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The Thing about Replicas — Why Historic Replicas Matter

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Reproduction of archaeological material was a significant and serious enterprise for antiquarians and museums in the long nineteenth century. Replicas embed many stories and embody considerable past human energy. Behind their creation, circulation, use, and after-life lies a series of specific social networks and relationships that determined why, when, and in what circumstances they were valued, or not. Summarising the context of their production, circulation, and changing fortunes, this article introduces the ways in which replicas are important, and considers the specific benefits and aspects of a biographical approach to their study. Beyond the evidential, the study of existing replicas provides a historical and contemporary laboratory in which to explore the concepts of value and authenticity, and their application in cultural heritage and collections management, offering us a richer insight into the history of ourselves as archaeologists and curators.

Keywords: Archaeological reproductions, facsimiles, plaster casts, cultural biography, value, authenticity

INTRODUCTION

In practice, replicas often ‘test’ our tolerance of the application of theoretically aware approaches to material culture. We tend to be quick to dismiss their value as inauthentic and of limited academic importance. Our aim is to invite readers to think again. We aspire to broader and more considered approaches to appreciating the interest, value, and significance of replicas. We want to influence the practices of researchers, heritage managers, and not least museum curators, in whose hands lies the future survival of much of this resource. Aspects of what we will discuss can extend to a wide range of things that people may understand as reproductions. Some of these may be scaled copies or interpretative reconstructions, including souvenirs (Stewart, 1984), the products of experimental archaeology, visual media such as models (Perry, 2013), or copies made to replace originals in the field; but our prime subject here is what were, at the time of their production in the long nineteenth century, generally referred to as ‘reproductions’, ‘facsimiles’ or occasionally ‘models’, primarily made for and by antiquarians and museums. The aspiration was that these were exact copies, of the shape if not the precise colour and texture, of their subjects, but there was never any pretence that they were the originals; these were not fakes or forgeries. We will make the case for the evidential, historical, and social value of such replicas, and the particular merits of a focus on copies of early medieval material culture made in the long nineteenth century. Having briefly introduced the material, we will explain why replicas are archaeological things in their own right and demonstrate how they contribute to our understanding of the thing they are copying. Second, we will consider the specific aspects of a biographical approach to the study of such material, weigh up its benefits, and reflect on what insights archaeologists in particular can bring to this. Finally, we will return to the wider value of replicas when we identify the key research opportunities that emerge, and their broader relevance for European archaeologists. Our focus is on the histories of replication rather than current digital technologies, an important area of research in its own right, although the two are clearly linked and invite reflections on each other.

HISTORIES OF REPLICATION

The production and exhibition of replicas of archaeological material was a very significant and serious enterprise for museums and international fairs, particularly between the Great Exhibition of 1851 in London and the First World War. Indeed, living in a world of reproductions and replicas has been seen as a defining attribute of late nineteenth-century culture in general (Orvell, 1989: xv, 39). In museums they were intended for observation, education, handling, documentation, presentation, and art training, not least as part of a concerted effort to improve the quality of industrial design and the taste of nations through the advocacy of universal principles of art. The reproductive media embraced the technologies and craft of plaster casts, electrotypes, fictile ivories, architectural models, watercolour copies of medieval stained glass, brass rubbings, paper mosaics, and, particularly from the 1850s onwards, photographs (Baker, 2010). The aim was usually to enable the acquisition of a representative canon of art. Collections could comprise many reproductive media (the ‘reproductive continuum’ to use Baker’s expression) — for example photographs showing the ‘original’ setting displayed alongside casts of sculptures — and might also combine authentic originals with reproductions (Camille, 1996; Baker, 2010). Classic examples of the central role replicas played in the origins and identities of museums are the Cast Courts at the Victoria and Albert Museum in London (Figure 1) and the Römisch-Germanisches Zentralmuseum in Mainz, institutions that were also instrumental in the production, exchange, and circulation of reproductions to provincial art schools and museums.

Slightly earlier, antiquaries and others had begun to create and circulate reproductions, primarily for research and display purposes. From the seventeenth and eighteenth centuries onwards art schools and academies used them in teaching, receiving fresh impetus in Britain in the early nineteenth century with the widespread circulation of copies of the Elgin Marbles, and from 1837 with the philosophy and practices of the Government School of Design in London (Wade, 2012: 173–230). From the end of the nineteenth century, and for a host of reasons but often related to changing attitudes to authenticity, such facsimiles — attempts at reproducing exact copies — largely fell out of favour (Baker, 2010); most came off display and curators were often happy to destroy or redistribute them. Readily charted in the early journals of the Museums Association, art curators, in particular, questioned the value of casts beyond their role in education, particular concerns being that their fabric misled the viewer, and they lacked aura and a connection with the artist. Not that plaster cast production stopped. Perhaps the most notable example was the production of tens of copies of Swedish and Norwegian prehistoric rock art in the late 1930s by the Nazi *Ahnenerbe* (‘Ancestral Heritage’) under Herman Wirth, supported by Heinrich Himmler. The casts were seen as a tool for promoting the superiority of the Nordic race, its descent from an arctic empire, and an original religion that emerged from the solar cult. The casts were considered valuable in their own right, for exhibition (though the intended museum near Berlin was not to be), as props in Nazi propaganda exercises, and as gifts and rewards for senior Nazis (Ulf Bertilsson personal communication 10 Mar 2015; Pringle, 2006: 53–75; see also Effros, 2012: 282–83 on perceived financial benefits of museums selling casts). Fibreglass and related materials went on to replace plaster for the production of direct copies cast from the original object, superseded in the twenty-first century by contact-less digital technologies.

In museums, many historic replicas were damaged, as and when they came off display, because they received less care than authentic original objects. Responses today are still highly variable: modern collection management structures (with different approaches to art, archaeology, and history collections) may result in different attitudes to whether copies are considered valuable or expendable, and curators lack the framework and guidelines to help them make a fully informed assessment of the significance of replicas. Some museums are quite prepared to put their plaster casts in skips (deaccessioning fragile and often bulky items can be a tempting way to save on costs of storage and, since replicas may not be accessioned, the processes of assessment before disposal may involve scant research and rigour, if at all). Some sell their collections (e.g. the New York Metropolitan Museum of Art in 2006), or pass them on to places where their long-term future will be uncertain (Nichols, 2005; 2007). On the other hand, in many places this curatorial purgatory is beginning to end, with significant new investments in the redisplay and curation of plaster casts and occasionally other replicas, whether on a temporary or permanent basis. Good examples of curatorial and artistic reinvigoration include the New Acropolis Museum (and Underground) in Athens (Leahy, 2011), the refurbished Galeries des moulages at the Cité de l'architecture et du patrimoine in Paris (Carré, 2010), conservation and redisplay of the Albacini and other historic casts at Edinburgh College of Art (Edinburgh College of Art, 2012), the plaster cast storage in the National Museum of Wales (Figure 2), and a well-received exhibition of plaster casts of Irish high crosses and related facsimiles displayed in Japan and Dublin at intervals between 2005 and 2013 (National Museum of Ireland, 2005; 2010).

The scholarly and curatorial turn in the contemporary appreciation of the significance of historic replicas is most visible in relation to plaster casts of Classical and Renaissance material (e.g. Frederiksen & Marchand, 2010), largely because that is where the modern interests in obtaining copies first lay. There has been limited academic interest in replicas of other archaeological material; a study of very early replicas of Bronze Age swords from Scotland made between 1809 and 1819 revealed that replicas were made because of their presumed Roman context (Curtis, 2007). There are a few studies of replicas of Irish metalwork created from the mid nineteenth century and during the Celtic Revival, while very recently contemporary copies of early medieval sculptures from Britain and Ireland have become the subject of critical enquiry (see below); fictile ivories are also beginning to be studied (Courtauld Institute of Art, 2013). It is striking that there is no academic overview of the production of replicas of archaeological material and limited knowledge of what replicas were created, what survives and in what condition, and the firms and individuals involved in their manufacture.

'Replica' is a term open to many interpretations. Describing nineteenth-century copies as replicas is strictly anachronistic but used in other disciplines reflecting on nineteenth-century practices (e.g. Tweney, 2004), alongside examples where the term was used at the time but meant other things, such as a response or rejoinder rather than a direct copy (as in the case of music or painting). In our context, the widespread application of this terminology today is in itself a reflection of how negatively this material can be received, for 'replication' is often regarded as pejorative. Even 'copy' is not generally a compliment, despite it being a proof of how often something is chosen to be reproduced (Latour & Lowe, 2011: 279). By way of example, international conservation charters define replication as making an exact copy, but in a way that is deemed intrinsically deceptive because the new work is not distinguishable from the original and therefore damages the object or site's authenticity (Bell, 1997: 25). So, a replica in that context is a fake, designed to deceive, something that is inauthentic because authenticity is defined as a property that is bound up with the intrinsic fabric of the thing (Jones & Yarrow, 2013: 6). Yet at the same time an increasing number of modern replicas are openly used for conservation and presentation purposes, most famously at the caves of Lascaux in France.

The nineteenth-century terms also elide a range of differences in terms of the exactitude or scale of a reproduction. ‘Facsimile’, when used for commercial products, notably brooches, could in practice comprise a direct facsimile (that might be intended for a museum), a modified facsimile (a recognisable copy modified in some way for sale to the public), or facsimile adaptions (where a recognisable motif or section of ornament was copied from an original) (Kelly, 2013a). To this evolving round of related and oft-confused definitions we must now also add ‘re-creation’, in the sense of a new version of something old created by artists and craftspeople (see Glenmorangie Research Project, 2013–14).

RE-VALUING REPLICAS 1 — THINGS IN THEIR OWN RIGHT

Replicas (and their moulds) can be the only surviving example of something now lost, or constitute records of the condition many years ago of a now-eroded monument (Latour & Lowe, 2011: 287). Examples of late nineteenth-century plaster casts of lost things include a decorated Roman distance slab from the Antonine Wall in Scotland, discovered in 1865 but lost in the Great Chicago Fire of 1871 (Keppie, 1998: 35), or an important Viking Mammen-style casket dated to around AD 1000 from Cammin, destroyed during Second World War bombing of Dresden in Germany, copies of which exist in several museums (Figure 3).The inscription on the ninth-century Dupplin Cross (Forsyth, 1995) can be cited as an example of a replica revealing detail that is not obvious on the early medieval original.

Whatever we decide to call them, modern replicas should not only be considered as material culture directly connected to more ancient archaeological things, but also as artefacts that are now becoming historic, with their own patinas of age and use — they are things in their own right. They can therefore be of scientific value as examples of craft technologies and practices, just as cast museums and galleries are now also monuments in their own right (Camille, 1996: 198). Comparison of the National Museum of Ireland’s (NMI, n.d.) online discussion of the replica Hunterston Brooch with its record on SCRAN (n.d.), in which the latter’s interest is *solely* in relation to the eighth-century version, nevertheless shows that the recognition of their value as objects in their own right is not universally recognised.

Beyond this, replicas embed many stories and embody considerable past human energy. Behind their creation, circulation, use, and after-life lies a series of specific social networks and relationships that determined why, when, how, and in what circumstances they were valued, or not (see Gosden & Larson, 2007; Curtis, 2007). Individuals, museums, and skilled craftspeople strove to access, copy, multiply, share, and sell the copies from the moulds that they made or commissioned. These networks and their physical traces speak of historically specific desires for the exotic, the intriguing, and the difficult to obtain. The resulting entanglements extended between ‘centres’ and ‘provinces’, and across many countries of the world. Notably, the South Kensington Museum (now Victoria and Albert Museum) in London drew on the skills and connections of former military engineers with their experience of working in the colonies (McCormick, 2010: 88–133). The European scope and ambition of these imperial and often colonial ventures is encapsulated in the *Convention for Promoting Universal Reproductions of Works of Art for the Benefit of Museums of all Countries*, signed by fifteen royal attendees of the Paris Exposition of 1867 (from Great Britain and Ireland, Prussia, Hesse, Saxony, France, Belgium, Russia, Sweden and Norway, Italy, Austria, and Denmark), in which they agreed to promote and facilitate the systematic acquisition and exchange of replicas of objects between countries and their institutions (Figure 4; Conway, 1882: 84–85 for the full text of the *Convention*). The value of this material for exchange with foreign governments is writ large in South Kensington’s subsequent internal policies and practices (e.g. Robinson, 1881).

Replicas of archaeological objects are things that lend themselves to a cultural biographical approach in their own right and to an analysis of their contribution to the biography of the thing that they are copying. A biographical approach is open to many interpretative and methodological possibilities (Hoskins, 2006, and Gilchrist, 2012: 11–13, provide summaries and historiographies). Exploring the changing relationships between people and things, and also places, through the life-history of the object (which might be an artefact, monument or landscape) lies at the heart of this enquiry. With its focus on the materiality and agency of the thing as it entangles with people, the biographical approach enables us to identify how the meanings of things change in different contexts and through time. It allows for things to have multiple lives, both simultaneously and consecutively, extending beyond a short biography (birth, life, and death) into a long biography (to the present). In this context, biographies need to appreciate use-life histories but also go beyond these. The latter end of a long biography is where we encounter the discovery of archaeological objects, and how they have come to be the things we interpret them to be (Holtorf, 2002); this is also when the replication of archaeological objects may have played a role in that understanding.

Our aim in what follows is two-fold. First, to consider the specific benefits and aspects of a biographical approach to the study of such material, and to reflect on what insights archaeologists in particular can bring to this. Second, we will return to the wider value of replicas when we identify the key research opportunities that emerge, and their broader relevance for European archaeologists.

BIOGRAPHIES: A HUNDRED WORLDS IN AN OBJECT (AND ITS KIN)

It is perhaps surprising, given the interest in how visual technologies play their part in making meaning and the recognition of the power and value of reproductions in many academic disciplines, just how little replicas have featured in archaeologists' cultural-biographical studies of things (e.g. Benjamin, 1936; Hughes & Ranfft, 1997; Schwartz, 1998; Moser, 2001; Nordbladh, 2012; Perry, 2013). Exceptions include Joy's (2002) study of his grandfather's replica medal, which illustrated how meaning transferred from the empty medal box of the lost original to the replica, and Foster and Jones's (2008) incorporation of the interpretative reconstruction of the Hilton of Cadboll cross-slab into their long biography of the monument. Refreshingly, Latour and Lowe (2011) present replicas in a positive light, challenging long-held views on the perception and reception of copies of things. In rehabilitating reproductions as originals in their own right (although hardly the first people to do so, see e.g. McAndrew, 1955), they observe that the real phenomenon we must explain is the evolving, composite biography of the authentic original *and all its reproduced originals*. It is our contention that the optimum interest and value of archaeological replicas indeed lies in their appreciation as part of the composite, full biographies of the original and all its reproductions, and we suggest that there are two ways of exploring such biographies.

The first approach involves mapping out what Latour and Lowe describe as object trajectories; a diachronic approach that can be considered to follow a vertical axis. They use the analogy of hydrographers examining the full extent and catchment of a river rather than focusing on the original spring. Bringing copies into the picture increases the physical manifestations of the changing meanings of things through time (as demonstrated at Hilton of Cadboll: Foster & Jones, 2008). We can trace and consider the extended agency of the authentic original thing, including artefacts that might not have moved (far) from where they were first erected (e.g. an Irish high cross), while direct copies might make their way around the world. These networks extended beyond the countries of the 1867 *Convention*, notably to the diaspora in the USA and Australia.

In this regard, carved stones — a key early medieval resource in much of north-western Europe — and their replicas offer added value and interest, since they move between static and portable states (Foster, 2001; 2010). Critically, this means that the relationships with the places and communities associated with them also change. So, at certain times they acquire histories by virtue of their longevity, as re-interpretations build up around them. When portable — whether it is the parent material or the copy that has moved — histories build up through exchange and circulation (see Foster & Jones, 2008; Joy, 2009; Jones, 2010: 190–97).

The second approach entails exploring the massing of events in particular periods, the horizontal axes: the examination and comparison of individual biographies to identify when trends in use, or non-use, of replicas become visible, which in turn provides a broader context for assessing and appreciating the significance and meaning of individual objects and their trajectories. Such events might relate to what Byrne *et al.* (2011: 15) refer to as nodes within networks of people and things, specifically 'acquisition events' (Wingfield, 2011: 27). A specific example is the near contemporaneous creation of bespoke collections of plaster casts of 'Celtic' sculpture for the 1901 Glasgow International Exhibition and at museums in Dundee in 1904 and Aberdeen in 1905 (see below).

The study of object trajectories requires a return to examining the material aspects of the objects themselves in addition to their social contexts. In the nineteenth and twentieth centuries, it was the commentators' reliance on written records rather than the objects themselves that created myths and perpetuated confusion about the nature of a group of related bronze swords supposedly found in Netherley, Scotland, that eventually made their way to museum collections in Scotland, England, and Denmark. It took a combined detailed study of the material aspects of these objects and an understanding of their textual context to disentangle the story of how tangible 'souvenirs' became parts of museum collections before their status as copies was recognised (Curtis, 2007). That research benefited from modern scientific technologies and analysis to inform cultural biography.

In a similar vein, the marriage of what it is possible to observe using a critical set of eyes and scientific techniques has also been key to understanding the (linked) modern biographies of the St Andrews Sarcophagus (Figure 5) and the Norrie's Law silver hoard, two of the most important surviving Pictish relics from early medieval (later first millennium AD) Scotland. What first unites their biographies is that in 1839 an antiquarian, George Buist, arranged for them both to be replicated by a local plasterer, Mr Ross, and a jeweller, Mr Robert Robertson, for display in the museums of the Fifeshire Literary, Scientific and Philosophical Society (in Cupar) and the St Andrews Literary and Philosophical Society. This early and documented programme of replication of non-Classical, local archaeological material culture took place in societies that were at the vanguard of the nineteenth-century establishment of county and local societies throughout Britain. A masterpiece of Pictish carving, the Sarcophagus with its Christian and kingly iconography was created in the mid to late eighth century AD, probably as a royal shrine and certainly for use in a monastery endowed by royalty. After only a short time, it was dismantled and buried, to be discovered in 1833 during grave digging. From 1838 it became a museum exhibit for the newly founded St Andrews Literary and Philosophical Society, although not before a part of it had disappeared with another antiquarian to York. Spurred on by the lively polymath George Buist, its existence motivated the Society to make the study and preservation of St Andrews one of the foci of its activities, alongside its role in the earliest photographic activities. In 1839, before migrating to India to further his profession as a newspaper editor, Buist arranged for plaster casts to be made for the Cupar-based Fifeshire Literary and Antiquarian Society, seeing the benefits for research and communication. Casts of the Sarcophagus became sought-after antiquarian cultural capital for expanding regional and aspirant national museums in Newcastle-upon-Tyne (1848) and Edinburgh (1849). Wilson illustrated the Edinburgh cast (with all its tell-tale idiosyncrasies) in his influential *Prehistoric Annals of Scotland* of 1851; this and the presence of the cast in Edinburgh helps explain why the Dublin

Industrial Exhibition sought casts in 1853, to further its objective of illustrating the connection between the 'aboriginal inhabitants of Great Britain and Ireland'. The subsequent fortunes of each set of casts varied, some are now lost and others were created and circulated. In 1997 the Sarcophagus acquired a rejuvenated international status as part of the British Museum's Heirs of Rome exhibition, leaving St Andrews and touring for the first time in its history. The associated resurgent scholarly interest brought the significance of the plaster casts into the picture, and their historical impact and ongoing legacy is now being recognised. Biographical studies of the Sarcophagus and Norrie's Law hoard included the detailed examination of the fabric of both the Pictish and nineteenth-century objects for what they could say about the replication story and interdependent trajectories of both originals and replicas. The outcome was an appreciation of multiple strands: the physical legacies for the original; the interpretational legacies of the original; the confusion of reproductions with originals; the use of images of reproductions as if they were the originals; and the extended and fissile trajectories of objects, with their implications for the accuracy of the multiple reproductions (Goldberg & Blackwell, 2013; Foster *et al.*, 2014; Foster, forthcoming).

It is our experience that an archaeologically informed, indeed forensic, familiarity with the materiality of the original and its copies is necessary to populate and understand the composite biography in all its nuances. Latour and Lowe (2011: 282) introduced the notion of version *n* as 'the original' and *n + 1* as 'a mere copy'. In practice, we will also find *(n + 1)* + 1, copies of copies, and *n + 1b* and upwards (subsequent copies from the same original mould), and *n* + 2 (different copying events) and other variations. Later castings and casts from casts will be less accurate than earlier ones, but such pedigrees are important elements of our stories, and the physical differences between them tell us about different episodes, conjunctions of people and things at specific times and in particular places (Figure 6). This relationship becomes all the more important if the original is lost, not least since it changes the perception of the value of the reproductions, the existence of which will encapsulate many stories. An example is Myron's *Discobolus*, a fifth-century BC Greek sculpture enormously famous despite only being known from its many Roman copies in different materials and to different scales, the significance of which emerged from the very early nineteenth century onwards (Haskell & Penny, 1982: 199–202). These stories illuminate the networks of people, places, and things, enfolding the contributions of many people and materials, to inform our appreciation of their legacies. In this sense, the difference from the original becomes a biographical aid and virtue rather than an aspect that diminishes the value of the replica, in a materialist sense. Our sense of the value of that difference between the 'successive segments' in the production of replicas is therefore quite different from that of Latour and Lowe (2011: 282–83) whose interest is in how well or poorly reproduced a copy is and in the factors affecting the appreciation of aura. They deem a lesser perceived difference between the original and copy to be an aid to appreciating the aura of the replica, while our interest in this context lies in telling the stories that can emerge from appreciating the differences.

Conveying things and what such composite biographies enfold is a challenge, but Figure 5 is at attempt at a visual summary of the events associated with the creation, use, abandonment, rediscovery, display, research, and multiple replication of the so-called St Andrews Sarcophagus. But beware: this approach sadly can involve high image costs and reproduction fees, with its use of multiple examples of original/copyright archive materials and artwork.

RE-VALUING REPLICAS 2 — THINGS IN CONTEXT

The study of archaeological replicas since the nineteenth century offers us, among other things, important historical insights into the unfolding purpose of collections of plaster casts and related materials; into the relations between museums and other organisations (international to national, national to provincial; and between different sorts of institutions); and into relations of craft and industry. At the same time, the circulation of replicas of other materials, such as art works, was also a significant facet of early collections, although the networks and people involved were largely different.

A focus on historic replicas of early medieval material culture offers the most exciting prospects in this respect, because of what was produced and the peculiarities of its biographical potential. Early medieval history and archaeology fired the nineteenth- and early twentieth-century imagination, contributing to the definition and construction of the identity of European nation states, and the contents of newly established national museums (Geary, 2002). Such thought has shaped the academic labels and structures we use in relation to early medieval people and culture, how early medieval portable art contributed to modern myths of modern European origins and modern aesthetic responses to medieval times (Williams, 2007; Effros & Williams, 2008). Replicas of early medieval material culture played their part in this, and at a provincial as well as national and international level.

Outside the scholarship on Celtic Revival metalwork (Edelstein, 1992), recently reinvigorated by Kelly's detailed study of mid nineteenth-century commercial facsimiles of Irish archaeological jewellery (Kelly, 2013a and b), relatively little work has been undertaken to date. Exceptions are Effros's work on the creation and use of replicas of Merovingian material (Effros, 2005; 2008; 2012: 237–98), notably their impact at the Vienna World Fair, and the burgeoning interest in plaster casts of early medieval sculpture from Britain and Ireland (Redknap & Lewis, 2007: 28–35; Ó Floinn, 2012; McCormick, 2010; 2013; Foster, 2013; 2015; forthcoming; Foster et al., 2014). Such early medieval replicas circulated in Europe and further afield, and are a distinct aspect of the wider trade in plaster casts of sculpture, both in terms of the subject matter and the timescale for their production; starting in the 1830s, it took off more significantly in the 1850s, and peaked in the late 1890s and first decade of the twentieth century (Figure 7).

In the context of the birth of museums and their social complexities, the accumulation and/or creation of collections of replicas offer insights into an unfolding appreciation of the purpose of nineteenth-century museum collections (see Bennett, 1995; Alberti, 2009). By the end of the nineteenth century, curators from different disciplines on both sides of the Atlantic were involved in furious debates about the value of casts, particularly in the arrangement of museums of art, as recorded blow-by-blow in their first professional journals. The so-called Boston 'battle of the casts' is perhaps the best known example of this (Whitehill, 1970: 180–99). Edward Robinson, Director of the Boston Museum of Fine Arts, a Classical scholar and a great fan of the value of plaster casts, was ultimately successfully undermined by his staff while he was out of the country. Ironically, he was attending the opening of the purpose-built Aberdeen Sculpture Gallery of plaster casts in 1905, and at the same time being honoured for his achievements by the University of Aberdeen. Matthew Pritchard, Robinson's deputy, despised casts. He aimed for aesthetic appreciation of sculpture rather than its use in education, which is what lay behind South Kensington's advocacy of copies.

Overall, however, we lack a detailed historical appreciation of the replicas' original purposes and meanings (notably curatorial) and how these have changed with time (in general, within the emerging disciplines of art and particularly archaeology, and within individual institutions; see Alberti, 2009; Whitehead, 2009). A study of the network of the people and places involved in the creation and circulation of replicas can also provide a critical understanding of how museums and other emerging professional institutions related to each other at national and provincial levels, and between nations. Emerick's observation that 'much more research needs to be carried out on the imperial context of conservation and the way in which colonial and post-colonial identities and aspirations were formed and modified' (2014: 223) could equally be applied to replicas of archaeological objects, and the early medieval material would be particularly rewarding in this regard.

A specific example is the creation of collections of plaster casts of 'Celtic' sculpture for the 1901 Glasgow International Exhibition and at museums in Dundee in 1904 and Aberdeen in 1905 (Figure 8). In each case these gave an important new dimension to new or expanded museums and art galleries. Understanding the networks behind what, why, and how items were selected for casting provides a Scottish example of a wider phenomenon and its context: it involves South Kensington's role (i.e. the central government's museological engagement) in the provinces of Britain and Ireland, museums and 'imperial localism' (see Pittock, 1999), burgeoning curatorial professionalism and networking, milestones in early medieval scholarship, objects as 'archaeology' or 'art', the perceived value of replicas, and the Celtic Revival (Foster, 2015).

Trade, labour, and manufacture were at the core of debates about cultural institutions in nineteenth-century Victorian Britain and Ireland (Kriegel, 2007) and, as the St Andrews and Norrie's Law examples mentioned earlier illustrate, craftspeople played under-appreciated yet critical roles in the creation and dissemination of archaeological replicas from the 1830s onwards. Not to be ignored, their compromises, deceits, and conceits can leave significant legacies, in this instance significantly skewing Pictish scholarship for 170 years (Foster et al., 2014). The composite biographies have intended and unintended consequences because of the intellectual and practical dependences (reliances) and dependencies (constraints) such entanglements create (see Hodder, 2012).

RE-VALUING REPLICAS 3 — THINGS TODAY

The study of existing replicas also provides a historical and contemporary laboratory in which to explore the concepts of value and authenticity, and their application. It has the potential to offer new insights that are of relevance to both cultural heritage and collections management, a connection that is enriched by the dual identity of sculpture (and its replicas) as both monument and artefact (see above). This presents enhanced opportunities to study and compare authentic originals and reproduced originals in a host of different contexts, in places where it will be possible to explore their contemporary social values as well as their evidential and historical ones (which is how most of the values described earlier are to be categorised). Replicas, old and new, still play an important role in museum collections and displays, but they are a particularly important consideration in external environments where they increasingly replace or substitute for an 'original' that is closed to the public, covered, or moved inside for its long-term preservation. Routinely, whether in museums or the landscape, the interpretation of replicas underplays their social interest and story-telling value, precluding the wider community and visitors from engaging with them (Figure 9). A measure of their social interest is the lively and sometimes raw debates that arise about where monuments and artefacts should be left or moved to, and whether carved stones should be allowed to 'die' (Foster, 2001).

There has been much recent discussion about the nature of authenticity — how it is something that is constructed, informed by the relationship between people, places, and things, rather than an intrinsic, 'material' property (Jones, 2009; 2010; Holtorf, 2013). The recognition that the material clues of the things in question are critical lies at the heart of both Jones and Holtorf's approaches; equally significant is the experience and perception of this constructed materiality, the factors that influence it (the creation of 'aura' in Jones's case, following Benjamin, 1936), and how observers can read meaningful stories (social biographies connecting people, places, and things; Holtorf's 'pastness') from and into the thing in question. The theoreticians may position themselves in slightly different places across the spectrum of materialist and constructivist approaches, but they and others are agreed that there is a significant gap between conservation practice and cultural theory when it comes to understandings of authenticity and its application, and that this has major implications that need addressing. Two studies demonstrate this very eloquently: Jones and Yarrow's (2013) ethnographic study of the multitude of voices and approaches involved in on-the-ground conservation practices (at Glasgow Cathedral, Scotland), and Emerick's (2014) masterful review and analysis of the practice of managing ancient monuments in England since the inception of heritage legislation in Britain in 1882 to the values-based approach of the present day.

Jones's work, in particular, demonstrates that the experience of authenticity is fundamental to heritage management and conservation and that there are issues to resolve (Jones, 2009: 141–43). For example, social biography may be instrumental in how people experience and negotiate authenticity, but there is insufficient research on how people make individual connections with the networks of relationships that the thing embodies, and how curators can therefore aid this process. Our inherited resource of replicas offers a further perspective on the development and application of authorised heritage discourses. When Emerick (2014: 3) states that '"authenticity" … is an intellectual dead end', he means that a traditional, materialist perspective that sees value only in the evidential, aesthetic, and art-historical values of a thing has no place in a modern values-based approach to management of the historic environment. His historical analysis of the question holds the key to modern reflective practice, to understanding the present heritage situation and effective future working, and in many respects offers a model for what is needed for the study of replicas from an archaeological perspective (but see Phillips, 1997 in relation to authenticity and art curation). However, as we have sought to argue, given the dual artefact/monument identity of both sculpture and replicas, the management of heritage places needs to be considered alongside heritage objects, for shared insight and mutual benefit.

As original, authentic things in their own right, replicas, with their changing fortunes, stops and starts in their individual and collective appreciation — richly documented in archival sources, scholarly and curatorial writings, and in the originals, reproductions and surviving reproductive technology like moulds — make an excellent medium for a historical perspective on the question of authenticity and value. For example, the replica swords discussed by Curtis (2007) have distinct biographies; they had been made from different batches of metal, and some had inscriptions, numbers applied by museums, different wear patterns and different uses. Alongside the archival and published documentation, their materiality contributes to recording their changing meanings and attributions. Factors to consider include how/if the purpose of replication — and of those who made the replicas — affected the appreciation of authenticity then and now. This includes the extent to which replicas were destined to be commodities, intended for exchange as opposed to cultural capital that could be circulated and (ultimately) donated (see Appadurai, 1986). Linked to this are the nature of the technologies of replication, the material used, and the levels of craftsmanship involved.

Latour and Lowe's ideas about how and why people value replicas require greater critical analysis. For them, 'the issue is about accuracy, understanding, and respect' (Latour & Lowe, 2011: 287), so there are ways to increase the originality of replicas: by bringing them back to their original locations; by situating them in spaces where visitors can contemplate their 'auratic' quality, wherever they are re-contextualised; and by paying attention to the accuracy of surface features, such as the three-dimensional qualities of paint on a canvas. Lowe's company (Factum Arte 2015) has pursued this thinking into practice, developing extensive experience of using modern technology to produce facsimiles of works of art and other historic objects; an example is a facsimile of the 70m^2 *Nozze di Cana* originally painted by Veronese for Palladio's refectory at San Giorgio Maggiore in Venice, copied from the original in the Museé du Louvre, where it has been since 1797. As archaeologists, we are familiar with examples of copies of carved sculptures erected in the open to replace an original that is now in a museum to secure its long-term protection (Figure 10). As these examples become the monuments that people visit, they attract their own aura of authenticity, and being in the original location may in some ways make them more real than the original. Exhibitions may also ooze a 'wow' factor and aura (Figure 11). The 'real' things may be far less successful in this respect. If social value is to reign supreme in the future as Emerick suggests (2014: 237), and the social biography of things holds the key to how they are successfully experienced (see above), then can we, should we, how might we also harness these qualities (when better understood) to make sites work better for us, including developing a greater public appreciation of the evidential and historical significance of things (see Holtorf & Schadla-Hall, 1999: 243)?

Reflecting on historical replicas can also tell us about the value of future technologies, while not diminishing the value of the historic originals. The historical and digital technologies used to create virtual replicas share the goal of faithful replication, to promote a sense of authenticity; they therefore share an interest in how aura is generated and its relationship to the thing being copied (see Latour & Lowe, 2011). As Jeffrey argues, digital technology, a thing that can be perceived as having no substance, severs the 'chain of proximity' to the original; this has implications, including if and how future researchers will find the intimate links and webs of personal, physical engagements that now make historic replicas such illuminating material. There are however processes such as democratisation and co-production that that may offer different sorts of stories (Jeffrey forthcoming).

CONCLUSIONS: CASTING ARCHAEOLOGY

The focus of our article has been on things that were created with the intention that they should be direct copies of something, with no intention of deceit, although certain degrees of hyperreality — copying the ideal rather than the physical state — sometimes crept in (e.g. Curtis, 2007 referencing Eco, 1987). These and other sorts of replicas of archaeological material are generally an under-valued and under-used resource but, like anything, they can come back to life when someone invests an interest in them, and when they become things we also understand as being 'in motion' (see Appadurai, 1986: 4; Byrne et al., 2011: 18). With their origins in the nineteenth century, they are rich in historic information and hence core objects for research and display. We recommend that replicas are understood as part of the composite biographies of objects, and have suggested two approaches for doing so. We have emphasised through reference to specific case studies the benefits of looking at the physical evidence of replicas and the things they were copied from using visual and scientific techniques (see Jones, 2004; Curtis, 2007), and the sorts of legacies these can have for the extended biography of an object. We have identified two main areas where future work will be of particular benefit: a focus on nineteenth-century replication of early medieval material culture (see above); and explorations of authenticity and how it works, taking a historical perspective right up to present-day digital technologies.

The value given to replicas should lie in an appreciation of their biographies and the specific, socially constructed meanings attached to them, rather than merely considering how faithful a copy of the original they are. This involves overcoming conventional attitudes to authenticity that perceive the value and significance of replicas in a traditional, materialist manner. This challenges the inherited curatorial discourse — that gulf between cultural theory and curatorial practices. It may be because the broader knowledge of the history of replicas in general, and of the replicas in question, does not exist that their evidential value, let alone their historical or social value, is not considered or appreciated. It may also be that with the 'exposure' and critique of the authorised heritage discourse (e.g. Emerick, 2014), there is a shyness on the part of heritage practitioners to place a value on such things as histories of ourselves as curators, for risk of this being deemed an elitist interest, rather than one of many that is legitimate in its own right (see Jensen, 2012). Clearly, the actions of archaeologists and others have contributed to the material biography of objects, with replicas offering a particularly powerful way of recording how objects are perceived at a given moment.

We therefore urge curators to consider the value and significance of their replicas, particularly when it is clear they are under, or feel themselves to be under, pressure to dispose of them. If replicas do not receive adequate care, not only will we lose the archaeological information that rests in replicas of objects whose originals have become worn and damaged, but historical studies of the recent past will not be possible, and the roots of archaeology and the questions that we ask will be forgotten. A wider understanding of the history of approaches to authenticity and value as evidenced through replicas — and of how replicas ‘work’ in practice — has real practical implications for future values-based management, presentation, and interpretation of cultural objects and places, undertaken by reflective practitioners. By exploring the composite cultural biographies of replicas, and recognising or establishing some cultural proximity to our own professional and personal histories (Jones, 2009: 137; 2010: 191), we can appreciate more profoundly the cultural history of the discipline and so understand why some avenues of research have developed and become influential, and why some popular understandings can be so resistant to challenge. By understanding the nineteenth-century cultural history that intimately links the development of archaeology as a discipline with the creation and use of replicas, we can have a much richer and reflective insight into the background of the subject, the development over the last couple of centuries of the questions we ask, and the theories and practices we apply.

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Figure Captions

FIGURE 1 The Cast Court at the Victoria and Albert Museum, opened in 1873, one of the most famous and influential examples of assembling plaster casts of sculpture for display to the public (Bilbey & Cribb, 2007).
By Permission of Victoria and Albert Museum, London.

FIGURE 2 Plaster casts of early medieval sculpture in the National Museum of Wales thoughtfully stored for ease of access by researchers in movable containers (a) and mobile racks (b).
By permission of National Museum Wales.

FIGURE 3 Plaster cast of the (lost) Cammin casket, acquired 1873 by the National Museum of Denmark.
By permission of National Museum of Denmark.

FIGURE 4 Napoleon III welcomes international sovereigns and dignitaries to the 1867 Paris Exposition, many of whom signed a convention about European museums sharing reproductions of works of art.
Artist unknown, by permission of RMN-Grand Palais (MuCEM).

FIGURE 5 Composite biography of the St Andrews Sarcophagus and its plaster casts.
Graphic by Christina Unwin, copyright S. Foster (incorporating images by permission of B. Keeling; S. Foster; Crown copyright RCAHMS and Courtesy of RCAHMS (artist Alexander Archer), Licensor www.rcahms.gov.uk*; Trustees of the National Museums of Scotland and Edinburgh University Library, Special Collections Department).*

FIGURE 6 Schematic reconstructions summarising the form of (a) the St Andrews Sarcophagus as presently displayed in St Andrews Cathedral Museum with (b) the assumed arrangement of the casts made for display in Cupar, Fife, in 1839. The lower image summarises what copies have been traced and in which museums (NMS: National Museums Scotland; CUPMS: St Andrews Museum; NMI: National Museum Ireland).
Graphic by Christina Unwin, copyright S. Foster (incorporating photographs in (a) that are Crown copyright RCAHMS and B. Keeling; and in (b) by permission of the Trustees of the National Museums Scotland).

FIGURE 7 Comparison of the fortunes of plaster casts of sculpture with (far left) interest in early medieval material.
Image by S. Foster.

FIGURE 8 Aberdeen’s Sculpture Gallery of plaster casts opened in 1905 to widespread critical claim. The Celtic Court was an important element of this, designed specifically to improve the quality of the local granite carving industry.
By permission of Aberdeen Art Gallery & Museums Collections.

FIGURE 9 A 1970 replica of the fragmentary eighth-century St John’s Cross is arguably the most iconic feature at Iona Abbey, Scotland (a), but the on-site interpretation has made little of this modern segment of the monument’s cultural biography, or of the replica in its own right. The 1971 cover of *Coracle* (b) shows Mr Alastair MacKenzie (second from left) and three of the employees of Murdoch MacKenzie Ltd — Joe Findlay, Jock Logan and Remo Tonietti — who assisted with the erection of the cross in June 1970.
Image by S. Foster (left); with kind permission of the photographer Murdoch MacKenzie and Iona Community (right).

FIGURE 10 A good quality replica of a rock carved with a footprint passes for the real thing on top of the hillfort at Dunadd, Argyll and Bute, Scotland. It lies over and protects the original, which was probably used for the inauguration of early medieval kings.

Image by S. Foster.

FIGURE 11 The National Museum of Ireland's temporary exhibition from 2010 to 2013 displayed seven casts of Irish high crosses to extremely successful 'auratic' effect. Banners behind each cross gave a sense of their original landscape context.
Image: courtesy of National Museum of Ireland.