



Open Library of Humanities

Innovation and Agency: To What Extent Did Cultural Appropriation Affect the Development of Jewellery in Britain During the 1st to 2nd Centuries AD?

Elizabeth Webster, Northeast Normal University, Changchun, China, elizabethwebster1997@gmail.com

From the Late Iron Age (LIA) to the second century AD significant cultural and technological changes occurred within Britain, commonly associated with the new relationship formed with the Roman Empire. This paper examines the jewellery of Roman Britain in an attempt to track the changes which occurred after the Roman occupation began. This examination aims to allow us to understand the true nature of the developments and how they could have been influenced by cultural appropriation.

This paper argues that the Roman occupation acted as a catalyst for change, promoting the development and innovation of techniques, styles, and designs which were already established in pre-Roman traditions. As evidence for this, the pre-existing technical and artistic interactions with places, such as Gaul and Ireland will be discussed with consideration given to the persistence and innovation of already established pre-Roman techniques. A discussion of internal trade and distribution patterns in use prior to the Roman occupation is incorporated. These existing trends will then be compared to the development patterns which emerge during the early period of Roman occupation.



Introduction

Native style objects from the Roman period are frequent in many regions of Britain and have often been considered to be evidence of cultural resistance or native identity resurgence as a result of the Roman invasion and occupation. With a focus on the metallurgical analysis of specific finds from two prominent jewellery types—brooches and finger rings, this paper aims to continue the current works of scholars such as Ivleva (2012) and Cool (2010) with an interdisciplinary approach to understanding ancient identities and cultures, shifting the focus from the idea of resurgence to one of innovation and the individual social agent.

The particularisation of the universal¹ which occurs in Britain during the first and second centuries AD is unique, denoting a relationship with the Roman Empire which expanded beyond local interactions. The techniques and forms adopted through Britain are evidence of local and regional innovation which evolved from pre-Roman Iron Age Brittonic craftsmen practices. Although significant developments only seem to occur as a result of increasing interactions with an interconnected ‘global’ empire, Britain’s ability to integrate into empire-wide socio-economic structures demonstrates a political, economic, and cultural complexity which has often been overlooked.

This paper focuses on the analysis of Late Pre-Roman Iron Age (LPRIA) jewellery produced within Britain, with special reference to typology and metallurgy. LPRIA jewellery is contrasted against later Romano-British items of adornment to ascertain developments in alloy composition and the metal working techniques of Brittonic craftsmen. It should also be noted that the term Romano-British is used throughout this paper as a general reference to the jewellery produced in the post-conquest period, which evolved from the already existing LPRIA type or as a reference to a type which is unique to Britain and developed during the early Roman occupation period.

Most cultural theories applied to British jewellery during this period attribute development to the appropriation of Roman culture or conform to the premise that the introduction of a Roman market was the sole cause for change, such as the works of Millett and his approach to Romanisation (Millett 1990). However, in the case of the latter it accounts for very little in way of innovative developments, and in the case of the former it seems to have merely acted as a catalyst for the speeding up and continuation of developments which were already occurring during the Late Pre-Roman Iron Age (LPRIA).

¹ The particularisation of the universal, in the context of this paper, is a term used to denote intentional or maintained changes made to an established universal typology making it particular or unique to a certain province or region. The conceptual antonym being the general universal or the generalisation to conform with the universal.

One of the most common approaches to analysing the problem of ‘native Brittonic’ and Roman interaction has adopted a relatively myopic perspective, often against the backdrop of Britain’s own imperial and colonial history. Usually this has had the effect of

‘(i) treating Roman Britain as a chronological package in relative isolation from pre-existing native background; (ii) giving undue prominence to the limited historical sources at the expense of the archaeology; (iii) seeing ‘change’ as a direct consequence of the Roman presence, and equating it with notions of civilization and improvement; and (iv) giving undue attention to the visible superstructure of romanization, the roads, towns, villas and so on, as evidence of acculturation to a Roman ideal’ (Burnham 1995: 126).

This problem has often been pervasive in our understanding of metal work and patterns of adornment in Britain. In an attempt to solve this issue, this paper uses jewellery and its implied and intrinsic values to understand the nature of Brittonic traditions and styles, tracking the subsequent changes which occur. Jewellery was used throughout most ancient cultures as an extension of the individual and expression of not just wealth and status but also their identity (Champion 1995: 411–421), Britain was no exception to this. Thus jewellery, defined throughout this paper as items of personal adornment, is one tool archaeologists and historians can use to understand the ancient world and the idea of individual, local, and regional identities of Britain.

The study of jewellery allows us to identify distinct choices of style, colour, and techniques in different parts of Roman Britain. Important examples of this are brooches and finger rings. Some designs are unique to specific regions, whilst others conform to a more global *zeitgeist* across the Roman empire. We can identify a continuing development by which Brittonic and Roman styles and techniques become amalgamated. This process was, however, much more complex than the theory of cultural appropriation presupposes. The social agents involved in the processes of development need to be considered, taking into account regional variations and the diverging identities expressed through the various types and designs of jewellery.

Introduction to Methodology and Theory

As stated by Gosden (2005: 193–194) periods of transition bring to light the developing relationships between people and material objects. While we can see the emergence of distinctive patterns of change within material culture, we must be cautious about attempting to simplify the representational associations between aspects of group identity and categories of objects, such as native and Roman, gender, tribal or by

military and civilian affiliations (Pitts 2018: 92). This oversimplification causes us to overlook human and object agency, cultural fluidity, and the fact that traditions and recipes constrained alloy composition and metallurgy more generally (Dungworth 1997: 909).

The issues of cultural fluidity and human and object agency are not often enough addressed when discussing the development of culture and cultural items of adornment in Britain during the first to second centuries AD. With cultural fluidity, we witness the concept of individualism within a cultural ethnic group and the movement of items, traditions, and ideas. Humans as a species are able to not only adapt to environmental change but they can participate in these changes in an active or passive capacity. This ability to adapt, change, develop, and manipulate the environment gives our cultural items and practises an intrinsically fluid nature that can either influence or be influenced by other cultures. This then leads to the theory of human and object agency as proposed by Gosden (2005: 193–211). Although it has been argued that objects cannot have true agency as true agency is not given, it cannot be disputed that objects possess innate agency and thus influence cultural mobility and development as much as the human social agent. Objects behave in ways that cannot and are not simply derived from human intentions, in fact, they channel those intentions and propel development and innovation. Large agglomerations of jewellery items have life cycles of their own. Changes in metal types, alloys, and designs take place over many generations. However, this does not mean to say that the changes always occur under the cognisant or direct control of individuals or groups (Gosden 2005: 195). We cannot, therefore, discount these theories through oversimplification, which has proven itself to be rather pervasive in our discussions of the cultural interactions of the Roman empire.

Cultural theories and their applications to this paper

The analysis of item trends in connection to abstract theories of cultural development, identity, and provincial adaptation in relation to terms such as Romanisation, cultural appropriation, bricolage, and creolisation will be discussed in the course of this paper. The issue in defining the parameters of these cultural theories and how such parameters should be applied will also be discussed.

Issues with the theory of Romanisation are well documented as well as disputed, and will not be explained here. Instead, I will spend some time here discussing Webster's approach to understanding the change which occurred in society, attributing it to the creolisation of the province (Webster 2001: 209). Although I do agree with Webster on her criticism of the application of outdated theories to Roman Britain, I do not agree that the changes which occurred in Britain can be attributed to creolisation in the same

way as in other provinces on the Continent. As discussed by Haeussler and Webster (2020), the theory of creolisation not only applies too much focus on the interaction of two cultures but also fails to acknowledge that, in the Americas, creolisation developed under very particular historic conditions, which included deracinated individuals combined with extreme social and racial violence resulting in the emergence of a 'substitute' or 'counter-culture', subverting or acting against the established dominant culture. These conditions were not met in Roman Britain, therefore, despite the usefulness of the term, creolisation as a process for cultural interaction between Britons and the Roman empire could not have occurred. This leaves us with the theories of cultural appropriation and bricolage.

The unique and individualistic nature of bricolage had a truly profound impact on Britain before and during Roman occupation. For instance, the spread and influence of La Tène culture on Pre-Roman Britain has been observed by Haeussler and Webster (2020). An interesting observation of intellectual or mythical bricolage, which occurs during the first and second centuries, from Roman culture presents itself in cult or ritual items such as the curse tablets of Bath and Uley. Although these tablets do not demonstrate the linguistic engagement of the native Britons with Latin, they do reveal a willingness to participate in some of the religious and cult behaviours brought by the Romans. Haeussler (2013) employs the term bricolage as a way of understanding the changes and developments, which occurred throughout the Roman provinces, made in way of material culture. He builds upon the theory of creolisation, explaining that although in some areas new cultures are created, in the majority of the Western Empire it only appears so on the surface with instances occurring more so on the continent than in Britain. Bricolage, as argued by Haeussler and Webster (2020), also fails to account for all of the influences and changes that were occurring, as the primary focus remains on the individual and limits itself to the active borrowing from cultures within close vicinity to the individual 'bricoleur'.

To explain the theory of cultural appropriation when applied to ancient societies, this paper takes the same stance as Haig-Brown who defines cultural appropriation as:

'The adoption of some specific elements of one culture by a different culture group. It can include the introduction of forms of dress or personal adornment, music and art, religion, language, or behavior. These elements are typically imported into the existing culture' (Haig-Brown 2010: 929).

Thus, cultural appropriation was chosen as the main cultural theory to be applied to the analysis of developments made from the LPRIA to the second century AD. The theory

of bricolage, which could also be attributed to some developments in Britain during the LIA, is used alongside the theory of cultural appropriation. This is due to the fact that they are not always considered mutually exclusive and, as discussed earlier, there is evidence for bricolage occurring both before and during this period.

The following terms need to be further defined before proceeding with analysis. When the word 'Roman' is used or attributed to an item (especially in the form of 'Romano-'), it is used as a reference to the incoming population as well as cultural influences from the Roman empire, not only Roman Italy (Cool 2010: 28). The terms 'Britons' and 'Brittonic' are used throughout the paper to refer to the peoples, items, or cultural traditions shared by the landmasses of modern Wales, England, and Scotland. These relatively neutral terms have, therefore, been deemed more appropriate to use when coupled with the theory of cultural appropriation, a term which now carries negative connotations as a result of its post-colonial and modern applications. However, the use of the terms 'Brittonic' and 'British' are not applied here to suggest any idea of a single homogenous group of peoples or cultures across the British Isles, and as such can refer to very localised phenomena. The term 'British' is, however, applied when discussing 'Romano-British' items as it is an established and standard term for the items produced during the occupation of Britain.

Methodological approach to metallurgy

Research on alloys has proven to be valuable in the understanding of the relationships between technological constraints and alloy choice especially when discussing copper (Cu) and precious metals. These constraints can be clearly seen when we analyse levels of lead (Pb), zinc (Zn), and tin (Sn). The terms brass, bronze, and copper are used throughout this article, with the occasional reference to gunmetal. Following Dungworth's distinctions (1997: 906), copper refers to alloys which present less than 5% zinc and tin, bronze refers to alloys with no more than 5% zinc and at least 5% tin, brass refers to alloys which contain at a minimum 15% zinc, and gunmetal refers to all other alloys. Any alloys which contain 1% lead or more will be referred to as leaded.

The usage and mixing scrap of metal will be further discussed in this paper. Often this process has been viewed as a barrier to our ability to understand metal use and metallurgical development. Mixed alloys and the utilisation of scrap metals, however, provides information about the overall availabilities of different alloys and alloying elements in the ancient world. This approach, as applied by Dungworth, proved useful in viewing metal supplies *en masse*, demonstrating that the evolving composition of available 'stock metal' may be reflective of the wider economic and socioeconomic influences on Brittonic metallurgy (Dungworth 1997: 903).

Criteria for Selecting Case Studies

Determining an item's origin and if it has a recognized typology required further investigation. For example, some jewellery items found in Britain bear considerable aesthetic similarity to other examples from the continent but may be metallurgically dissimilar to the established norm for that typology.

Consequently, there are issues in identifying the provenance of the artefacts, especially if they have not undergone chemical analysis such as energy dispersive x-ray fluorescence spectrometry (ED-XRF) which may further help to determine where the raw materials were sourced. In turn, this presents further challenges as it becomes difficult to determine whether the items were produced in Britain to replicate popular styles or whether the items themselves were imported. Regrettably, these issues are not easily overcome without access to more data; thus, items without such supporting data are treated tentatively and are used as supporting evidence to this paper's argument, rather than appearing as a focal point.

Chemical analysis of certain jewellery items is used to demonstrate their potential provenance (which may not be reflected by their find site) and where the raw materials for their production were sourced. This is important as it establishes whether the materials for production were imported, or sourced locally at the site of production. The methodology for evidence selection throughout this paper, therefore, is simple. Items that have undergone chemical analysis and demonstrate interesting aesthetic or metallurgical features are selected for in-depth analysis.

Throughout this paper, jewellery development is quantified by a change that occurs with a positive reflection on jewellery production. Changes such as an increase in design complexity, stylistic diversity, and or production which is either different from pre-existing techniques and traditions or is a reflection of the introduction of new techniques, designs, or jewellery types are to be considered as developments with positive reflections. These developments are then compared to pre-existing trends of development from the LPRIA. This process allows us to see the extent to which Roman occupation and culture affected the manufacturing process, essential for the discussion of persistence and innovation in production from the LPRIA to the second century AD.

It is important to keep in mind, however, how objects (such as jewellery) that are produced within a recognisable set of styles and forms influence the ways in which they are made and used. The artefacts are made in styles that are not only recognisable but also repeatable, so much so that even a pin for holding clothes fits within a corpus of other such objects. Although many items are similar, there are unique combinations of type and aesthetic characteristics which define the style of these items as recognisable entities (Gosden 2005: 194).

Late Pre-Roman Iron Age (LPRIA) Brittonic Jewellery

This section discusses the pre-existing Brittonic traditions of bricolage and the fluidity of culture during the LPRIA in Britain. We will see the analysis of items of adornment that share similarities to other items found outside of a Brittonic context. Also analysed in this section is the chemical composition of two glass beads found in a Brittonic LPRIA context that seem to have adopted metallurgical techniques from the continent. All of this aims to demonstrate that there were already ongoing developments prior to the introduction of Gallo-Roman material culture.²

Although the end of the first century BC, throughout Europe, there were widespread changes in the way material culture was utilised (Pitts 2018: 77), there is significant evidence for thriving manufacturing practices and developments in jewellery production and adornment in Britain which predates Roman invasions. For instance, there is evidence of imported metal types during the later Iron Age coming from both Ireland and the Continent (Northover 1995: 288). In addition, there is evidence for diverse forms of cultural, commercial, and economic transformations taking place in Britain before the Roman invasion. This is demonstrated by the reduced occurrence of items produced in cast bronze, the Massiliote prototypes during the mid-first century BC, and the increasing importance of other metal types (Northover 1995: 288). The LPRIA period shows a revival in metallurgical activity with new, previously unutilised, copper deposits opened up. The best example of this exists near the Llanymynech hillfort and the Tanat valley, located on the Welsh side of the Powys/Shropshire border. The excavations on the two second/first century BC hearths on the hillfort ramparts were used for the processing of zinc and lead rich copper, alloys commonly used in jewellery making (Northover 1995: 287–288). This is significant providing two potentialities: firstly, it could suggest a tradition of using scrap metal in the production of jewellery, thus reducing excessive waste. Secondly, it indicates an abundance of and easy access to zinc and lead rich material for alloying, allowing it to be used in the production of more than solely utilitarian items. Towards the end of the first century BC, bronze in Britain was joined by brass, composed of various alloy mixtures containing different levels of Cu, Zn, and Sn (Dungworth 1997: 901). This is important due to the fact that many later jewellery items reflect similar levels of mixed alloys.

IA brooch evidence

It is acknowledged that brooches demonstrate something of the complexities of human mobility, trade movements, and cultural contacts in the ancient world. Since the first

² Gallo-Roman material cultural development is linked to the first Gallo-Roman archaeological horizon, dated to around 27 BC when Augustus's visit to Gaul led to the division of Gallia Comata into the provinces of Lugdunensis, Belgica, and Aquitania (Pitts 2018: 64).

century BC people in the south of Britain prolifically used brooches, often adapting or adopting styles from Gaul (Hunter 2013: 271). However, this trend was not universal throughout Britain during the Late Iron Age. In Scotland and Ireland, for example, brooches during the Iron Age were exceedingly rare as pins were preferred in both places. In the north of England during the LPRIA period, it is only in east Yorkshire that we observe a strong tradition of brooch use. This observation is only possible, however, due to the traditional practice of accompanied inhumation burials in this region, a practice which is otherwise rare in Britain. Further suggesting that the number of brooches which survive and can be catalogued in a modern context is a poor reflection of actual brooch use during the Iron Age (Hunter 2013: 270). Any discussion of LPRIA brooches must address that although brooches in LPRIA Britain were in significant use in the south-east of England, this trend cannot be applied to Britain as a whole.

The torc

One of the most recognisable LPRIA items of adornment associated with Brittonic regions and peoples is the neck torc (**Figure 1**). The torc as an item of adornment might provide an example of a LPRIA pre-existing tradition of importing (or exporting)



Figure 1: Two strands of circular cross-section wire that have been twisted together, suspected section of golden Iron Age Torc found in Gloucestershire (Image courtesy of the Portable Antiquities Scheme, Record ID: GLO-ADCB3A).

stylistic preferences, the gold torc, for example, being seemingly more common in many regions of Britain than in Gallic regions. One gold torc found in the LPRIA Snettisham hoard has been compared with a stylistically similar piece from Mailly-le-Camp (Aube), keeping in mind that bronze pieces were more common than gold ones within that French region (Lloyd-Morgan 1995: 102–103). Here it is difficult to determine the exact provenance of the stylistic preferences due to the fragmentary nature of the evidence for commerce during the LPRIA in Britain. The example found in the Snettisham hoard can be interpreted as a reflection of styles preferred earlier on the mainland that filtered into Britain from Gaul during the early Pre-Roman Iron Age (PRIA), which then became the preferred style type of the LPRIA southern population. This may account for some of the separation in preferred style types on the continent and Britain during the LPRIA. Roman literature alludes to the importance of the torc as prominent Brittonic individuals are reported to have worn them. Dio Cassius for example specifically describes Boudicca as having worn ‘a great gold torque’ (62. 2). We must be aware that this stereotyping can sometimes lead to the promotion of a sense of homogeneity, rather than exploring regional diversity.

This diversity can be seen in the Netherurd torc which, although comparable to the Great torc with its high gold content electrum, is an example of unique northern torc manufacturing. The design and technique of the Netherurd torc parallels that of the Great torc, making it likely that these two items were in some way related, more so than other examples from LPRIA Britain. However, the metal content of these two torcs prove that they were not manufactured concurrently in the same place (Machling and Williamson 2016: 3–5). Both the Netherurd and the Snettisham Great torc are examples of high gold content electrum, hollow torus terminal torcs which makes the casting evidence less obvious. Consequently, it is more difficult to identify the production techniques, though it may be suggested that both were made from sheet gold. The questions posed by Machling and Williamson (2016) regarding the uniqueness of the Netherurd torc, the potential implications of it being a reflection of northern torc manufacturing, and on its connection to other Brittonic torcs are highly intriguing. This is because they highlight new and engaging fields of research for future study into the metallurgical practices and design traditions of pre-Roman Britain.

These torcs and many more (such as the Sedgeford gold torcs, the silver and bronze Snettisham torcs, the high content gold torcs of Ipswich, etc.) do, however, definitively point to the production and use of torcs within Britain and an established practice of metalworking and adornment with precious metals.

Oldbury type beads

An example of traditional Brittonic jewellery complexity can be seen through two glass beads of Old Castle Down found at the Vale of Glamorgan. Both beads fall under the category of the Oldbury type which is typically found concentrated around the southern areas of Britain during second c. BC–first c. AD, with few numbers of Oldbury type beads recovered in the North of Britain, Ireland, and the continent (Macdonald and Davis 2002: 20). In contrast to examples from Danebury (Hampshire) and Glastonbury (Somerset) which suggest that a portion of the type’s representatives could have been manufactured in the South of Britain (Macdonald and Davis 2002: 22), it is more than likely that the beads from Old Castle Down were manufactured in Britain.

What is extraordinary about these two beads is the complexity of the composition of the opaque yellow glass on bead no. 1 which is coloured by lead antimonate ($\text{Pb}_2\text{Sb}_2\text{O}_7$). During the Iron age opaque yellow glass was generally manufactured by incorporating lead stannate as the opacifier due to its tin-rich nature (Macdonald and Davis 2002: 23). According to the chemical analysis of glass beads produced in mainland Europe, tin based opacifiers were used from the second century BC (Tite et al. 2008: 68). Identification of this technique allows us to identify that in Britain there was already an existing precedent for adopting techniques demonstrated on the continent to be efficient and effective, as tin-rich minerals would have been easily accessible for much of LPRIA Britain. Due to the fact that there is no known precedent of its use in Britain until after its prolific use on the continent, we can postulate that people in Britain adopted the technique of incorporating lead stannate as an opacifier.

Table 1 demonstrates that the materials used for the production of the two beads were sourced locally due to the concentrations of iron (Fe), lead (Pb), and silicon (Si) in conjunction with antimony (Sb). As we know that the stylistic and design techniques were imported these beads demonstrate the developments to traditional techniques and practices made within Britain prior to the Roman occupation.

These results demonstrate how we can perceive pre-existing practices as forms of innovative bricolage within the LPRIA period. Although this section is rather succinct, it demonstrates that there is evidence for technical developments during this period, developments which took place away from the influence of the Roman empire and culture. As such, the rest of this paper will examine the developments made through the early period of occupation in an attempt to ascertain the extent to which cultural appropriation affected the development of jewellery during the first and second centuries AD.

Oxide %	Na ₂ O	MgO	Al ₂ O ₃	SiO ₂	P ₂ O ₅	K ₂ O	CaO	MnO	Fe ₂ O ₃	CoO	CuO	Sb ₂ O ₃	Pb
No. 1 Blue	14.0	0.51	2.1	71.7	0.1	0.35	8.4	0.73	0.9	0.13	0.15	<i>Nd</i>	<i>Nd</i>
No. 1 Yellow	7.4	0.29	1.2	50.8	0.04	0.53	5.1	<i>Nd</i>	3.3	<i>Nd</i>	<i>Nd</i>	1.16	28.2
No. 2 Blue	0.9	1.69	17.6	55.0	0.07	1.28	12.7	0.06	7.5	0.04	<i>Nd</i>	0.03	<i>Nd</i>
No.2 Yellow	0.5	1.41	17.4	53.1	0.03	1.285	14.5	0.06	7.5	<i>Nd</i>	<i>Nd</i>	0.07	<i>Nd</i>

Table 1: Chemical composition (%) of glass beads using EDX. Results from bead. No.2 normalized. WD results for Magnesium, Phosphorus, Potassium, Manganese, Cobalt, Copper and antimony shown in italics (after Macdonald and Davis 2002: 22).

Brooches

Brooches were not always the solely utilitarian item they are presupposed to be during the LPRIA period and early Principate and can therefore be considered as a jewellery type. On a fundamental level, brooches reflect the differences, developments, and changes in costume. Individuals in areas where brooch use was high were undoubtedly able to access more variations than those in areas where it was low or non-existent (Cool and Baxter 2016: 71). It warrants mentioning at this point that while it is true that iron brooches existed both during the LPRIA period and after the conquest, they do not appear in frequent use. Similarly, gold and silver brooches are rare finds in Britain. Interestingly, however, gilding, tinsplating, and silver-plating were applied to brooches more frequently than to most other personal metal adornments (Johns 1996: 149).

As a jewellery type, brooches differ compared to other personal ornaments worn in Roman Britain. For example, the enamelling on bronze is commonplace on brooches of various typologies; however, this technique is an unusual feature on other forms of contemporary jewellery (Johns 1996: 182–183). The recent analysis of Romano-British brooches has exemplified the complex relationship between typological categories and alloy composition, Dungworth illustrates this through the examples of the Colchester A and B types:

‘Some of these relationships are quite clear (e.g. the use of brass for Colchester A brooches and leaded bronze for Colchester B brooches) while others have required the analysis of large numbers of brooches and a careful examination of existing typologies’ (Dungworth 1997: 902).

Bronze brooches are extremely common finds in Romano-British sites, shown by their common display in museums and private collections (Burnham et al. 2007: 340). With their excessive commonality, they lend themselves to minute typological analysis. In recent years, metallurgical analyses have shown that the brooches of Roman Britain were made from a large range of copper alloys, the compositions of which were unique to Britain. The studies indicated very subtle metallurgical variations in established typologies which were regionally consistent, implying that the different raw materials were carefully blended according to traditional recipes (Dungworth 1997: 902–903).

The first two centuries AD saw an ‘explosion’ of ‘Celtic’ art in Britain. New aesthetic styles drew on the knowledge of Brittonic art whilst creating something different by blending the familiar and the foreign (Hunter 2013: 271). While this is not the case throughout the whole of Britain, nor through every type of artistic expression, it is apparent in the case for some articles of personal adornment. A key example of this is the brooch, the adoption, adaptation, and development of style and typology.

The genesis of Romano-British brooches cannot be simply attributed to the continuance of tradition (or ‘Celtic survival’). Rather, it reflects a much broader picture of the adaptation and recreation of practises. To some this is evidence for the reinvention of ‘Celtic art’ under the Roman imperial shadow. However, the modification of tradition cannot be solely attributed to the idea of individual social agents negotiating their new identities as Hunter argues (Hunter 2013: 278), as there is no evidence to suggest that every metal worker reinvented their identity post Roman occupation. Although these brooches provide us with examples of settlements and communities which had little to no pre-existing traditions of brooch use subsequently rapidly adopting them, we do not see any form of ‘resurgence’ or ‘survival’ of a homogenous ‘Celtic’ identity depicted in art as suggested by Hunter’s theory of the explosion of Celtic art. It is important to remember that even during the Roman occupation, Britain was not culturally or even linguistically unified and the individual social agent played a significant role in the developments which we are able to identify and discuss in this paper.

Penannular brooches

In regard to ‘basic’ designs, there is none simpler than the penannular brooch. It is formed using a pin and ring, a type that shows minute variations during the early Romano-British period (**Figure 2**). The various typologies have been determined by the form of the terminals, which may be simply flattened, bulbous, turned back, or rolled. In some of our more elaborate brooches we see terminals which are enamelled, or cast with depictions of stylised animal heads (Johns 1996: 151). The north of England



Figure 2: Copper alloys Penannular brooch found in Staffordshire (Image courtesy of the Portable Antiquities Scheme, Record ID: WMID-77D0BC).

appears to be more prolific in the use of the penannular type than the South (Cool and Baxter 2016: 87). This may be due to the simple design and the long use life of this brooch type. It has proven impossible to accurately provide start dates for some sub-sets of the penannular grouping without having the item's carbon dates due to the penannular's similarity to other brooch types. Furthermore, this brooch type had a seemingly bimodal use-live over many centuries, providing another issue for dating and our interpretation of distribution patterns (Cool and Baxter 2016: 74).

As a simple brooch type it is probably not surprising that despite there being a few examples of silver and iron Romano-British penannular brooches, the overwhelming majority of this brooch type in Britain are simple bronze pieces (Johns 1996: 151). This indicates their commonality and potentially a larger radius of intended distribution to non-elite Britons.

Bow brooches

Bow brooches were generally a small typology often decorated with stylised animals. Produced most prolifically in Britain and Gaul, they were worn by soldiers and civilians alike. When discussing Bow brooches (**Figure 3**) we must consider those discovered at the settlement at Woodcock Hall, Norfolk. Brown states that in the evaluation of the find spots of the earliest groupings, we can see the growth of the settlement up to the period of military occupation. At which point the pre-conquest brooch types continue



Figure 3: Bow brooch found in Norfolk (Image courtesy of the Portable Antiquities Scheme, Record ID: SF-122328).

to dominate, the later types having a utilitarian function commonly associated with the army (Brown 1986: 11–14). The argument that the early brooches suggest that the settlement was already well established and affluent by the first quarter of the first century AD, with a continued persistence of native styles and designs is flawed. Although these suppositions seem accurate, they do not account for the nature of the use lives of brooches. These brooches must therefore be dealt with tentatively as they could remain in use or be kept for another purpose for more than one generation before being discarded or lost. It has been theorised that this typology had such long use-lives due to their signifying authority and so the bow brooches which were worn and/or repaired could take on lives of their own, being themselves a signifier of power and control to the local audiences (Cool 2010: 41). When the abundant existence of a LPRIA brooch type, however, is correlated with our knowledge of Norfolk and its importance in the development of Brittonic metal working, we can suppose that cultural appropriation had little influence on the development of Bow brooches in Norfolk. This is demonstrated through design trends and the persistence of local brooch types.

It serves at this time to discuss the traditions of metalworking and potential PRIA mining in Norfolk which may have supported brooch development. Namely, the natural mineral and metal deposits which later attracted the attention of the Romans. Norfolk is plentiful in mineral rich soils and metals such as iron and also has a natural supply of Carrstone which can be quarried. The iron ore of Carrstone is highly viable for iron smelting, a process which increased during the Roman occupation but that was already practised during the LPRIA or earlier. This access to raw materials will be discussed in more detail later as it pertains to Snettisham but in the discussion of brooches, it allows us to see that there is a pre-existing tradition of high quality metal working which may have supported the later production of a type which is profoundly Brittonic and Gallic

Dragonesque brooches

Found almost exclusively in the north of Britain, the dragonesque brooch is one of the more ornate brooch types to appear in Roman Britain. The dragonesque brooch is a unique type of zoomorphic brooch serving as both decorative and highly functional jewellery with a strong curved pin which was able to hold large folds of fabric. This type is a strictly a Romano-British object 'made of quaternary alloys containing Cu, Zn, Sn, and Pb' (Dungworth 1997: 906), with only a few stray examples being found on the continent. The Dragonesque brooch moved across the English Channel as an item rather than as a concept with its distribution pattern suggesting a possible primary process of movement being military. Troop movements along the *limes* and subsequent secondary contacts to the neighbouring North Sea coast of Belgium, the Netherlands, and France would account for the distribution of find sites (Hunter 2013: 273). We see the emergence of the dragonesque brooch after the initiation of Roman occupation in the first century AD, embodying uniquely local Northern Brittonic aesthetic tastes and serving as both decorative objects and highly functional clothing fasteners capable of holding thick folds of fabric with their substantial curved pin (**Figure 4**).

The distribution pattern of finds indicates that this type was manufactured in the north of England and the south of Scotland. It first appears in the first century AD and individual brooches remained in use for some four or five generations. These brooches had heads most likely inspired by La Tène trumpet motifs and were decorated with either moulding or enamelling to highlight the zoomorphic plate, showing artistic elements which are often defined as 'Celtic' (Hunter 2013: 273). The patterns and range of enamel colours underlines the fact that these brooches are the product of early Romano-British technology rather than the products of the LPRIA. Although there are rare plain examples made of iron from Iron Age Yorkshire, we can argue that without the Roman conquest the dragonesque brooch would not have developed into



Figure 4: Dragonesque brooch found in Yorkshire (Image courtesy of the Portable Antiquities Scheme, Record ID: SWYOR-4BDA8D).

the type we see emerge during the post-conquest period. This is due to the fact that their decorative flourishing emerged from the explosion of ‘new’ Celtic art (Hunter 2013: 273). Dragonesque brooches reflect the tastes and preferences of peoples who were actively participating in the bricolage of aspects of Roman technology but were conscientiously engaging with their perceived local ‘native’ identities in terms of artistic expression. This was being demonstrated rather overtly through displaying altered provincial designs and aspects of adornment. Therefore, it seems accurate to surmise that the designs are by their nature provincial in concept.

As the Dragonesque brooch has no obvious LPRIA predecessor and there is no Classical type introduced to form the immediate inspiration for these decorative fasteners (Johns 1996: 153), it can be argued that this uniquely Romano-British type

developed, stylistically, independently of Roman influence. The utilisation of new Roman technologies and products only allowed for the realisation of the conceptualised brooch, they did not determine its conception, perfectly demonstrating local engagement with the particularisation of the universal.

Wirral type brooches

An apparent popular brooch type in the north and north-west of Roman Britain during the second century is the 'Wirral' type, characterised by a bow of semi-oval section, usually decorated with a rectangular panel which contains three long strips with an enamel infill (Figure 5). Below the enamel panel, at the waist, there is typically a boss or stud which is on some occasions decorated with a star most commonly with four or five points, done with enamel. The head has a loop and a head-plate, which is cast in one with the bow and catchplate. In most cases, the head-plate takes the form of a series of steps frequently bearing knurled decoration or less often an enamelled panel (Philpott



Figure 5: Copper alloy Wirral type brooch (Image of curtesy of the Portable Antiquities Scheme, Record ID: GLO-1DD6C2).

1999: 274–275). Despite variations in detail, concerning the exact form of the head, colour, and enamel panel detailing, all examples are hinged. The term ‘Wirral type’ has been attributed to this type as it is very distinctive and uniquely Brittonic, being made with leaded bronze (an alloy which does not appear commonly outside of Britain), and locally produced in the Wirral area.

The Wirral type sub-group likely evolved from the earlier trumpet brooch, and although it arguably draws on a number of decorative and stylistic features of other brooch types once it is adopted, the type remains remarkably consistent. Where we do see variations they are only minor and pertain to the head and enamelling (Philpott 1999: 276). This would suggest that production was short-lived and there was a single manufacturer. Despite this, however, there does seem to be evidence for a large radius of distribution within the North (see **Figure 6**). **Figures 6 and 7** indicate that although

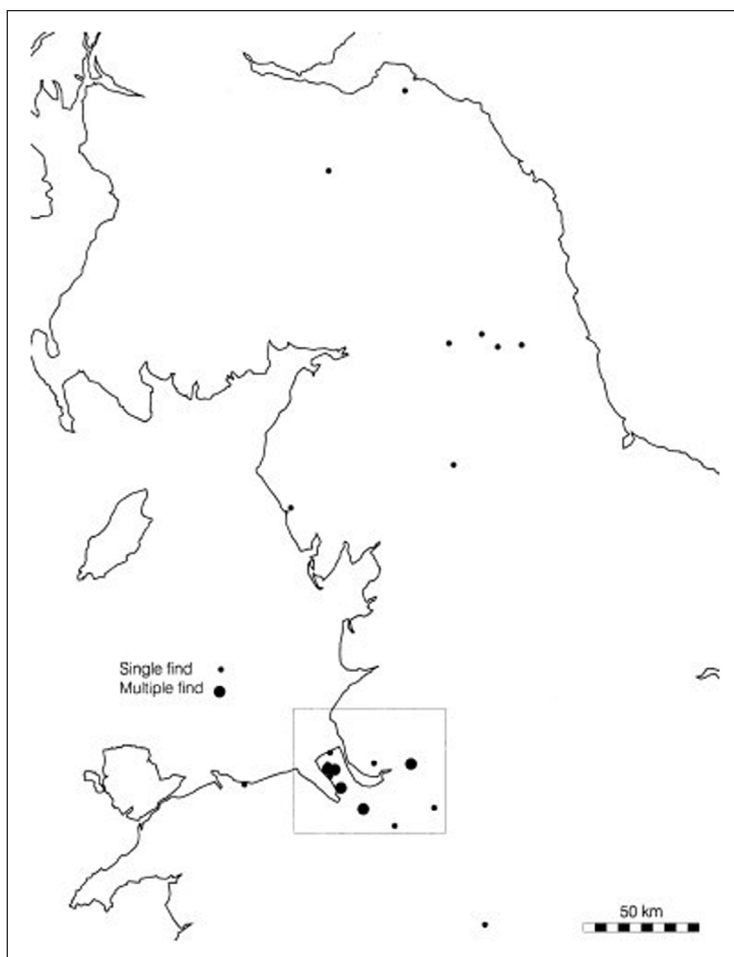


Figure 6: Distribution of Wirral type brooch in Britain (Philpott 1999: 280. Reproduced with permission).

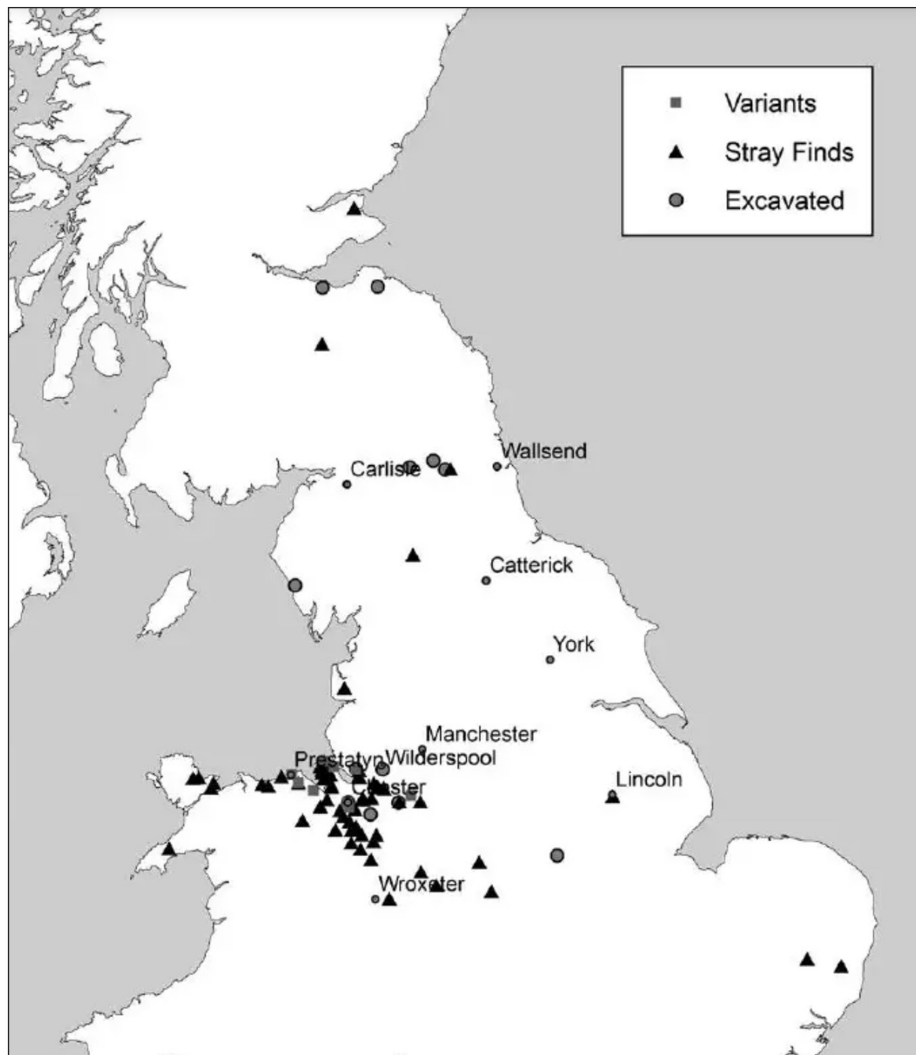


Figure 7: Distribution of Wirral type brooches and variants (Philpott 1999: 281. Reproduced with permission).

the type was most densely deposited within the Wirral area, the brooches have been found considerably further North and East. This uniquely northern Brittonic type demonstrates the potential dominance of local and regional production, the brooch type being produced in a singular localised area of the North-West and distributed, for the most part, thereabouts. It is possible that the brooches found in areas other than Wirral may only demonstrate the mobility of the populace rather than commercial mobility patterns. Despite this, it still shows the mobility of the 'Wirral' brooch type within the North, an area not well known during this period for a large production of ornate items. It, therefore, demonstrates an increasing market for ornate functional items of adornment in the north of Britain. Although this development could be attributed to

Roman cultural, ideological, and physical influences on adornment and dress patterns in relation to pre-existing regional trends, it does not signify homogenous local appropriation of Roman culture or cultural practices.

Brooches of the Backworth treasure

The brooches of the Backworth treasure are examples of Romano-British manufacturing found in the context of an offering to the mother-goddesses in the area around the eastern end of Hadrian's Wall (Johns 1996: 213). As with most finds from hoards and treasures that have not undergone chemical analysis, it is uncertain whether the brooches were produced around the area of deposition. However, the existence of these items does demonstrate that either the brooches were produced in the north of England and deposited in a neighbouring area or that they were produced elsewhere in Britain before being deposited.

Overall, we have seen that regional groups developed their own unique typologies of brooches during the Roman period. While craftsmen took advantage of new technologies, some of which originated in Greece or Egypt, traditional production practices seem to continue with a greater emphasis on the regionality of the individual social agent as opposed to a Roman provincial universality. These items and typologies are traditionally classified as 'Romano-British' in scholarship as they were developed during a period of Roman occupation. In reality, however, we are dealing with complex layers of localised manufacturing styles and techniques, where new in-coming ideas are incorporated into existing pre-Roman practices. In theory, it is possible to argue that these developments could have been achieved without the Roman occupation. Direct contact with Roman material culture was not essential for these developments and whilst the interaction within the globalised Roman world certainly accelerated the exchange of information, contacts with Gaul, and as such indirect contacts with the Roman empire, would have sufficiently facilitated cultural and material interactions; if this is the case, then these jewellery types and subsequent developments should not be singularly attributed to the appropriation of Roman culture.

Roman Finger Rings and Britain

The following section considers a new jewellery-type not previously manufactured in Britain, finger-rings. Introduced during the initial Roman invasion of Caesar in the first century BC evidenced by rings from Colchester (*Camulodunum*) and other early fortified Roman settlements, finger rings constructed in materials ranging from gold to bone became extremely popular (Johns 1996: 41). The extreme variation in material types indicates their ready availability.

Snettisham snake rings

One of the largest assemblages of Romano-British rings found in one context dating before the second century AD is the Snettisham Roman jewellers hoard in Norfolk (Figure 8). Pike and Cowell (1997) grouped the snake rings of this hoard into three well-defined types. The first category is that of the overlapped wound-wire rings, the second consists of plain rings set with stones (some clearly unfinished), and the third include faceted rings (Pike and Cowell 1997: 50), with the only variation in the physical construction of each type being size. The general uniformity would suggest that there was a manufacturing repertoire among the owner(s) of the hoard. However, it is possible that the hoard represents a brief snapshot of the last batch of rings produced before their deposition after the workshop's closure, rather than a reflection of the full range of outputs. Interestingly, when compared to an early Romano-British ring we see very little variation in the chemical compositions of the silver used despite their deposition at separate sites. This suggests that the development of this finger ring in Britain centred around the adoption of the jewellery type and the subsequent categories of ring. Production and the sourcing of raw materials remained local to Britain. The ring used as a comparative object to those found in the Snettisham hoard is the complex snake-ring from Slay Hill, Saltings, Kent, (Pike and Cowell 1997: 50) referenced as Cat/Reg No. 276 in Table 2.



Figure 8: Snake ring (Image courtesy of the Portable Antiquities Scheme, Record ID: NMS-1FFD6E).

Cat/Reg. NO.	Description	% Copper	% Silver	% Gold	% Lead	% Zinc	% Tin
276	Complex snake-ring	5.6	93.6	0.7	0.2	<0.1	<0.5
243	Snake-ring	16.1	80.9	0.6	0.2	1.3	0.9
244	Snake-ring	8.6	90.1	0.7	0.1	0.4	<0.8
251	Snake-ring	9.7	88.3	0.7	0.2	0.3	0.6
252	Snake-ring	8.4	87.7	0.7	0.5	1.8	0.9
254	Snake-ring	7.8	90.5	0.6	0.2	0.8	<1.1
257	Snake-ring	11.0	87.1	1.1	0.2	0.5	<0.5
259	Snake-ring	28.9	66.3	0.8	0.5	3.4	<0.5
274	Snake-ring	19.3	77.5	0.5	0.7	2.0	<0.7
239	Ring, oval bezel, no stone, unfinished	16.4	81.0	0.7	0.8	1.1	<0.6
240	Ring, oval bezel, no stone, unfinished	7.7	91.0	0.4	0.8	0.0	<0.5
241	Ring, oval bezel, no stone, unfinished	7.7	90.6	0.6	0.4	0.8	<1.00
289	Ring, wire wrapped	5.6	91.3	1.8	1.3	0.1	<0.6
290	Ring, wire wrapped	2.6	96.3	0.8	0.3	0.0	<0.5
292	Ring, wire wrapped	6.4	91.5	0.8	0.5	0.2	0.5
293	Ring, wire wrapped	1.8	97.3	0.9	0.0	<0.1	<0.5
296	Ring, wire wrapped	2.1	96.1	1.2	0.5	0.1	<0.5
297	Ring, wire wrapped, fragment	1.4	97.2	1.1	0.3	0.0	<0.6
301	Ring, faceted	23.1	72.4	0.8	0.6	3.1	<0.4
302	Ring, faceted	20.6	76.8	0.7	0.6	1.3	<1.0
303	Ring, faceted	32.5	62.9	0.7	0.7	3.3	<0.5
304	Ring, Faceted	14.3	81.6	1.0	0.6	2.6	<0.6
341	Ring? fragment	2.7	96.3	0.8	0.3	<0.1	<0.5
311	Ring, plain	5.5	93.2	0.9	0.5	<0.1	<0.8

Table 2: XRF – results – Silver items. Snettisham hoard (after Pike and Cowell 1997: 52).

Table 2 shows the metal contents of the silver items found in the Snettisham hoard. The concentration and mix of metals, which varies very little throughout, demonstrate that the metal used to produce all the items was sourced from one area local to the production centre and likely produced by the same jewellers. This hoard demonstrates

that although finger rings were new to Britain, the ability to produce high quality silver jewellery made from locally sourced raw materials was already well established before the Roman occupation. The skill being reflected through the highly refined quality of the silver used for these rings leads me to hypothesize that the jewellers who produced the items for this hoard were able to obtain and work silver from a relatively localised source.

Metallurgical analysis of the silver rings of the Snettisham hoard gives us at least one definite answer, that the silver sourced for the production of these rings was from the South of Britain. Although the South of Britain may not seem to some to be considered 'local' to Norfolk, the term here is used to indicate that the metal is neither imported from elsewhere in the Roman Empire, nor does it come from any other part of Britain than either Norfolk or further south-south-west, indicated by the relatively high copper levels and significantly low gold levels. This coupled with the distinctively Brittonic production methods and non-idealised aesthetic of the snake rings, which will be fully explored in the coming sections, forces us to acknowledge a distinct lack of pervasive Roman influence. However, one must remember that there are no rings in pre-Roman Britain, so we must consider the way in which individuals and regional societies engage with this item of adornment. The manner of engagement by the individual social agent suggests that although there was a general insignificance of cultural appropriation in Britain there is significant Creolage (Haeussler and Webster 2020) occurring during this period.

Henig-type II finger rings

Nos 222–42 in the Snettisham hoard belong to the Henig-type II ring which represents the classic type of Roman ring which was based on Hellenistic prototypes (Johns 1997: 34). This group of rings may be regarded as the most useful reference point for the Henig II type from the mid-second century AD as they provide information on both morphology and the sequence of manufacturing (Johns 1997: 34). This information is important as the rings are relatively uniform in appearance to the rest of the Henig II rings found throughout the empire. This demonstrates not only that the relatively new jewellery type was produced and traded internally within Britain but that these rings manufactured in Britain were of the same quality and shape as those made across the empire. This confirms, once again, that Brittonic metalworkers were able to engage with the Roman technologies and adornment trends in a manner that was only possible through the cultural fluidity of LPRIA and Roman Britain. This fluidity was feasible due to a general lack of Brittonic homogeneity and an already established practice of cultural and material mingling.

The Snettisham hoard also presents instances of Roman jewellery types which had uniquely native Brittonic stylistic overtones. As a group, nos 243–88 enable us to study

an extensive series of mass-produced moulded jewellery cast in precious metal and produced in a single workshop within a short time period (Johns 1997: 35). Rings shaped in the form of serpents, with snake-head terminals were an already well-established style, with standard types being found in virtually all Roman provinces. However, the snake-head rings of the Snettisham hoard display a more abstract design, which seems to be characteristic of Brittonic aesthetic preferences. The commonality of this type may be a reflection of the significance of the serpent in the 'pagan' classical world (Johns 1997: 35), potentially explaining why the type is especially prevalent throughout the empire, as it was a style easily conflated with already existing designs. We can argue that although the ring was a jewellery type which was introduced to Britain in the first century AD (Johns 1996: 44), it was the availability of an 'open market' that had a greater effect on the chosen designs and ring typologies of Roman Britain, the idea of an 'open market' being that of expanded trade routes which were already in use. Interestingly, the majority of the snake-rings found in Roman Britain, including those of the Snettisham hoard, were produced within the province (Johns 1996: 44),⁵⁵ rather than being imported from the continent, showing local developments in design preference and innovation in metalworking and alloy construction within Britain.

Wound-wire rings

Another ring type found in the Snettisham hoard is the wound-wire ring, nos 289–99 (Johns 1997: 40). With overlapped and coiled ends, wire rings reflect a basic and obvious design that was used as both personal adornment and functional attachments and links (Johns 1997: 40). During the Roman period, they occur in base and precious metals. However, when used as finger-rings there are no other provincial parallels to some of the wound-wire rings of the Snettisham hoard. This demonstrates a uniqueness which would insinuate, once again, that although the type shares some characteristics of a common ring, production within Britain allows for local variation and thus regional development independent of Roman culture, a phenomenon classified as creolage (Haeussler and Webster 2020) which accounts for social agency and the individual, local and regional social agent. Once again reiterating the argument that cultural appropriation in relation to rings is limited to the adoption of typologies.

Curiously, there are at least two parallels that can be found for the Snettisham wound-wire type from Germany. A silver ring from a multi-period cave site at Burghöhle appears to be very close as well as a later period find (Johns 1997: 40). This demonstrates a potential stylistic exportation from Britain to the continent, arguing for an existing precedence of creolage which continued to develop with the advantage of an 'open market'. Another parallel comes from Britain. A silver ring excavated from the fortress baths at Caerleon is an exact parallel, the only variation being the size of

the ring (Johns 1997: 40). It seems appropriate to assume that the Caerleon ring is actually a product from the Snettisham jewellers' workshop. The gold snake ring of the Backworth treasure also seems to be an example of Brittonic production during the second century AD due to its stylistic similarity to the silver ring examples of the Snettisham hoard (Johns 1996: 213).

From the analysis undertaken in this chapter, we suggest that the greatest influence in the development of Brittonic jewellery, and in particular rings, was once again the particularisation of the universal, where an established item of adornment from the Roman empire develops in a locally unique manner creating distinctive regional diversity. Despite the Roman presence in Britain popularising certain jewellery type, the developments which occurred seem unique to each region of Britain. As far as the effect cultural appropriation had on the development of Brittonic finger rings, it is limited to the introduction of this item adornment type to LPRIA Britons, having little to do with any developments which occur after the fact.

Conclusion

At its most basic level, the buying and wearing of precious metal jewellery is a demonstration of the owner's wealth. Although ornaments may have an actual intrinsic value that can be linked directly to the value of currency in those societies that use coinage, the wearing of ornaments serves as a badge of status or rank (Johns 1996: 5), a fact which plays an important role in innovation and development progression. Moreover, jewellery is heavily loaded with symbolic values and associations and thus develops alongside regional societal and cultural understandings. Metallurgically speaking, whilst scrap metal may have been a source of raw material for the jewellers of Britain, it appears that care was taken over its use, meaning that the alloys would have been recognisable. Elements such as their colour or metallurgical qualities would have made them discernible to any jeweller, meaning that the jewellers were most likely cognisant in their blending of metals to create deliberately mixed alloys (Dungworth 1997: 907), putting Romano-British jewellery makers on equal standing with the jewellers of the Mediterranean or Gaul.

Through the comparative study of jewellery produced in Britain with examples from the rest of the Empire, we can see an incredible phenomenon of cultural appropriation and bricolage having very little influence in production and design whilst introducing typologies and distribution trends (Haeussler and Webster 2020). Most ostentatious developments were centred around the wealthiest in society and probably did not greatly affect the general Brittonic population who continued to live their lives according to their own traditions and merely took advantage of some of the advancements made in production where it suited them. The focus of Roman influence was centred, therefore,

around the Brittonic elite and aspiring elites who were able and free to experiment with the idea of Romanness, this provided the opportunity for some of the metallurgical, design, and item experimentation of Brittonic jewellers. The changes and developments which occurred suggest that individuals in Britain only adopted certain aspects of the material culture of Rome. We can identify a distinct continuity with late and even early Iron Age trends and adornment practices into the first and second centuries AD with regional diversity still demonstrating the individual and group identities which carried on from before the Roman occupation. The people of LPRIA Britain seemed to lack general sense of social and cultural homogeneity, therefore it is not surprising that regional variety remained as a recurring feature of Roman Britain once it was established as a province (Hunter 2013: 271).

Based on the available evidence, we can surmise that Roman culture did not extend far beyond the country houses and towns of the wealthiest families (Guest 2002: 87). However, from what we have discussed throughout this paper, this statement seems to be unsubstantiated. Whilst the agency behind the developments we see is arguably still debatable, the changes which occurred were widespread, affecting rural as well as urban communities (Pitts 2018: 64) in relation to interaction with items of adornment and engaging with the demonstration of identity. In the south of Britain, we see an increase of locally produced decorative jewellery types which are extravagant and ornate. This, however, cannot be attributed solely to the Roman influence as such trends have been seen throughout history. They occur when cultural hubs are formed around economically stable and thriving areas, a pattern noted by Millett (1990: 11–13) in his survey of LPRIA agricultural areas. Millett (1990: 13) found that the south of Britain and more predominantly the south-east had higher populations and more cultural influence coming from Gaul and the continent. With larger groupings of people there seems to be a trend of opulence and persons capable of affording jewellery made from precious metals with more complex and intricate designs. As this was occurring well before the Roman occupation, it would be unwise to attribute it to the appropriation of Roman settlement culture.

The developments made during this period then, in general terms, could have hypothetically occurred without direct Roman influence or contact and should be dealt with thusly. To assume that they were only possible through the appropriation of Roman culture as a result of occupation is a regrettably myopic approach to a complex issue of social agency and cultural fluidity within individual social groupings. However, it must be conceded that there are some specific developments that may have taken longer or would never have come to fruition.

Acknowledgements

I am incredibly grateful for the constructive feedback that I received from the audience at the Theoretical Roman Archaeology Conference 2019 at the University of Kent and from the anonymous reviewers at TRAJ.

Competing Interests

The author has no competing interests to declare.

References

Ancient Sources

Dio Cassius (Translated by E. Carry 1955). *Roman History. Book LIX PP*. London: William Heinemann LTD.

Modern Scholarship

Brown, R.A. 1986. The Iron Age and Romano-British settlement at Woodcock Hall, Saham Toney, Norfolk. *Britannia* 17: 1–58. DOI: <https://doi.org/10.2307/526539>

Burnham, B.C. 1995. Celts and Romans. Towards a Romano-Celtic society. In: M.J. Green (ed.) *The Celtic World*. London: Routledge: 121–141.

Burnham, B.C., Hunter, F., Booth, P., Worrell, S., and Tomlin, R.S.O. 2007. Roman Britain in 2007. *Britannia* 39: 263–390. DOI: <https://doi.org/10.3815/006811308785917097>

Champion, S. 1995. Jewellery and adornment. In: M.J. Green (ed.) *The Celtic World*. London: Routledge: 411–419.

Cool, H.E.M. 2010. Finding the foreigners. In: H. Eckardt (ed.) *Roman Diasporas*. *Journal of Roman Archaeology Supplementary* 78: 27–44.

Cool, H.E.M., and Baxter, M.J. 2016. Brooches and Britannia. *Britannia* 47: 71–98. DOI: <https://doi.org/10.1017/S0068113X16000039>

Dungworth, D. 1997. Roman copper alloys: analysis of artefacts from Northern Britain. *Journal of Archaeological Science* 24: 901–910. DOI: <https://doi.org/10.1006/jasc.1996.0169>

Gosden, C. 2005. What do objects want? *Journal of Archaeological Method and Theory* 12: 193–211. DOI: <https://doi.org/10.1007/s10816-005-6928-x>

Guest, P. 2002. Manning the defences: the development of Roman-British urban boundaries. In: M. Aldhouse-Green and P. Webster (eds) *Artefacts and Archaeology. Aspects of the Celtic and Roman World*. Cardiff: University of Wales Press: 76–89.

Haeussler, R. 2013. *Becoming Roman? Diverging Identities and Experiences in North-West Italy*. New York: Routledge.

Haeussler, R. and Webster, E. 2020. Creolage. A bottom-up approach to cultural change in Roman times. *Theoretical Roman Archaeology Journal* 3(1): 5. DOI: <https://doi.org/10.16995/traj.419>

- Haig-Brown, C. 2010. Indigenous thought, appropriation, and non-Aboriginal People. *Canadian Journal of Education* 33: 925–950.
- Hunter, F. 2013. Roman brooches around and across the British limes. In: G. Grabherr, B. Kainrath, and T. Schierl (eds) *Verwandte in der Fremde. Fibeln und Bestandteile der Brkleidung als Mittel zur Rekonstruktion von interregionalem Austausch und zur Abgrenzung von Gruppen vom Ausgreifen Roms wahren des 1. Punischen Krieges bis zum Ende des Westromischen Reiches*. Innsbruck: Innsbruck University Press: 270–280.
- Ivleva, T. 2012. *Britons abroad. The mobility of Britons and the circulation of British-made objects in the Roman Empire*. Unpublished thesis (PhD), University of Leiden.
- Johns, C. 1996. *The Jewellery of Roman Britain. Celtic and Classical Traditions*. London: UCL Press limited.
- Johns, C. 1997. *The Snettisham Roman Jeweller's Hoard*. London: British Museum Press.
- Lloyd-Morgan, G. 1995. Appearance, life and leisure. In: M.J. Green (ed.) *The Celtic World*. London: Routledge: 95–120.
- Macdonald, P. and Davis, M. 2002. Old Castle Down revised: some recent finds from the Vale of Glamorgan. In: M. Aldhouse-Green and P. Webster (eds) *Artefacts and Archaeology. Aspects of the Celtic and Roman World*. Cardiff: University of Wales press: 20–32.
- Machling, T. and Williamson, R. 2016. The Netherund torc terminal- insights into torc technology. *Past, the Newsletter of the Prehistoric Society* 84: 3–5.
- Millett, M. 1990. *The Romanization of Britain*. Cambridge: Cambridge University Press.
- Northover, P. 1995. The technology of metalwork. Bronze and gold. In: M.J. Green (ed.) *The Celtic World*. London: Routledge: 285–309.
- Pike, A. and Cowell, M. 1997. The scientific examination of the Hoard. Analysis of materials. In: C. Johns (ed.) *The Snettisham Roman Jeweller's Hoard*. London: British Museum Press: 50–68.
- Philpott, R.A. 1999. A Romano-British brooch type from north-western and northern England. *Britannia* 30: 274–286. DOI: <https://doi.org/10.2307/526683>
- Pitts, M. 2018. *The Roman Object Revolution*. Amsterdam: Amsterdam University Press. DOI: <https://doi.org/10.5117/9789463728201>
- Tite, M., Pradell, T., and Shortland, A. 2008. Discovery, production and use of tin-based opacifiers in glasses, enamels and glazes from the Late Iron Age onwards: a reassessment. *Archaeometry* 50(1): 67–84.
- Webster, J. 2001. Creolizing Roman provinces. *American Journal of Archaeology* 105: 209–225. DOI: <https://doi.org/10.2307/507271>

