Roman duality (e.g. Hunter 2001b; 2007a; b).

Another area that was identified as potentially problematic was in the quality of the descriptions in written artefact reports. This was encountered during the MA pilot-study, where written descriptions were primarily relied upon. The pilot-study conducted during the initial stages of the current research was able to test the quality of published descriptions by viewing the artefacts first hand. It was quickly discovered that descriptions and illustrations do not always adequately describe the artefacts to the level of detail needed for the analyses to be conducted in subsequent chapters. In part this is due to an unclear understanding of the standards necessary for reporting many later prehistoric artefacts: a clear framework would be of benefit (see Appendix A). Furthermore, discussions with museum staff often brought to light glass beads that were previously unpublished and thus unknown.

One other issue identified was the impact of developer-funded excavations. The MA pilot-study investigated all unpublished reports held in the Historic Environment Record offices in County Durham and Northumberland,

and the RCAHMS that contained evidence for Iron Age or Roman period archaeological evidence from excavation. Although very few new beads were identified in this way, it was unclear if this was a reflection of regional material culture, as only limited numbers of Iron Age glass beads were known from this region as recorded in the Guido catalogue. In contrast, the initial pilot-study conducted over Northeast Scotland identified several glass beads that were found during developer-led excavation, including the nationally important site of Culduthel Farm near Inverness (Murray 2007a). This suggested that there was potential for discovery of glass beads through a review of developer-led excavation.

In order to address these issues a clear and consistent methodology was needed in order to perform a detailed and rigorous analysis of the data. This included the identification of key aspects of glass beads that would be informative through analysis and the terminology needed in order to record data. One of the outcomes of this was the recognition that the Guido (1978a) typology is not suitable for the detailed analyses needed here in order to complete the aims of the study. Chapter 5 presents an analysis of the Guido typology and explains the development of the new typology. However, the aim of this research is not simply to devise a new typology and catalogue, but to put glass beads into a social context through an examination of their use and deposition. This has been a growing theme in on-going and recently completed doctoral theses as seen at recent student conferences¹ and new approaches to understanding Celtic Art (Garrow and Gosden 2012; Garrow, Gosden *et al.* 2008). It is these approaches that the analysis of glass bead context draws upon in Chapter 7.

Study Regions

Guido’s original catalogue contains entries for over 1,000 glass beads that were found from a variety of circumstances up until about the 1970s. During the data collection phase of the present work, it was found that the actual quantity of glass beads within the study regions (to be discussed below) as recorded by Guido, was relatively accurate. Thus, her catalogue could be said to be a reliable reflection of glass beads thought to be of Iron Age date in the 1970s. However, the catalogue has been the only data-set available for glass beads throughout Britain (Henderson’s (1982) catalogue was based on Guido’s). Although both Guido and Henderson studied glass beads on a Britain-wide scale (and Guido included Ireland), considering the level of detail utilised in the current study this wide-scale geographic approach would be inappropriate. Instead, the selection of small geographic areas of study was vital.

¹ Iron Age Research Student Symposium/Seminar held in 2010 at Bradford, 2011 in Durham, 2012 at Southampton, and 2013 at Hull/Bradford.

To understand the available data better, distribution maps were created using Guido's catalogue. This allowed areas of high and low bead density to be identified (Figure 1). Drawing on this summary distribution map, Guido's class based distribution maps and her interpretations (1978a), four regions were selected for in-depth study: Southwest England, East Anglia, East Yorkshire, and Northeast Scotland (Figure 2). 'Southwest England' covered most of Dorset, Somerset, North Somerset, South Gloucestershire, Gloucestershire, Northeast Somerset and Bath, Bristol City, and Wiltshire; and 'Northeast Scotland' covered the old counties of Aberdeenshire, Banffshire, Morayshire, and Inverness-shire. These two regions were chosen for similar reasons. They are both areas of high bead density and each contained a site where more than 100 beads were found. In Southwest England this was Meare Lake Village, Somerset, and Culbin Sands, Morayshire in Northeast Scotland. Guido considered both of these sites to be possible locations of glass bead manufacturing. However, glass beads were not restricted to these single sites. They have been recorded from many other sites within the region.

East Yorkshire was also chosen as a region of study due to the large number of glass beads that were known from this area. In contrast to Southwest England and Northeast Scotland, the beads in this region were found from a very small number of human burials and were very much isolated to these occurrences. Although Guido only included the Queen's Barrow at Arras and Barrow L at Cowlam in her 1978 catalogue, it was also known at the time of the research design that the excavations at Wetwang Slack also uncovered many glass beads and that this added to the numbers from this region. This area was chosen as another study region due to the significant number of beads and the context they were found in (which is markedly different from the other regions). The boundaries of the region were extended further west to the A1(M) in the hope of being able to place the burial evidence into a wider context within the surrounding region.

The first three regions were chosen for study because of the high frequency of glass beads and the likelihood that they constituted a significant element of dress during the Iron Age in those areas. In order to assess whether Guido's distributions remain an accurate reflection of bead prevalence, a final region was chosen. The distribution map formed from Guido's original catalogue highlights a number of seemingly blank areas where glass beads apparently did not occur. This posed an interesting question: might the increasing amount of archaeological investigations since the 1970s, particularly as a result of developer-funded archaeology, mean such variations in distributions were no longer accurate? At the time, initial data from the recent Celtic Art project led by Duncan Garrow (2008) had been published with tantalising distribution maps of Celtic Art, coins, and other objects.

These distribution maps indicated East Anglia as an area where metalwork was most widespread. In comparison, Guido's distribution maps of glass beads showed that very few glass beads (many of which were Roman) were found in this region. Due to the discrepancies between the number of metal and glass artefacts in East Anglia (defined here as Norfolk and Suffolk), this region became an ideal subject for further investigation.

Data Acquisition and Organisation

A regional approach to glass beads was undertaken using the four study regions set out in the preceding section. As the Guido catalogue already suggested that a large numbers of glass beads would be involved, it was imperative that a consistent method be used in order to obtain accurate and quality data. This was achieved through the use of a database. Detailed information was recorded for both artefacts and sites using the following parameters:

1. **Sites:** all sites with Iron Age and/or Roman activity that have been excavated (purposefully excluding non-excavated (i.e. surveyed) sites);
2. **Artefacts:** all artefacts related to bodily adornment from the sites identified by parameter 1.

Data was obtained from three main sources: published research excavation reports, published and unpublished ('grey-literature') developer-funded reports, and from first-hand observations of artefacts. In order to cover as many sites as possible, entire runs of local/regional journals were surveyed for any excavation reports that encountered Iron Age and/or Roman period material. While many of the larger and more significant developer-led excavations are published either as monographs or as journal articles, the majority are not easily available. Therefore, unpublished grey-literature was accessed at Historic Environment Record (HER) offices in England, and at the Royal Commission on the Ancient and Historical Monuments of Scotland (RCAHMS). In total, it was possible to visit 10 HER offices in England, including: Dorset, Somerset, Gloucestershire, Bristol City, Norfolk, Suffolk, North Yorkshire, North Yorkshire Moor National Park, Humber Archaeology Partnership, and City of York. Where it was not possible to visit an HER in the study region (Wiltshire, North Somerset), grey literature reports were accessed through the OASIS database available on the *Archaeology Data Service* website.

The final main source for data came from actual examination of artefacts in museums, which included stray finds. In total, it was possible to visit twenty-one museums, including: the British Museum, National museum of Scotland, Museum of Somerset, Wiltshire Heritage Museum, Dorchester Museum, Gloucester Museum, Poole Museum, Gillingham Museum

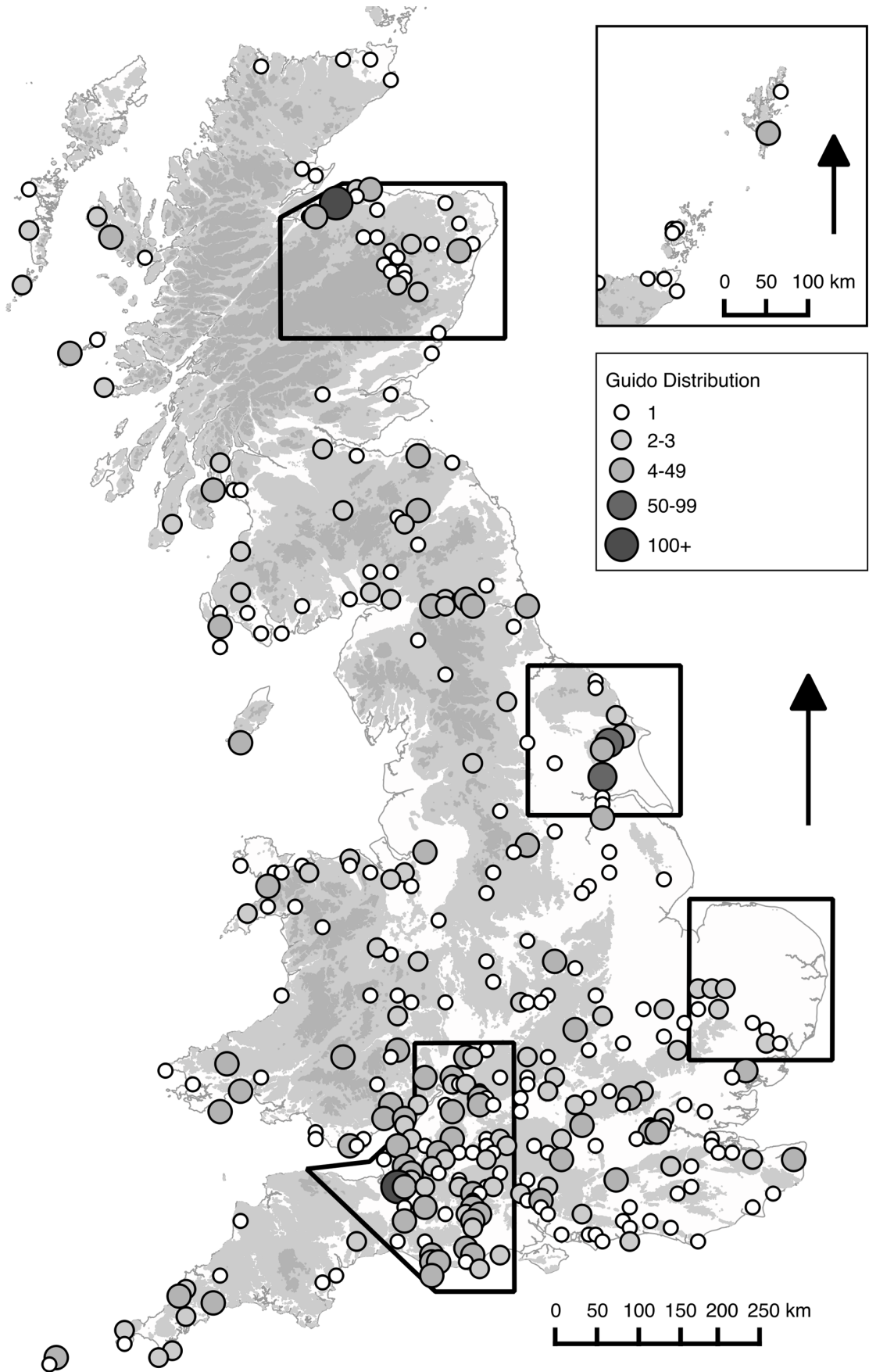


Figure 1: Compilation map of all of Guido's (1978a) original data.

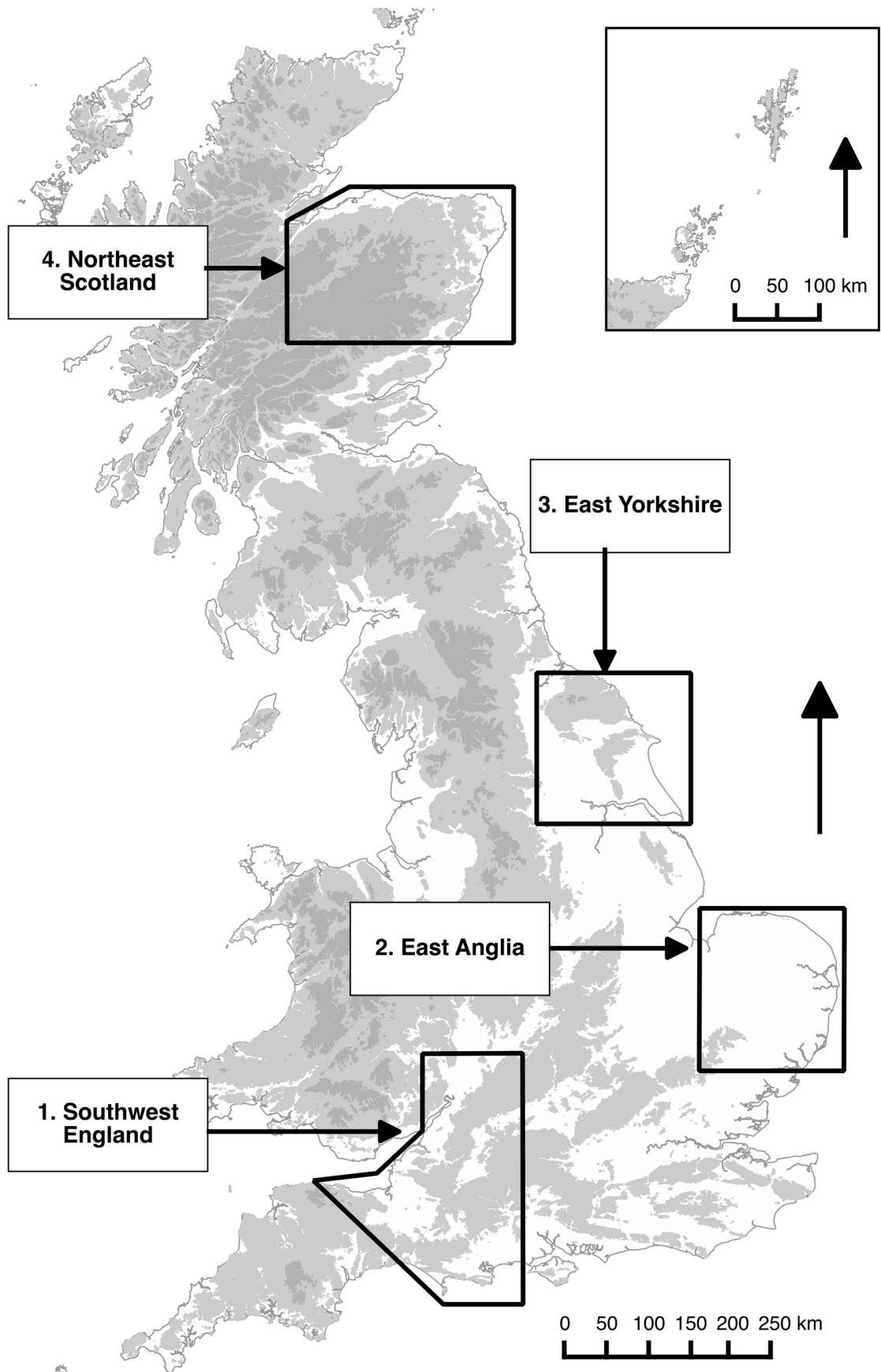


Figure 2: Identification of project study regions.

(Dorset), Bristol City Museum, Red House Museum (Christchurch), Corinium Museum, Stroud Museum, Ashmolean, Norwich Castle Museum, Yorkshire Museum, Hull Museum, Marischal Museum, Forres Museum, Elgin Museum, Hunterian Museum, and Inverness City Museum. Although all museums in the study regions could not be visited, first hand analysis of glass beads was extremely beneficial. In some cases published descriptions only needed to be verified, but for others additional details could be gathered. Methods of recording data were continually improved over the course of the data-collection, while insuring that consistency was maintained. Key data included: dimensions, weight, description of colour and decorative motif, shape of perforation, modifications, and completeness (see Appendix A). This was accomplished through the use of a digital caliper with a resolution of 0.1mm and an accuracy of ± 0.2 mm. A digital scale was used with an accuracy of 0.01g up to 100g. Finally, multiple high-resolution digital photographs were taken of each bead from multiple angles in order to ensure full coverage.

All of the data from both written sources and visual analysis was compiled into the database. Each artefact had a separate entry even when found together, such as in burial features. Through firsthand analysis and studies of context, it became clear that each individual bead was, or could have been, treated separately and would have had its own individual biography. The recording method ensures that each individual object is considered on its own merits and permits comparison in statistical software.

In addition to the glass beads that were recovered, other artefacts related to dress that were found during excavation were also recorded (e.g. brooches, pendants, bracelets, etc.). In addition, other data sources were added, as many significant artefacts were not found during excavation. This primarily included relevant artefacts from the Portable Antiquities Scheme database (2003), MacGregor's (1976) catalogue of Northern Celtic Art, and the Celtic Art Database (Gwilt, Joy *et al.* August 2010).

As with any research methodology, there were a number of issues encountered during the data collection. The following describes some of the issues encountered during data-collection, which may have some bearing on final interpretations:

1. **Inconsistencies in excavation reports.** The data-collection process dealt with 1,699 excavations reports produced over a period of at least 100 years. Over this period, both the excavation and recording methodology employed changed drastically, and the quality varied between reports.

2. **Lack of illustrations in reports.** Reports often contained very vague descriptions of artefacts discovered and did not always include an illustration.
3. **Additional data on supplemental material.** Technological changes have rendered some data inaccessible (e.g. micro-fiche).
4. **Developer-funded excavation reports.** For consistency, a request was made to each Historic Environment Record Office for all excavations that recovered Iron Age and/or Roman period activity. Due to differences in recording practices in HER databases and the sheer quantity of reports, in some cases only a sample could be included in the analyses (e.g. a 40% sample of reports at Gloucester and a 75% sample at Suffolk).

While these issues may have some bearing on the data and final interpretations, it seems likely that, by completing either a 100% survey at each HER, or by visiting the missing HERs, the final interpretation would not be significantly different. The primary reason for including every site that had been excavated where Iron Age and Roman material was found was to assess whether new Iron Age glass beads had been found during developer-funded excavation. In the few cases that this did happen, the reports had already been published either as monographs or in local journals, or knowledge was passed on by museum curators, local HER staff, and through other networks. There were in fact very few glass beads encountered in the developer-funded excavation reports that were added to the database in the first instance due to discovery at the HER offices. However, the second reason for including every excavation with Iron Age and Roman period evidence was to contrast sites where glass beads had been found, with the negative evidence showing where excavations had taken place, but no Iron Age glass beads had been discovered (see Chapter 7).

Analyses

Prior to analysis, the data was checked for consistency and accuracy. For example, Guido's catalogue contained several duplicate entries that needed to be deleted. Following database cleanup, an extraction from the database was converted into SPSS files (Windows, version 19.0.0) for analysis. Using SPSS, it was possible to evaluate the data that is discussed in later chapters. This was done using a variety of means, depending on the types of data. Bead size analyses were conducted using ranges, averages, and standard deviations. They were also plotted through the use of histograms and scatter-graphs. Other categorical descriptive data, such as colour, decorative motif, and types were compared through the use of bar charts and tables showing frequencies. Bar charts and tables were also used to compare sites and material culture. In a few instances, it was possible to carry out a Chi-square test using the data, but in order to

make the data valid smaller categories were combined (Fletcher and Lock 2005, 131).

Although every effort was made to examine as many glass beads as possible, as already highlighted in this chapter, this was not always feasible. The number of possible beads for analysis in the follow chapters amounts to 1,788 individual specimens. Many of these were seen first-hand, but for others written descriptions needed to be relied on. In some cases, data was not available to the detail needed for analysis. In order to be as explicit as possible for each analysis, the number of beads that are included is stated, as some were necessarily left out due to missing data.

Spatial data was explored through the use of mapping software. These maps show the locations, distributions, and density of sites and objects and were created using QGIS (For Mac, 2.4.0 Chugiak). While exact find spots or sites are known for many examples, unfortunately, there is a large number of stray that rely on villages or towns to describe provenance. In some cases, these are only known at the parish or administrative district/county level. In these cases, beads have been left out of distributional maps, as their area of origin is too vague. In each section the analysis carried out is described in detail.

Layout

The following three chapters form the background to the analyses. Chapter 2 provides an in-depth discussion on the Guido typology, and the context of other Iron Age glass bead typologies and glass bead studies that cover

the European Iron Age. Chapter 3 introduces many of the theoretical concepts that the interpretations are based upon, especially in terms of dress and object studies. Finally, the last of these preliminary chapters (Chapter 4) addresses the nature of the archaeological resource in each region and implications for a study of glass beads.

Following these introductory chapters, Chapter 5 follows on from the discussion of the Guido typology presented in Chapter 2, by critiquing its use and some of the inherent issues in its construction. With these issues in mind, as well as the aims of this research, a new typology is proposed that is utilised throughout the remainder of the book. Chapter 6 uses data obtained for glass beads and analyses regional characteristics of beads, including: size, shape, colour, and decorative motif. This is followed by Chapter 7, which explores the archaeological contexts in which glass beads have been found. Then, Chapter 8 places glass beads into a wider discussion of dress in the Iron Age by examining at the evidence for how glass beads were used. Finally, Chapter 9 summarises the analysis and presents a final interpretation about dress, identity, and Iron Age objects.

To supplement the main text, there are a number of appendices. Appendix A is a glossary of terms used throughout the book and guidelines for reporting on glass beads. Appendix B describes each of the Guido types for reference, while Appendix C is a complete list of types proposed by the new typology. 'A full catalogue of the sites and glass beads discussed throughout is included on the accompanying data download. Some of these are also illustrated in Figures 189-194.