Images and Agency: Dynamics of Early Celtic Art and the Axial Age of Eurasia

Peter S. Wells D

This paper argues for a new way of thinking about Early Celtic art in the context of changes taking place throughout Eurasia during the fifth and fourth centuries BCE. It applies ideas of anthropologist Alfred Gell, among others, regarding art as a stimulus to action. It asks, in the spirit of papers by Chris Gosden and W.J.T. Mitchell, 'what did the art do'? The paper argues that this complex new art can be understood in terms of agency contributing to and even stimulating aggressive attitudes and practices on the part of elites during the late fifth and early fourth centuries BCE. The new worldviews that are apparent in the new style, and actions driven by them, played major roles in Iron Age Europeans' participation in the so-called Axial Age of dynamic change throughout Eurasia.

The idea of images as agents

Investigators working in a number of different fields have argued that seeing images has a direct effect on people's minds and on their actions (e.g. Freedberg 1989; Gell 1992; 1998; Giles 2008, 6, 70, 205; 2012; Gosden 2005; Gregory 1998; Malafouris 2013; Mitchell 2005; Morphy 2009; Olivier 2020a,b; Osborne 2018; Osborne & Tanner 2007; Stafford 2007; Wexler 2006). Just as national flags can drive people to patriotic fervour, and emblems of schools and of athletic teams can induce those who identify with them to aggressive action, people can respond emotionally to images to such an extent that they are driven to act upon their responses.

Historical and ethnographic cases provide good examples. In a case documented by both archaeological and textual evidence, Robin Osborne argues (2018) that changes in subject matter and style during the fifth century BCE in the character of images painted on Attic pottery acted on the beliefs, feelings and thoughts of people in ancient Greece. In his recent study of the arts of Oceania, Nicholas Thomas (2018, 99) notes how images of eyes are thought to provide protection to warriors. Küchler and Carroll (2020, 134–6) write of how people ascribe agency to images and objects for fostering action. In a striking modern American ethnographic example, in her book *Read My Pins* (2009), former United States Secretary of State Madeleine Albright explains in detail why she selected specific images to elicit the responses she sought from the diplomats with whom she was meeting.

The theme of agency as it can be understood specifically in relation to archaeology has been developed by Dobres and Robb (2000), by Jones and Boivin (2010), by Robb (2010), by Dobres (2014) and by Vedeler (2018) (see also Barrett 2022, 112). As these authors indicate, the word 'agency' can be understood in a number of different ways. This paper suggests one application of the concept within the field of prehistoric archaeology. With regard specifically to imagery in Iron Age Europe, Garrow and Gosden (2012, 305, 311) note that decorated metal-work played active roles in society. This paper explores one specific context within the archaeology of the European Iron Age.

Early Celtic art

I use the term 'Celtic art' because it is common in popular discourse about the distinctive imagery

Cambridge Archaeological Journal 34:4, 711–736 © The Author(s), 2024. Published by Cambridge University Press on behalf of the McDonald Institute for Archaeological Research

doi:10.1017/S095977432400012X Received 19 Jul 2023; Accepted 3 Mar 2024; Revised 25 Jan 2024



Figure 1. Map showing locations of sites mentioned in the text. The large circle labelled Hohenasperg indicates also the nearby locations of the sites of Hirschlanden, Hochdorf and Nebringen. The circle labelled Mont Lassois indicates also the location of Vix.

and design fashioned during the Early La Tène Period (450–350 BCE). 'Celtic' is a problematic name (Pope 2022; Wells 1995; 2001), but it is convenient as a designation for the people of the central regions of Iron Age Europe. 'Art' is also a problematic term, because it comes loaded with assumptions. This paper is not intended to explore these terms crticially, but to use them as shorthand for discussing the imagery and design elements of the Early La

Tène period in the central and western regions of Europe (Fig. 1).

A major constituent of this art is imagery images of human-like faces and occasionally whole bodies; images of animals, both real and imaginary (Frey 2013, 33, 47-48); and images of 'hybrids' creatures fashioned from the parts of different animals (Guggisberg 2000; Olivier 2020a), sometimes combining human and animal forms (Aldhouse-Green 2021). It is accompanied by certain design elements such as spirals, S-curves and formlines. This highly distinctive art was developed relatively suddenly during the fifth century BCE, and it occurs on objects in specific kinds of contexts that will be explored below. This art is very different from art and designs that preceded it, and it appeared at a time when major cultural changes were under way.

There has been a surge recently in interest in the art and imagery in later prehistoric Europe (e.g. Bagley 2013; 2014; Bagley & Schumann 2013; Farley & Hunter 2015; Gosden et al. 2014; Guggisberg 2000; 2010; 2018; Hess 2015a,b; Joy 2010; 2019; 2020; Kruta 2015; Nebelsick 2022; Nortmann 2016; Olivier 2020a,b; Robb 2015; 2020; Romankiewicz 2020; Wells 2012; 2017; 2020a; Wendling 2018). The different studies pursue diverse approaches to images and representation. In this paper I develop just one approach to imagery and design in Early Celtic art, the fundamental characteristics of which were outlined by Paul Jacobsthal in 1944 and expanded and refined by J.V.S. Megaw in a series of publications since 1970. The idea that I shall argue is that the imagery of the art of the late fifth and early fourth centuries BCE in the central regions of temperate Europe served to stimulate people, specifically elites of the societies, to engage in aggressive commercial and military expansion into the larger world of Eurasia. From the fifth century BCE on, societies of temperate Europe played a much more active role in world affairs than they had before. The power of the style that emerged in the fifth century BCE is evident in its maintenance and development throughout the four centuries before the Roman conquests, to be revived in the early medieval period (Goldberg 2015), persisting through the late medieval centuries (Pulliam 2015), and thriving into modern times in the popular arts of Ireland, Scotland, and other places (Fowle 2015).

Examples

The new style appears primarily on a limited number of types of objects—most frequently on personal ornaments (jewellery) made of gold, ornate bronze feasting vessels (mostly jugs for pouring liquid) and weapons (especially bronze sword scabbards). In its earliest manifestations, between about 450 and 350 BCE, the new style was largely restricted to elite contexts, specifically to objects placed in richly outfitted burials believed to be those of elite members of Iron Age society. A number of exceptionally ornate bronze fibulae also bear Early La Tène ornament (e.g. Baitinger & Pinsker 2002a, 284–90; Binding 1993). As examples of the new style, I present here six objects, all characteristic of this style. They are all complex objects, and my discussion focuses on the aspects important for my argument.

ERSTFELD NECKRING 3 (Fig. 2). Largest external width 17.5 cm (Guggisberg 2000; 2009a, 199 fig. 265; 2010; Megaw & Megaw 1989, 93). This ring, like the other three gold neckrings from Erstfeld, bears complex decoration over about two-thirds of the object. Eight figures are distinguishable on the ring. On either side of the opening is a highly stylized human-like figure with bulbous eyes and large nose, with detailed hatching on what seems to be a garment on the torso. The two figures are facing away from the opening. Each one grasps a bird-like creature of almost the same size as the human-like creatures. These have the long pointed beaks of birds of prey. They are ornamented with hatching patterns. The opening of the ring is bordered by great bulbous forms, and underneath them are downward-facing creatures which look more human than anything else, but are highly stylized with bulbous eyes and only parts of bodies. They have hands that reach backwards to grasp parts that connect to the first stylized human-like creatures. At the other end of the decoration on the ring from the opening are heads of what appear to be deer, with eyes, ears and snouts represented. Further along the ring on each side are sections of ornament with fine hatching and with palmettes.

A noteworthy aspect is the representation of violence in the apparent conflict between the anthropoid figures and the large birds with their long pointed bills shown stabbing at the faces of the human-like figures. Guggisberg (2010, 226–7, 231) notes that the anthropomorphic figures are shown wearing helmets and armour, themes referring to warfare.

REINHEIM NECKRING (Fig. 3). External width 14.2 cm (Echt 1999; Keller 1965; Reinhard 2004). The two ends of the ring have bulbous knobs similar to those on the Erstfeld ring. Below the knobs are human-like faces, which Echt (1999) identifies as those of women (Frey 2004, 37), and just above them are heads of birds of prey, characterized by downward-pointing sharp beaks. Especially viewed from the side, the bird heads can be seen as parts of helmets on the women's heads (best seen in Echt 1999, pl. 1). Under the bulbs are faces, gazing downward, that look partly human, partly animal. Megaw & Megaw (1989, 91) identify the faces as those of owls; Guggisberg (2009b, 194) suggests lions. All of

Peter S. Wells

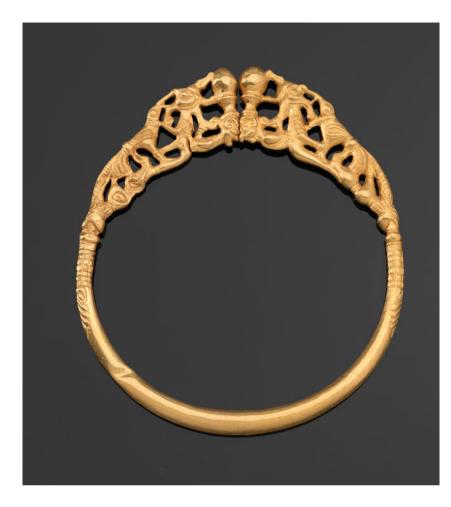


Figure 2. Erstfeld neckring. Largest external width 17.5 cm. Schweizerisches Nationalmuseum, A-52046.



Figure 3. Reinheim neckring. External width 14.2 cm. (Erich Lessing/Art Resource, NY.)

Downloaded from https://www.cambridge.org/core. IP address: 3.14.250.88, on 11 Jan 2025 at 03:34:04, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/S095977432400012X



Figure 4. *Glauberg fibula. Length 6.4 cm. (Photograph: Pavel Odvody/Keltenwelt am Glauberg.)*



Figure 5. Weiskirchen 1 belt plaque. Width 7.5 cm. Inv.1939,45b © GDKE/Rheinisches Landesmuseum Trier. (Photograph: Th. Zühmer.)

these creatures are predatory animals, referring to violence. The ornament is enriched with hatching. Echt suggests the Greek goddess Athena as a possible model for the helmeted females.

GLAUBERG I FIBULA (Fig. 4). Length 6.4 cm (Baitinger & Pinsker 2002b, 250 fig. 243). The main part of the bronze fibula from grave 1 at the Glauberg consists of an unreal creature with the body and head of what could be a horse or a dog, with a long tail, a small wing, and a very humanlooking head, with a beard, projecting from the lower part of its back. The horse or dog has its head turned backward (a feature common to creatures represented in Early La Tène art), viewing what seems to be a captive human, suggesting violence between the different beings represented here. Extensive use of hatching draws and holds the attention of the viewer. At the head end of the fibula is an openwork plaque with what appear to be two highly stylized horses, their heads facing outward. On the two ends of the iron axle are spherical coral beads.

WEISKIRCHEN I BELT PLAQUE (Fig. 5). Width 7.5 cm (Müller 2009a, 189 fig. 250). Attached to the belt hook is a cast bronze plaque bearing clear images of five creatures and, according to one reading of the object, a 'hidden' sixth image (Müller 2009a, 189 fig. 250). The central and dominant image is that of a typical Early La Tène face, often called a mask, of roughly human character. The mask has bulbous eyes, a reduced chin, and on top of the head two S-scrolls. On either side of the mask are pairs of creatures, usually identified as sphinxes, apparently mammals with wings, all with their

heads turned backward looking over their backs. The image suggests a captive anthropomorphic figure (as on the Glauberg fibula), guarded on both sides by these sphinxes. Just below the mask are coral insets of irregular shapes, in which Müller (2009a, 188 fig. 249) sees a 'hidden' figure of a human. Below all of these figures are two rows of inset coral pieces. Hatching on all of the creatures serves to attract and hold the viewer's attention.

DÜRRNBERG JUG (Fig. 6). Height 45.8 cm (Frey 2002a, 184 fig. 155; 2002b, 195 fig. 174; Hundt 1974, pls D-I; Moosleitner 1974, 77-8). The bronze jug from grave 112 at the Dürrnberg in Austria is of a shape derived from the Etruscan 'beaked flagons' (Vorlauf 1997) with a fairly narrow body, a handle on one side and spout on the other, and figurative ornament at the base of the handle, on the top of the handle and on the rim. At the base of the handle is a human-like face quite like the mask on the Weiskirchen belt hook plaque. On the top of the handle is a four-legged creature resembling a lion or other large feline, with a human head in its jaws, referencing the theme of violence. On the rim on either side of the top of the handle are very unusual fourlegged creatures that resemble anteaters more than anything else, with long snouts and long tails, unlike any actual animals. All of the creatures are decorated with hatching.

HOCHSCHEID SCABBARD (Fig. 7). Width 4.9 cm (Haffner 1992; Megaw & Megaw 1989, 59 fig. 57; Wells 2012, 124–5 fig. 29). Incised designs and images cover the surface of this scabbard. Near the base of the scabbard is a pair of open S-curves, and going up the scabbard are five more pairs of open

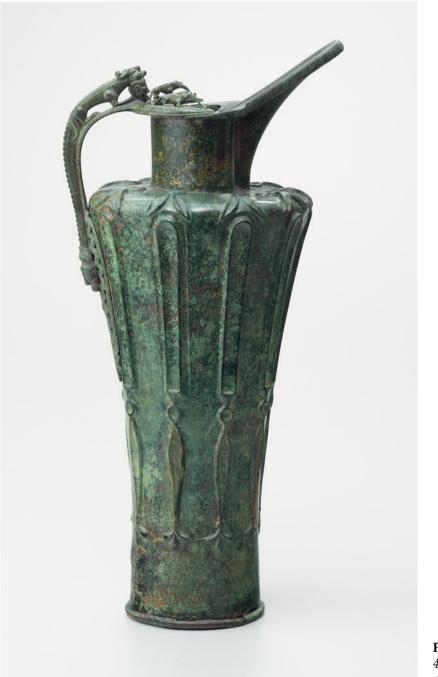


Figure 6. Dürrnberg jug. Height 45.8 cm. (© Salzburg Museum, Austria.)

S-curves, with pointed horn-shaped incised forms between each pair. At the top, above these six pairs, are four-legged mammals whose shape echoes the open S-curves. It is not clear what animal they represent, if indeed they were meant to represent any real animal. They could be dogs or wolves, both predatory animals. The important point of this object is the development of the S-form, from an abstract shape at the bottom of the scabbard to a represented creature at the top. A similar transformation from shapes to creatures occurs on the scabbard from Glauberg grave 2, where we see canines emerge from the abstract pattern (Frey 2016, 377). On the scabbard from Glauberg grave 1, S-curves transition to become birds of prey (Bartel *et al.* 2002, 154–5 fig. 118).

The six objects featured above, as well as many others from the Early La Tène context, embody several different but closely related themes, all of which revolve around the subject of violence. There are scenes of unmistakable violence against humans-the human head in the monster's mouth of the Dürrnberg flagon, the head in the monster's mouth of the Glauberg 1 belt hook (Baitinger & Pinsker 2002b, 253 fig. 247), the two creatures converging on the human head on the belt hook in Glauberg grave 2 (Baitinger & Pinsker 2002b, 260 fig. 256). Others represent humans as captive-the human head on the back of the creature of the Glauberg fibula, the human-like face trapped between the sphinxes on the Weiskirchen belt plaque, the human-like head on the foot end of the Parsberg fibula (Megaw & Megaw 1989, 66 fig. 67). Others, such as the Erstfeld neckring, show humanlike creatures fighting with animals, here raptors as on the Reinheim neckring.

An interpretation of the ideology reflected in these representations is that elites needed to be aggressive in order to fulfill their aims in gaining power and expanding their influence beyond the central regions of Europe. Perhaps their thinking was something along the lines of 'we inhabit a dangerous, threatening world where conflict is all around us; by presenting these themes in art, using animals as metaphors for human enemies, we prepare ourselves for actions that we must take to aid us in acquiring the power and wealth that we seek through conquest and expansion'. Such ideology would accord well with Livy's account of the expansion of the Gauls (see below).

The question of numbers—how many were there?

How numerous were objects such as these six examples? I have selected these because they exemplify the special features of Early La Tène art—anthropomorphic, animal and hybrid images represented in ways designed to attract visual attention to exceptionally finely crafted personal ornaments, weapons, and vessels. All six were made between about 425 and 380 BCE. They are among some 50 known objects (this is a very rough estimate) that are similarly richly decorated and that have been recovered between central France and Slovakia (for overviews of such objects and discussions of chronology, see especially Beilharz *et al.* 2012; Farley & Hunter 2015; Jacobsthal 1944; Kruta 2015; Megaw & Megaw 1989; Müller 2009b).

The known objects bearing such imagery are only a small fraction of those that once existed. Estimating how many there may have been during

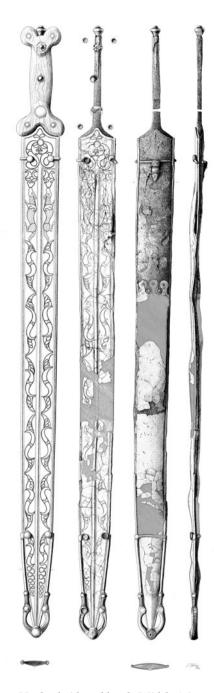


Figure 7. Hochscheid scabbard. Width 4.9 cm. (Hochscheid Schwert © GDKE/Rheinisches Landesmuseum Trier Rek. Lambert Dahm.)

the fifth and fourth centuries BCE is a useful (but very imprecise) exercise. The majority of richly outfitted burials of this period were looted, many of them in antiquity (Frey 2002a, 172). It is likely that many looted objects were melted down, bought by private collectors and otherwise escaped public notice.

Heiko Steuer (1982, 72) has approached the question of survival and modern discovery of ancient objects in Europe through extensive investigation of both archaeological evidence and written sources for the early medieval period. He provides a useful way of thinking about the question. He estimates that around 1 per cent of the objects that were in use during early medieval times are known today (in museums, published, or otherwise documented). If we use his estimate (of course more objects have been found since Steuer was writing in 1982, but we probably have wider access to early medieval material culture than to that of the fifth and fourth centuries BCE), then using my estimate of 50 objects existing today, we can reckon with some 5000 such objects in use during the period 425-380 BCE. If we instead use a hypothetical figure of 5 per cent rather than Steuer's 1 per cent, that would posit some 1000 such objects crafted and used. Megaw and Megaw (1989, 87) estimate that more than 500 ornate Early La Tène fibulae have been documented. If we apply Steuer's estimate of 1 per cent, then we can reckon with some 50,000 such fibulae once in use; if we apply the figure of 5 per cent, then some 10,000 in use (see Binding 1993 for numerous examples of such fibulae).

Main elements of the style

For the purposes of this paper, I identify three main themes—faces, violence, and transformation—in Early La Tène art, all of which are apparent in the six examples above. All of these examples, and Early La Tène art in general, are based largely on faces (Hess 2015b). Some look anthropomorphic, but none are what we would consider portraits that is, attempts to portray actual individual persons. They convey instead the idea of human-like, but not actually human. Other faces are those of non-human creatures, many of them hybrids composed of parts of different real creatures.

In many cases, the human-like figures seem to be captive victims of violence. On Erstfeld ring 3, especially the faces underneath on either side of the opening seem to be constrained. On the Glauberg fibula, the human head is unconnected to a body and seems attached helplessly to the back of the horse or dog, and that creature may be gazing back triumphantly at the human head. The horse/dog creature seems very much in control, the human head a powerless captive. On the Weiskirchen belt hook, the central mask is surrounded by the four sphinxes, as if held captive by them. On the top of the handle of the Dürrnberg jug, a human head is held inside the jaws of a predatory creature (a similar scene is on the belt hook from Glauberg grave 1: Baitinger & Pinsker 2002b, 253 fig. 247).

A third theme is transformation. Any hybrid suggests transformation from one creature to another. The transformation theme is especially clearly represented on the Hochscheid scabbard. From the base of the scabbard upward toward the top, S-curves become ever more like an animal, until at the very top, the S-curves have turned into two four-legged predatory canines.

In all of these examples, specific techniques of representation were used by the craft workers who made them. One is hatching—covering a surface with incised dots or lines. Hatching catches and holds viewers' attention more than smooth surfaces do (Brett 2005; Gibson 1986; Gregory 1998)—it is a technique used to increase the visual attractiveness of an object. Other devices also serve to hold the attention of the viewer. These include spirals, S-shapes, tendrils and palmettes (Fürst *et al.* 2021, 75–6 n. 39; Jacobsthal 1944).

All of the representations of humans, animals and hybrids on these examples, and on others, are miniatures—small objects bearing very finely executed details that require close examination to see fully (Bagley & Schumann 2013, 132). Finely crafted miniatures are enchanting and, like hatching, they attract and hold attention (Bailey 2005; Frey 2016, 377; Kiernan 2015). As miniatures, they convey meaning in an intensified fashion (Knappett 2012), and they cause the viewer to ponder and to imagine their relation to the larger real creatures (Martin & Langin-Hooper 2018).

The social context of the art and the effectiveness of display

The five objects from graves are all from burials with richer than average assemblages of grave goods and, where the evidence is available, with structures, such as burial chambers and mounds, associated with elites. Other similarly decorated objects have also been recovered from graves that contain the kinds of special items associated with the small group of most privileged individuals in the communities (for overviews of the kinds of objects that characterize the elites of this period, see Müller 2009b, 80–104, 184–209).

We get the best sense of how these special objects of the elite were displayed socially from the well-excavated intact burials, such as those of the Glauberg and Reinheim. At the Glauberg, at least one lifesize stone statue marked the location of the grave (it is unclear where other statues represented by fragments were situated), preserving the memory of the individual and of the ritual that was conducted when the individual was buried. The care with which the grave goods were arranged on and around the body gives us a sense of the display enacted for participants.

The ornate gold neckrings in the graves at the Glauberg, Lavau (Dubuis *et al.* 2021; Millet *et al.* 2020) and Reinheim make clear that these rings were indeed worn around the neck, a highly visible place, *at least in burial*—we do not know how often or on what occasions they were worn during life-times. The ornate neckrings cannot have been part of everyday personal ornaments—they would have been uncomfortable to wear for extended periods of time. And they do not show traces of much use. More likely, they were part of personal ornament for special occasions, perhaps comparable to crowns in recent centuries.

Fibulae would also have been worn on clothing, as they are often found on the chest where they would have fastened garments and communicated information about the status of the wearer. Four fibulae had been positioned on the woman's body at Reinheim. But fibulae as complex and heavy as that from Glauberg grave 1 were probably worn only on special occasions, like the gold neckrings.

Ornate scabbards, such as that from Hochscheid (and those from Weiskirchen 1 and Glauberg 1) would have been visible worn on the side of buried warriors, and during warriors' lifetimes when they removed the swords and displayed the scabbards; similarly for the ornate vessels such as the jugs from the Dürrnberg, from Glauberg grave 1 and from Reinheim-as we know from the grave deposits, these were also the prerogative of elites and were probably displayed and used on occasions of special social and political purpose—feasts (Wells forthcoming). Again, the minute detail of the images on the bronze vessels would have made them objects of mystery to non-elites, who could perhaps see them from a distance, but probably not up close. We do not have a grave plan for the Dürrnberg jug. But we know that other ornate jugs of this period, such as those in Glauberg 1 and Reinheim, were placed in the grave chambers near the buried individuals. Representations on vessels of the Situla Art provide a good idea of what such feasts were like, and how status was expressed at them (Frey 2011; Lucke & Frey 1962).

The cultural context: Iron Age Europe of the fifth and fourth centuries BCE

The development of the new style during the fifth and fourth centuries BCE took place principally in

the central regions of temperate Europe, from France in the west to Slovakia in the east. During the preceding century, the cultural landscape had been dominated by a number of centres, of which the Heuneburg in southwest Germany (Krausse et al. 2016) and Mont Lassois in eastern France (Chaume et al. 2011) are the most thoroughly researched. Recent investigations at the Heuneburg have revealed that associated with the hilltop settlement were extensive suburbs, and a population as high as 5000 has been suggested for the site. All of the centres, of which some 20 have been studied, show substantial populations; manufacturing in pottery, iron, bronze, gold and other substances; and extensive trade with other regions, notably with Greek and Etruscan societies in the Mediterranean basin. The majority of the population of temperate Europe lived in much smaller communities—villages and farmsteads.

The many cemeteries that have been excavated and studied throughout temperate Europe show a great disparity between the most common graves, with few grave goods, and richly outfitted burials such as those of Hochdorf in southwest Germany (Biel 1985) and Vix in eastern France (Brun *et al.* 2021).

Around the middle of the fifth century BCE, most of the major centres of the Early Iron Age (known as the Hallstatt Period) declined in activity and importance at the same time that the new art style appeared. In the succeeding Early La Tène period, there do not seem to be centres on the same scale as those of the preceding period (though a few sites such the Glauberg north of Frankfurt-Baitinger & Pinsker 2002c—may turn out, with future research, to have been similar). Burial evidence is fundamentally like that of the preceding period, but with some changes that will be discussed below. Most burial was by inhumation and with a wide range of burial inventories, from no or very few grave goods to relatively richly outfitted graves, but none as rich in grave goods as the richest of the preceding century (Frey 2002a, 175).

We have no direct evidence of workshops at which the objects of Early La Tène art were produced (but see the evidence from the earlier workshop remains at the Hochdorf tumulus: Biel 1985, 35–6, 162 fig. 89, pl. 2C). The technical processes involved in the manufacture of the objects are quite well understood (Armbruster 2012; Armbruster *et al.* 2021). Production was most likely carried out on a small scale, with a small number of easily portable tools, including hammers, anvils, chisels and punches, that craftworkers could easily carry with them. We do not know whether most craftworkers

operated in fixed workshops or moved from place to place to produce objects for their customers (Megaw & Megaw 1990, 90). Guggisberg (2000) and Bagley (2014, 265–6) raise the question whether more than one craftworker was involved in the manufacture of any specific object. Investigators speculate that the elite consumers provided the raw materialsthe gold, bronze and coral-to the craftsworkers (Fischer 1992, 123–4) and directed them in producing what was desired (Bagley & Schumann 2013, 125; Frey 2002b, 186). Craftworkers who produced the luxury goods for the elites may have been organized in small groups (Nortmann 2016, 224) and may have participated in regional networks (Stöllner 2010, 285 n. 17; for an example of networks of Late Bronze Age metal workers identified archaeologically, see Golubiewski-Davis 2018).

Although communities in temperate Europe were in contact and interaction with the literate societies of Greece and Italy, the communities north of the Alps did not adopt the practice of writing until the end of the prehistoric Iron Age, at the time of the Roman conquests some four centuries after the period of concern here. They were 'oral societies' in the sense of Walter Ong (1982; 1986), relying on communication through oral expression and signalling with the use of material objects—an important topic, the details of which are beyond the scope of this paper.

Historical sources, especially the Roman writer Livy, describe invasions by Gauls (Celts) from north of the Alps into Italy, Greece and Anatolia during the fourth century BCE. Numerous Greek and Roman writers mention Celtic mercenaries fighting with armies in the lands of the eastern Mediterranean region during the third and second centuries BCE. At the same time, there is a marked increase in weapons, especially swords, being placed in burials in temperate Europe. These momentous changes evident in both the Mediterranean texts and the European archaeology were both reflected in and driven by the new art emerging in the late fifth and early fourth centuries BCE, as will be seen.

Interpretations of Early Celtic art

Investigators agree that Early La Tène art was a thoroughly new phenomenon in the fifth and fourth centuries BCE, very different from what went before and reflecting a new way of thinking (Echt 2016; Frey 2013; Pauli 1975, 209). It constituted a change in what Anders Andrén (2020, 166–8) refers to as 'pictorial conventions'. Different researchers emphasize different aspects of the new style. During the preceding period, the Late Hallstatt, there were relatively few representations of humans and animals, and when they were fashioned, they tended to be naturalistic in appearance. What looks like a horse was meant to be a horse (though what a horse signified to the people of this time was another matter). In the new style, representations of humans and animals were highly stylized, and it is often impossible to determine what animal is signified (Ginoux 2012). Many of the animal forms represent hybrids made of parts of different real creatures (Olivier 2014, 52-4), and many are mythological, such as the sphinxes on the Weiskirchen belt plate. Miranda Aldhouse-Green (2021) argues that identity of humans and animals in Early La Tène art was often fluid, as for example on the neckring from Erstfeld.

Rudolf Echt (2016) argues that the new style was part of a major change in what he calls selfawareness and self-representation, with individuals increasingly perceiving themselves as separate individuals rather than primarily as parts of larger social groups (see also Frey 2013). Frey suggests that Late Hallstatt elites travelled more than their predecessors had done. The abundant imports from Greece, Italy and elsewhere in the greater Mediterranean region indicate the great extent and intensity of these interactions (Mac Sweeney & Wells 2023), and there is every reason to think that European elite individuals were travelling widely during the sixth and fifth centuries BCE. Travel would have exposed them to new ideas and worldviews (Wells 2012; 2020a).

Many investigators suggest that Early La Tène art was essentially 'religious' in nature (Bagley 2013, 73; Echt 2016, 354; Frey 2007; Guggisberg 2000, 239; Hess 2015a,b; Nortmann 2016, 213; Stöllner 2019; Wendling 2018), though what exactly 'religion' might mean in this context is not elaborated. What we consider religion was probably not a separate category in the minds of Iron Age Europeans, but a product of changes in thinking in the course of the Enlightenment (Brück 1999). Some suggest links between imagery of Early La Tène and specific Greek deities known from textual sources (Guggisberg 2000; 2010; Hatt 1980). But caution is in order when attempting to make connections between beliefs and representations of different societies and different periods, as Nortmann (2016, 221-2) emphasizes. It is also questionable whether we can apply a modern category-religion-to the ways of life of people who lived 2500 years ago, in societies that left no written information about how they understood their experience.

As seen in the examples above, many of the images in Early La Tène art display violence. The

creatures with human heads in their mouths on the belt hook from Glauberg grave 1 and on the Dürrnberg jug have been mentioned above. The birds on the Erstfeld and Reinheim neckrings are birds of prev, characteristic for bird imagery after 400 BCE, in contrast to the waterbirds of earlier periods. Jacobson-Tepfer (2015) and Kisel (2020) both argue that representations such as these often portray metaphorically actual situations within the social and political contexts of the times that they were crafted. In other words, representations of violence are likely to reflect violent conditions at the time that the objects were made. Frey (2013, 41) suggests that strife between humans is metaphorically represented by the conflict between dogs and other predatory animals on the Glauberg 2 scabbard.

This change in worldview is reflected also in changes in burial practices for elites, as noted by Verger (1995; see also Echt 2016, 266; Wells 2012, 131-48). In the late phase of the Early Iron Age tradition (600-450 BCE), funerary ritual emphasized the social and political role of the buried individual in the community. An outstanding example is the Magdalenenberg tumulus, in which 126 modestly outfitted burials were arranged concentrically around the richly equipped chamber burial in the centre (Spindler 1976, fig. 16). In the mounds around the Hohenasperg, such as that at Hochdorf (Biel 1985, 31 fig. 20), we see a similar situation, with plainer burials arranged around the richly outfitted central chamber tomb.

In the Early La Tène Period, there was no longer the principal emphasis on the elite individual's place in the community. Instead, the elite person was represented as a military hero, as in grave 1 at the Glauberg (Herrmann 2002, 100 fig. 63), or as a woman in possession of special objects indicative both of wealth and of power to affect the course of events, especially regarding the health and wellbeing of the community to which she belonged, as in the cases of the graves at Reinheim and Gündlingen (Dehn 1994; Wells 2001, 58-60). Elites became 'entangled' in this emerging environment of new ideas, designs and objects introduced through the growing interactions, direct and indirect, with communities not just in the Mediterranean Basin, but also further afield, in the Near East, central Asia and beyond (Wells 2020a).

Interactions between Iron Age communities in temperate Europe and the societies of the Mediterranean Basin that resulted in much sharing and borrowing of motifs and design elements have long been explored, especially by Jacobsthal (1944) and his successors. With recent field research and

publications in the Near East, the steppes of eastern Europe and central Asia, and as far eastward as China, it is becoming apparent that Early La Tène art and design shared important features with the arts and crafts of many different peoples of Eurasia. For examples, see Bunker 1995; Chugunov 2017a,b; Di Cosmo 1994; Falkenhausen 2006; Pare 2012; Reeder 1999; Thote 2016; Wu 2017. For discussion of specific details that link these connections to the development of the Early La Tène style, see Fischer 1993; Wells 2012, 200-209; 2020a, 38-41). On other cultural practices that show important connections between the peoples of Early La Tène temperate Europe and other regions of Eurasia, see Cugunov et al. (2010); Gheyle et al. (2016); Korolkova (2017); Thote (2000; 2016); Wright et al. (2009).

A new approach to Early Celtic art: art as agent

The changes in the style and subject matter of crafted objects illustrate these social and ideological changes but, more important for the purpose of this paper, the new motifs and designs of crafted objects contributed to the enactment of those changes. As pointed out above, art, representation and design are not just passive reflections of changes, but they are active drivers of change. John Barrett's ideas (2022, 111) about the embodiment of relationships between humans and their material culture is relevant here. The important point is that some elites developed intense ('embodied') relations with the objects that expressed the new motifs relating to aggression and violence. Some of these were objects of personal expression tied to individuals (neckrings, bracelets, fibulae, swords and their scabbards), others were objects of social expression (bronze vessels designed for use in feasts). In Early La Tène Europe, at a time when communities became much more intensively exposed to new ideas of design and subject matter through the growing interactions with other parts of Eurasia (Jacobsthal 1944, 32-6, 156-60; Wells 2020a), some emerging elites and the craftworkers who made things for them adopted the new stylistic ideas and created the phenomenon we know as 'Early La Tène art' (or 'Early Celtic art').

This new style and subject matter, expressed on personal ornaments, fine bronze feasting vessels and weapons, offered elites a new medium through which to express identity and a new way of thinking about who they were; how they related to their communities, their society, and the wider world; and a new ideology of aggression and military activity. With the other ongoing changes (see above), the opportunity to forge a new kind of identity based on a whole new understanding of the world and seeing new opportunities to expand their status, power and wealth led to the spread of the new style and the joining of new elites across much of Europe to the new designs and themes. The design features that were developed in western and central Europe during the fifth century BCE spread during the following centuries all over Europe (Farley & Hunter 2015; Jacobsthal 1944).

The representations on personal ornaments, scabbards and bronze vessels signalled to viewers the new aggressive ideology that emerged in the Early La Tène period. The monstrous creature with the human(-like) head stuck on its back on the Glauberg fibula, the human(-like) head under the threatening pointed beak of the raptor on the Reinheim neckring, the creature with the human head in its jaws at the top of the handle of the Dürrnberg flagon, all remind the viewer of the dangers in the world and of the need to overcome threatened danger through force. On personal ornaments, these visual signals attest to the adherence of the individual wearer to the new aggressive ideology; on objects used in social contexts, such as the flagons, they attest to the commitment of the community to this ideology. The persons wearing the Glauberg fibula, the Reinheim neckring, the belthook from grave 2 at the Glauberg, and other personal ornaments bearing images of actual or potential violence, were communicating and thus promoting this new set of attitudes. Wearing these objects made the wearers feel that they were active members of the elite groups that were undertaking aggressive actions in lands to the south and the southeast. The aggressive scenes on the scabbards such as those in Glauberg graves 1 and 2 served both to promote the ideology and to imbue the swords with added force and effectiveness in pursuing the aggressive policy. (All of these signs and signals were largely restricted to the elite individuals in Early La Tène society.)

To summarize my argument: the new style was actively created and developed by members of society who were able to command the work of craft specialists to produce objects with which they could express their new understandings of their relation to the world in which they lived and the new ideology that involved agression and military violence. The opportunity was presented by the exposure to new design elements and motifs through expanding interactions with other parts of Eurasia, and by the decline in the fortunes of the old traditional elites at the centres such as the Heuneburg. The new representations on neckrings such as those from Erstfeld and Reinheim, on weapons such as the scabbards from Weiskirchen and Hochscheid, and on vessels such as those from Glauberg 1 and Basse-Yutz, were thus used to communicate both to privileged individuals who had direct access to these objects and to others who saw and marvelled at them that a new way of understanding the social and natural world was emerging, and with it a new dynamic of aggression and expansion.

Eurasia-wide changes, fifth-fourth centuries BCE

The fifth century BCE was a time of profound cultural change throughout Eurasia, what Jan Assmann (2016, 183) refers to as 'a global intellectual revolution.' The middle of the final millennium BCE was the time that the historian-philosopher Karl Jaspers ([1949] 1953) named the Axial Age for developments in religion and philosophy in different parts of Eurasia-in Greece, Israel, Persia, India and China (Baumard et al. 2015; Bellah & Joas 2012; Gregersen 2017; on how archaeology fits into this wider perspective, see Riva & Mira 2022; Stoddart 2022). In commerce, during the middle of the millennium, historians including Christopher Ehret (2002, 162-4) argue that in the greater Mediterranean world, a shift took place from trade being under the control of kings and other potentates to commerce becoming controlled by individual merchants working for their own gain (see also Fletcher 2012; Hodos 2009; 2020, 96). Around this time coinage came into use, first in the Mediterranean world, in China and in India. Jan Lucassen (2021, 116-48) argues that the growing use of coins contributed to the expansion of market economies throughout much of Eurasia. At the same time, communities across Eurasia began sharing similar kinds of art and design (Wells 2012, 204-5; 2020a). Laurent Olivier notes (2020a, 106-8; 2020b, 24) that similar kinds of symbolism developed in both temperate Europe and China (see also Andreeva 2023; Juliano 2018; O'Sullivan & Hommel 2020; Pare 2012).

Greek and Roman writers on Celtic expansion

In treatments of the 'expansion' of the Celts during the fifth and fourth centuries BCE, several historical processes noted and described by Greek and Roman writers are ordinarily treated as separate occurrences. One is the 'invasion' of or 'migration' to, depending on interpretations, by Celts (or 'Gauls') across the Alps into Italy and on to Rome, recounted by Livy. Another is the movement of Celts into Greece and attacking of Delphi, and moving on into Anatolia. Another is the recruitment of Celtic warriors by representatives of potentates in the lands of the eastern Mediterranean to serve as mercenaries in armies fighting in Greece, southern Italy, Sicily, Anatolia, Syria and Egypt. I suggest that we can understand these processes as related instances of expansion, and increasing militarism, on the part of the people called Celts and Gauls, and that the images in La Tène art can be understood both as a reflection (for us investigators) and as agents (for the elites of the time and their followers) in relation to these processes.

Images, aggression, and the archaeology of expansion

The new images of Early Celtic Art, with their emphasis on scenes of violence and representations of animals and hybrids associated with aggression (birds of prey, bulls, rams, canines) expressed and drove a new, increasingly aggressive and expansionist ideology on the part of the elites of temperate Europe. This new ideology was a factor in increasing militarism and the symbolism associated with it, in invasions of lands to the south and southeast, and in migration to those regions.

Imagery provided a series of models for elites, who commissioned the objects of Early La Tène art, for the new ways of thinking (Echt 2016; Frey 2004; 2013) that included a new drive for expansion, conquests and acquisition of new settlement lands. The movements of the Celtic groups were portrayed as violent and aggressive by the Classical writers, and in many cases they surely were. But they also involved settlements of new lands in Italy, eastern Europe and Anatolia (Darbyshire *et al.* 2000), and probably other places that were unobserved by the Classical writers and that have as yet escaped the notice of archaeologists— perhaps lands further to the east, where material evidence of them has not yet been identified.

The main point of this paper is to argue that the imagery of the Early La Tène period not only *reflects* major changes in mentality and society, specifically among the elites of Iron Age Europe, but actually *caused* changes in thinking and in behaviour. This is a complex issue with many ramifications. In this short paper, I briefly explore three. All three were parts of the same processes, but they are ordinarily represented as distinct events because of the way they were portrayed by Greek and Roman writers. The new images of Early Celtic Art, with their emphasis on scenes of violence and its results, as well as representations of animals and hybrids associated with aggression, expressed and drove this new, increasingly aggressive and expansionist ideology on the part of the elites of temperate Europe.

Migrations into Italy

One expression of the new aggressive attitudes fostered at least in part by the new imagery of the Early La Tène Period was expeditions mounted to other parts of Europe and to the greater Mediterranean world during the fourth and third centuries BCE. The Roman historian Livy (59 BCE-CE 17), writing in the final decades of the final century BCE, described in some detail invasions (or migrations, depending upon the interpretations of modern scholars) by groups whom he called Gauls from north of the Alps across the mountains into the Po Plain of northern Italy. Some groups continued southward down the peninsula to Rome and beyond. Though Livy was writing centuries after the events he described, he included considerable detail, naming specific passes through the mountains and even providing the names of some of the Gallic leaders (for recent discussion, see Colonna 2017; Roncaglia 2018, 16–17). While there is debate about details of the character and the chronology of these incursions described by Livy (see e.g. Lejars 2020; Pare 1991, 196), they are consistent with the description by the Greek writer Polybius (Hist. 2, 17) written in the second century BCE of Celtic inhabitants of Italy (Vitali 2004a).

The archaeological evidence in Italy shows strong connections to communities north of the Alps, consistent with what we would expect from Livy's account, however we might interpret it in detail. The archaeological evidence indicates that these movements, whether military invasions, peaceful migrations, or most likely a variety of mechanisms, happened at just the time that the new style of representation appeared in temperate Europe. Burial practices in some of the cemeteries in northern Italy indicate strongly the presence of settlers from the north (Vitali 2004b; 2010). Swords and other weapons similarly indicate links (Frey 1995; Lejars & Bernardet 2015), as do fibulae of types made north of the Alps (De Marinis 2012). The flourishing of La Tène style design on many objects further attests to those connections (Vitali 2010), perhaps produced by craftworkers who were among the migrants from the north (Vitali & Kaenel 2000).

The prevalence of weapons of northern style, especially swords, among the indicators of arrival in Italy underscores the link between the new style of representation and increased aggression on the part of the elites of temperate Europe and their followers. Fitzpatrick (2023, 1151) notes that in some of the cemeteries in northern Italy of the period 350–330 BCE, some 40 per cent of the graves contain weapons. Livy's account of the attack on Rome in 387 BCE further underscores the aggressive actions undertaken at the time of the appearance of the new style.

The Celtic invasions and/or migrations to Italy at the start of the fourth century BCE had a great impact on the societies in Italy and beyond. A distinctive 'Italo-Celtic' culture emerged in Italy (Polybius; Lejars 2006; Prosdocimi 1987), and the Celtic presence was of great importance down to the Roman imperial period. Historians have suggested that it was the sacking of Rome in 387 BCE that played an important part in Rome's determination to establish a secure frontier to prevent further invasions, one of the reasons for the conquests and expansion of the Roman Empire.

Movements into Eastern Europe, Greece, Anatolia

Beginning in the early fourth century BCE, at the same time that Celtic groups were invading Italy, Greek and Roman written sources, including works by Herodotus, Xenophon and other writers, also attest to them in eastern and southeastern Europe (Guštin & Jevtić 2011; Rustoiu & Berecki 2014), invading Greece (Rapin 1995), and in some cases moving on to Anatolia (modern Turkey) (for modern discussion, see Bouzek 2014; Mitchell 1993; Müller-Karpe 2006; Schönfelder 2007; Szabó 1991; 1995; 2006) and possibly further east into central Asia (Sims-Williams 2006, 299).

These migrations had a large military component (see below). Celtic-style weapons appear in large numbers in graves of the fourth century BCE in Hungary, Bulgaria, Romania and neighbouring countries (Rustoiu 2011; Szabó 2014). Rustoiu (2006) cites the much discussed grave at Ciumesi in Romania that contained the famous helmet with a bird of prey on top, along with a Celtic-style sword and La Tène ornaments. Rustoiu suggests that the person buried here was a chieftain of a Celtic contingent, and that his greaves were made specifically for him in Greece (since they had to be crafted for a specific individual's legs). This link with Greece leads to discussion of the role of Celtic mercenaries in Greece and other lands of the eastern Mediterranean. Rustoiu (2006, 56) proposes that recruiters were sent to temperate Europe by the monarchs of the Mediterranean world to enlist young men to join the armies of those lands, promising riches in exchange for their military service. The results may account for the influx of wealth into Europe during these centuries.

We shall be able to learn a great deal more about these movements into Italy, eastern Europe and Anatolia when more results from isotope and aDNA analyses become available. So far, a number of such studies offer tantalizing but limited results (e.g. Cicolani & Zamboni 2022; Fitzpatrick 2023; Gori & Abar 2022; Günther & Jakobsson 2016; Hauschild *et al.* 2013; Scheeres *et al.* 2013). As larger samples are analysed from more relevant locations, results will aid in developing a more detailed picture of these movements during the fifth, fourthand third centuries BCE.

Mercenary service

Mercenary service by soldiers identified in the written sources as Celts is another example of the expression of increased aggression on the part of elites in fourth-century BCE Europe (Baray 2017a,b; Griffith 1935; Strobel 1996). Although many ancient writers refer to Celts or Gauls in the service of armies fighting in Italy, Sicily, North Africa, Greece, Asia Minor, Egypt and other places (Adam & Fichtl 2011), we do not have much detailed information about exactly where they came from or about their terms of service. But according to the written sources, these Celts or Gauls played important parts in military conflicts in the greater Mediterranean region.

When we read of Celtic mercenaries serving in armies in the lands of the eastern Mediterranean (Griffith 1935; Szabó 1995), we need to understand the word 'mercenary' broadly. What Greek and Roman writers recorded as mercenaries may have been people with a variety of actions and intentions. Though the writers may have used words that translate best as mercenaries, it is quite possible that groups of settlers and others were considered under this term. And individuals may have played different roles at different times. Since our information about what different groups of people were doing in this period is generally rather vague, we should keep our minds open to the various possibilities of migration and settlement falling under some writer's perception as mercenary.

Celtic military forces played significant roles in the outcomes of many important battles of the fourth and third centuries BCE (for a recent summary, see Rustoiu 2006) and thus contributed to the political and economic circumstances of these regions. It could be argued that the cultural, social and political development of this part of the world was in large measure determined by the military activities of Celtic mercenaries. We have no precise figures for the numbers of troops involved, but from numbers suggested by ancient authors for various war parties it is likely that contingents of Celtic mercenaries typically numbered in the several thousands.

Personal ornaments, especially fibulae, of European types that have been recovered from sites in Anatolia, Syria, Lebanon and Israel (Parachaud 2018; 2020; 2022; Voigt 2003), can be understood as evidence of objects left behind by Celtic mercenaries and/or as indications of traditions maintained by mercenaries and their descendants of their (real or perceived) homelands. The cultural influence of these mercenaries and their descendants on the indigenous societies of the Near East is a topic that would produce great rewards for our understanding of cultural changes during the centuries immediately preceding the expansion of the Roman Empire, but the topic is beyond the scope of this paper.

All of the available evidence, textual, archaeological and linguistic, indicates that people called Celts or Gauls by Mediterranean writers had settled in Anatolia by the early decades of the third century BCE (Darbyshire et al. 2000; Voigt 2003). As Darbyshire and his colleagues make clear, we know very little about the specific motivations for the migration of Celts to Anatolia, but they argue that whatever other motivations may have been involved, the search for land for settlement was a main reason. While the early phases of the movements may have involved military action and looting, eventually Celtic groups settled and remained in place in Anatolia. Darbyshire et al. emphasize that the archaeological database for the region is not abundant, and there are many uncertainties about the exact nature of Celtic settlement. The written sources make clear that the Celts-now 'Galatians'-became from the third century on a major political, military and cultural force in the region. Both military and decorative material culture have been identified in the regions described by the writers as settlement areas of the Celts and further afield in the Near East, for example in what are today Israel and Egypt.

For individuals to leave their homes to serve in these armies, there must have been strong incentives—substantial rewards—awaiting them. A portion of the material wealth of European societies during the fourth and third centuries may be attributable to the wealth brought home from their campaigns, whether in the form of booty captured during their military service or in salaries paid to them. The first coins to arrive in temperate Europe were Greek coins that probably represented the pay that mercenaries received (Mannsperger 1981). By the end of the fourth century BCE, minting of coinage was begun in temperate Europe, modelled on the coins of Philip II of Macedon (Haselgrove 2023). Other prizes that were likely brought back from their mercenary service include Greek helmets found in the south of France, recovered at Bauxde-Provence, Modez and in the Montpellier region, one from the river Guadalete in Spain (Garcia 2013), and a Celtic shield represented in Sicily (Rapin 2001).

Otto-Herman Frey (2001) and Martin Schönfelder (2007, 310) suggest that the armour shown on the statue from the Glauberg tumulus, as well as the armour represented on the seated figure on the bronze jug from grave 1 at the site, is Greek or Etruscan in style. Had the man buried in the grave served as a mercenary, and had his uniform acquired in that service remained part of his identity after he had returned home?

Militarism at home in temperate Europe

The new aggressive and expansionist ideology expressed in military activity of the Celts during the fifth, fourth and third centuries BCE in lands to the south and east of their homelands was also expressed in their homelands in temperate Europe (Wells 2007; 2020b). Weapons were placed in many more graves than had been the case earlier, they were deposited frequently on large and complex ritual sites, and they are shown in informative pictorial representations.

Weapons in graves

There is general agreement that there was a great increase in military activity and military ideology at this time, with many more weapons placed in graves (Stöllner 2010, 278–9; 2014, 121) and more attention paid to the decoration of weapons, especially swords, as at Hochscheid (Fig. 7, above), the Glauberg (Frey 2002b) and Weiskirchen (Müller 2009a, 188 fig. 248 & 189 fig. 250). Pictorial representations of marching soldiers on the scabbard from Hallstatt grave 994 (Barth 2009; Egg *et al.* 2006) and on situlae (Lucke & Frey 1962) further attest to this increasing militarism. Otto-Herman Frey (2002c) highlights these changes in his comparison of the statues from Hirschlanden and the Glauberg (see below).

Martin Schönfelder (2007) suggests that these changes reflect the formation of a 'warrior elite' that achieved its status at least in part through mercenary service abroad (Ginoux & Ramsl 2014). Glauberg grave 1 is an example of the archaeological evidence for a new warrior elite. The man was accompanied by a sword (with decorated scabbard—see above), a shield, three lances, a quiver and a bow and arrows. The statue that accompanied the grave is that of a well-armed warrior, with body armour, sword and shield.

After the initial phase of the La Tène Period, swords and other weapons were still deposited regularly in substantial proportions of graves. Cemeteries such as Nebringen in Germany (Krämer 1964), Münsingen-Rain in Switzerland (Hodson 1968), Radovesice in Czechia (Waldhauser 1987), Ludas in Hungary (Szabó 2014, 87 fig. 5, 90 fig. 7), Vače in Slovenia (Dular 2016) and Ciumesti in Romania (Rustoiu 2006) are examples of burial places where the practice of including weapons in graves was common during the fourth and third centuries BCE.

Weapons more decorated and individualized

Swords and their scabbards, in particular, were often highly decorated in this period. The decoration could have served a variety of purposes. Perhaps some of the signs were meant to protect the user and to intimidate the enemy (Giles 2008; 2012). As Gell (1998) might suggest, many of the decorations could have been enchanting and designed to capture the attention of the enemies to their disadvantage. The decorations may also have served to identify the owner of the sword and scabbard. Even among large assemblages of scabbards, such as that at the site of La Tène, each decoration is different (De Navarro 1972). The special symbolism on the Hochscheid scabbard has been discussed above.

Ritual deposits of weapons

Before the fourth century BCE, sites understood as places of ritual deposition were relatively small and rarely included any appreciable quantity of weapons (Bradley 1990). From the fourth century BCE, much more expansive open spaces were structured for use as sites of ritual activity. The classic example is the site of Gournay-sur-Aronde in northern France, a square ditched enclosure, a building in the centre, and weapons-swords, sword belts, spears, shields -of some 500 warriors, most of them recovered in the ditches (Brunaux 1988; 1996; 2006). Similar deposits, but with fewer weapons, are at Ribemont (Brunaux 1999), not far from Gournay. In Austria, the site of Roseldorf (Holzer 2014; Kohler-Schneider et al. 2015) shows similar depositions of weapons at this time.

At the site of La Tène in Lake Neuchâtel in Switzerland, 166 swords have been recovered, a great many of them with ornate scabbards (De Navarro 1972), along with other weapons, coins and other objects that were deposited in the shallows of the lake. Excavations at the site yielded remains of a large wooden structure built into the edge of the lake, apparently to be used for the deposition of objects. At Hjortspring on the island of Als in Denmark at about this same time, swords, spears, over 50 wooden shields, and other weapons, including coats of mail, were deposited in a pond, together with a wooden boat (Kaul 2003; Randsborg 1996).

The importance of these new sites intended for ritual performance involving weapons is that they demonstrate that display of weapons in open public places was an important activity at the same time as the Celtic incursions into Italy, eastern Europe, Anatolia and elsewhere.

Images of weapons

Along with the placing of swords and other weapons in graves and depositing them in open-air land sites such as Gournay and in water, as at La Tène, during this period, representations of soldiers with their weapons also become important. The scabbard of the sword in Hallstatt grave 994 shows armed troops, some riding horseback, others marching in infantry formation, all wearing similar uniforms and bearing weapons (Barth 2009; Egg *et al.* 2006). Similar troop formations are shown on a number of the bronze situlae found in the eastern Alpine regions, including northeast Italy, Slovenia and Austria (e.g. Lucke & Frey 1962, pls 63, 64, 65).

Frey (2002c, 216–18) calls attention to the stunning differences between two near-lifesize stone statues, that from the Early Iron Age burial mound of Hirschlanden and that from the Early La Tène mound at the Glauberg. Both were sculpted from local stone, one in southwest Germany, the other in the central part of Germany north of Frankfurt, and both represent armed elites. The Hirschlanden figure, which is nearly naked, wears the characteristic dagger at his waist, a thick neckring around his neck and a conical hat or helmet on his head. The Glauberg figure wears body armour and a sword at his right side, holds a shield and wears a thin neckring matched by the gold neckring in grave 1 at the site. Instead of a hat or helmet, the top of his head is decorated with the palmette crown characteristic of Early La Tène art. Hirschlanden gives us a picture of the hero of the earlier period, Glauberg of the later. The armour on the Glauberg statue is matched by the armour shown on the figure sitting on the rim of the bronze jug in grave 1 at the site (Frey 2001).

Aftermath

After the archaeologically clear dominance of the warrior elites of the fourth and third centuries BCE

in temperate Europe, the following period sees a reduction in the display of weaponry, both in graves and on ritual sites. The large settlements known as oppida appear, named after Julius Caesar's use of the term to refer to the great fortified sites against which he fought in Gaul (Fichtl 2023). During the second century BCE, cemeteries in the central regions of temperate Europe are many fewer than they had been previously. Weapons are much fewer in number, though some swords have been recovered from water deposits. The overall character of life at the oppida suggests an increased focus on manufacturing and trade and less on warfare (Gebhard 2023; Gosden 2023). In Gaul, this new pattern is interrupted by the invasion of Caesar's legions in 58 BCE (Roymans & Fernández-Götz 2019), and profound changes happened in other parts of temperate Europe at the same time (Wells 1999, 122-47, 224-58).

Conclusion

This paper argues for an approach to Early La Tène art and design in terms of the role that the imagery played in fostering a new aggressive and expansionary ideology among the elites of the fifth and fourth centuries BCE in temperate Europe. These centuries were times of great dynamism throughout much of Eurasia. Karl Jaspers and his followers have argued for an understanding of these times as what he called the Axial Age, based on textual evidence pertaining to philosophy and religion. In this paper, I argue that we can identify closely related changes in the material culture of temperate Europe and the lands into which Europeans expanded, militarily, socially and culturally. Early Celtic art was not the only factor that drove these momentous changes, but it played an important part in bringing the societies of Iron Age Europe into contact and interaction with the complex literate civilizations that lay to the south and east. In this way, the societies based in temperate Europe became dynamic players in the phenomena known as the Axial Age, when many profound changes took place throughout much of Eurasia and arguably fashioned many of the cultural features of what we call modernity.

Acknowledgements

I did most of the research for this paper during a sabbatical semester in the fall of 2021, for which I thank the College of Liberal Arts of the University of Minnesota. For helpful advice and for useful publications, I thank Lothar von Falkenhausen, Heather Flowers, Melanie Giles, Chris Gosden, Colin Haselgrove, Manual Fernández-Götz, Aurel Rustoiu and Simon Stoddart. For help with the map I thank Matt Edling. I thank the three anonymous reviewers for helpful suggestions that led to the to improvement of the draft that they read. For the artefact illustrations, I thank the Schweizerisches Landesmuseum, Art Resource of New York, Keltenwelt am Glauberg, the Rheinisches Landesmuseum Trier and the Salzburg Museum.

> Peter S. Wells Anthropology University of Minnesota Twin Cities Minneapolis, MN 55455 USA Email: wells001@umn.edu

References

Classical sources

- Livy, 1967. *Book III* (trans. B.O. Foster). Cambridge (MA): Harvard University Press.
- Polybius, 2010. *The Histories*. Books 1–2 (trans. W.R. Paton, rev. F.W. Walbank & C. Habicht). Cambridge (MA): Harvard University Press.
- Adam, A.-M. & S. Fichtl, 2011. Les Celtes dans les guerres hellénistiques: le cas de la Méditerranée orientale [The Celts in the Hellenistic Wars: the case of the eastern Mediterranean], in *Pratiques et identités culturelles des armées hellénistiques du monde méditerranéen* [Practices and cultural identities of the Hellenistic armies of the Mediterranean world], eds J.-C. Couvenhes, S. Crouzet & S. Péré-Noguès. Bordeaux: Ausonius, 117–28, 371–401.
- Albright, M.K., 2009. *Read My Pins: Stories from a diplomat's jewel box*. New York (NY): Harper.
- Aldhouse-Green, M., 2021. Connective tissue: embracing fluidity and subverting boundaries in European Iron Age and Roman provincial images. *Religions* 12, 351.
- Andreeva, P., 2023. Fantastic fauna in a global perspective: understanding composites in early Eurasian antiquity. *Journal of the Royal Asiatic Society* 3(33), 55–71.
- Andrén, A., 2020. Images, in *The Pre-Christian Religions of* the North, Vol. I: History and structure: basic premises and consideration of sources, eds J.P. Schjødt, J. Lindow & A. Andrén. Turnhout: Brepols, 161–93.
- Armbruster, B., 2012. Blech und Draht: Goldschmiedetechniken der Frühlatènezeit [Sheet and wire: goldsmithing techniques of the Early La Tène Period], in *Die Welt der Kelten* [The world of the Celts], eds D. Beilharz, T. Hoppe, D. Krausse, F. Müller & C. von Nicolai. Ostfildern: Jan Torbecke Verlag, 245.
- Armbruster, B., M. Nordez, M. Blet-Lemarquand, et al., 2021. Celtic gold torcs – an interdisciplinary and diachronic perspective, in 5th International Conference 'Archaeometallurgy in Europe', eds B. Török & A. Giumlia-Mair. Drémil-Lafage: Editions Mergoil, 417–32.

- Assmann, J., 2016. Egypt in the 'Axial Age', in Eurasia at the Dawn of History: Urbanization and social change, eds M. Fernández-Götz & D. Krausse. New York (NY): Cambridge University Press, 183–97.
- Bagley, J.M., 2013. Potnia und Despotes Theron: transalpine Kontakte im Spiegel der Kunst der frühen Latenezeit [Potnia and Despotes Theron: transalpine contacts as reflected in the art of the Early La Tène Period]. Archäologisches Korrespondenzblatt 43(1), 59–78.
- Bagley, J.M., 2014. Zwischen Kommunikation und Distinktion: Ansätze zur Rekonstruktion frühlatènezeitlicher Bildpraxis [Between communication and distinction: approaches to the reconstruction of Early La Tène pictorial practice]. Rahden: Marie Leidorf.
- Bagley, J.M. & R. Schumann, 2013. Materialized prestige: remarks on the archaeological research of social distinction based on case studies of the late Hallstatt golden necklaces and early La Tène Maskenfibeln, in *Interpretierte Eisenzeiten: Fallstudien, Methoden, Theorie* [Interpreted Iron Ages: case studies, methods, theory], eds R. Karl & J. Leskovar. Linz: Oberösterreiches Landesmuseum, 123–36.
- Bailey, D.D., 2005. *Prehistoric Figurines: Representation and corporality*. London: Routledge.
- Baitinger, H. & B. Pinsker, 2002a. Katalog der ausgestellten Funde [Catalog of the exhibited finds], in *Das Rätsel der Kelten vom Glauberg* [The puzzle of the Celts from the Glauberg], eds H. Baitinger & B. Pinsker. Stuttgart: Theiss, 268–327.
- Baitinger, H. & B. Pinsker, 2002b. Die Glauberg-Funde [The Glauberg finds], in *Das Rätsel der Kelten vom Glauberg* [The puzzle of the Celts from the Glauberg], eds H. Baitinger & B. Pinsker. Stuttgart: Theiss, 242–65.
- Baitinger, H. & B. Pinsker (eds), 2002c. Das Rätsel der Kelten vom Glauberg [The puzzle of the Celts from the Glauberg]. Stuttgart: Theiss.
- Baray, L., 2017a. Celtes, Galates et Gaulois: mercenaires de l'Antiquité: représentation, recrutement, organisation [Celts, Galatians and Gauls: mercenaries of antiquity: representation, recruitment, organization]. Paris: Picard.
- Baray, L., 2017b. De Carthage à Jericho: Mythes et réalités du mercenariat celtique (V^e-1^{er} siècle a. C.) [From Carthage to Jericho: myths and realities of Celtic mercenaries (5th–1st century BC)]. Bordeaux: Ausonius.
- Barrett, J.C., 2022. Humanness as performance. Archaeological Dialogues 29, 109–19.
- Bartel, A., F. Bodis, M. Bosinski, et al., 2002. Bergung, Freilegung und Restaurierung [Salvage, excavation and restoration], in *Das Rätsel der Kelten vom Glauberg* [The puzzle of the Celts from the Glauberg], eds H. Baitinger & B. Pinsker. Stuttgart: Theiss, 132–69.
- Barth, F.E., 2009. Ergänzende Bemerkungen zum frühlatènezeitlichen Grab 994 von Hallstatt [Supplementary observations about Early La Tène

Period Grave 994 at Hallstatt]. Archäologisches Korrespondenzblatt 39, 527–38.

- Baumard, N., A. Hyafil & P. Boyer, 2015. What changed during the axial age: cognitive styles or reward systems? *Communicative & Integrative Biology* 8(5), e1046657.
- Beilharz, D., T. Hoppe, D. Krausse, F. Müller & C. von Nicolai (eds), 2012. *Die Welt der Kelten* [The world of the Celts]. Ostfildern: Jan Torbecke Verlag.
- Bellah, R.N. & H. Joas, 2012. The Axial Age and Its Consequences. Cambridge (MA): Harvard University Press.
- Biel, J., 1985. Der Keltenfürst von Hochdorf [The Celtic prince of Hochdorf]. Stuttgart: Konrad Theiss.
- Binding, U., 1993. *Studien zu den figürlichen Fibeln der Frühlatènezeit* [Studies of the figural fibulae of the Early La Tène Period]. Bonn: Dr. Rudolf Habelt.
- Bouzek, J., 2014. The Celtic mercenary reconsidered, in *Celtic Art in Europe*, eds C. Gosden, S. Crawford & K. Ulmscheider. Oxford: Oxbow, 223–33.
- Bradley, R., 1990. The Passage of Arms: An archaeological analysis of prehistoric hoards and votive deposits. Cambridge: Cambridge University Press.
- Brett, D., 2005. *Rethinking Decoration: Pleasure and ideology in the visual arts.* Cambridge: Cambridge University Press.
- Brück, J., 1999. Ritual and rationality: some problems of interpretation in European archaeology. *Journal of European Archaeology* 2, 313–44.
- Brun, P., B. Chaume & F. Sacchetti (eds), 2021. *Vix et le phénomène princier* [Vix and the princely phenomenon]. Bordeaux: Ausonius Editions.
- Brunaux, J.-L., 1988. The Celtic Gauls: Gods, rites and sanctuaries (trans. D. Nash). London: Seaby.
- Brunaux, J.-L., 1996. Les religions gauloises: rituels celtiques de la Gaule indépendante [The Gallic religions: Celtic rituals of independent Gaul]. Paris: Editions Errances.
- Brunaux, J.-L., 1999. Ribemont-sur-Ancre (Somme): bilan préliminaire et nouvelles hypothèses [Ribemontsur-Ancre: preliminary results and new hypotheses]. *Gallia* 56, 177–283.
- Brunaux, J.-L., 2006. Religion et sanctuaires [Religion and sanctuaries], in *Religion et société en Gaule* [Religion and society in Gaul], ed. C. Goudineau. Paris: Editions Errance, 95–116.
- Bunker, E.C., 1995. Chinese luxury goods enhanced: fifth century B.C.-first century A.D., in *Traders and Raiders on China's Northern Frontier*, eds J.F. So & E.C. Bunker. Washington (DC): Smithsonian Institution, 69–75.
- Chaume, B., C. Mordant & C. Allag, 2011. *Le complexe aristocratique de Vix* [The aristocratic complex of Vix]. Dijon: Editions universitaires de Dijon.
- Chugunov, K.V., 2017a. Openwork belt holders, in Scythians: Warriors of ancient Siberia, eds S.J. Simpson & S. Pankova. London: British Museum, 214.
- Chugunov, K.V., 2017b. Decorative plaques in the form of deer, in *Scythians: Warriors of ancient Siberia*, eds

S.J. Simpson & S. Pankova. London: British Museum, 144.

- Cicolani V. & L. Zamboni, 2022. Alpine connections: Iron Age mobility in the Po Valley and the circum-Alpine regions, in *Rethinking Migrations in Late Prehistoric Eurasia*, eds M. Fernández-Götz, C. Nimura, P.W. Stockhammer & R. Cartwright. (Proceedings of the British Academy 254.) Oxford: Oxford University Press/British Academy, 258–79.
- Colonna, G., 2017. I Celti in Italia nel VI e V secolo A.C.: dati storici, epigrafici e onomastici [The Celts in Italy during the 6th and 5th centuries BC: historical data, epigraphy and onomastics], in *Celti d'Italia*. I *Celti dell'eta di La Tène a sud delle Alpi* [Celts in Italy: The Celts of the La Tène Period south of the Alps], ed. P. Piana Agnostinetti. Rome: Giorgia Bretscheider Editore, 3–12.
- Cugunov, K.V., H. Parzinger & A. Nagler, 2010. *Der skythenzeitliche Fürstenkurgan Arzan 2 in Tuva* [The Scythian Period princely kurgan Arzan 2 in Tuva]. Mainz: Verlag Philipp von Zabern.
- Darbyshire, G., S. Mitchell & L. Vardar, 2000. The Galatian settlement in Asia Minor. *Anatolian Studies* 50, 75–97.
- De Marinis, R., 2012. Handelsknotenpunkt in der Poebene – Forcello [Trade node in the Po Plain – Forcello], in *Die Welt der Kelten* [The world of the Celts], eds D. Beilharz, T. Hoppe, D. Krausse, F. Müller & C. von Nicolai. Ostfildern: Jan Torbecke Verlag, 178–9.
- De Navarro, J.M., 1972. The Finds from the Site of La Tène. Vol. 1: Scabbards and the Swords Found in Them. Oxford: Oxford University Press.
- Dehn, R., 1994. Das Grab einer 'besonderen Frau' der Frühlatènezeit von Gündlingen, Stadt Breisach, Kreis Breisgau-Hochschwarzwald [The grave of a 'special woman' of the Early La Tène Period at Gündlingen, Stadt Breisach, Kreis Breisgau-Hochschwarzwald]. Archäologische Ausgrabungen in Baden-Württemberg 1994, 92–4.
- Di Cosmo, N., 1994. Ancient Inner Asian nomads: their economic basis and its significance in Chinese history. *Journal of Asian Studies* 53(4), 1092–1126.
- Dobres, M.-A., 2014. Agency in archaeological theory, in *Encyclopedia of Global Archaeology*, ed. C. Smith. New York (NY): Springer, 59–66.
- Dobres, M.-A. & J. Robb, 2000. Agency in Archaeology. New York (NY): Routledge.
- Dubuis, B., E. Millet & V. Riquier, 2021. Le complexe funéraire de Lavau et la question du pole aristocratique de Troyes, au V^e a.C. [The funerary complex of Lavau and the question of the aristocratic site of Troyes during the 5th century BC], in *Vix et le phénomène princier* [Vix and the princely phenomenon], eds P. Brun, B. Chaume & F. Sacchetti. Pessac: Ausonius Editions.
- Dular, J., 2016. Der eisenzeitliche Zentralort Vače und seine kriegerische Elite [The Iron Age central place of Vače and its warrior elite]. *Arheoloski vestnik* 67, 73–104.

- Echt, R., 1999. Das Fürstinnengrab von Reinheim: Studien zur Kulturgeschichte der Früh-La-Tène Zeit [The princess grave at Reinheim: studies on the cultural history of the Early La Tène Period]. Bliesbruck-Reinheim: Parc Archéologique Européen.
- Echt, R., 2016. Phase transition, axial age, and axis displacement: from the Hallstatt to the La Tène culture in the regions northwest of the Alps, in *Eurasia at the Dawn of History: Urbanization and social change*, eds M. Fernández-Götz & D. Krausse. New York (NY): Cambridge University Press, 353–69.
- Egg, M., M. Hauschild & M. Schönfelder, 2006. Zum frühlatènezeitlichen Grab 994 mit figural verzierter Schwertscheide von Hallstatt (Oberösterreich) [On Early La Tène Grave 994 with figurally decorated sword scabbard at Hallstatt (Oberösterreich)]. Jahrbuch des Römisch-Germanischen Zentralmuseums 53, 175–216.
- Ehret, C., 2002. *The Civilization of Africa: A history to 1800*. Charlottesville (VA): University of Virginia Press.
- Falkenhausen, L. von, 2006. Chinese Society in the Age of Confucius (1000–250 BC). Los Angeles (CA): Cotsen Institute of Archaeology.
- Farley, J. & F. Hunter (eds), 2015. *Celts: Art and identity*. London: British Museum.
- Fichtl, S., 2023. Urbanization and oppida, in The Oxford Handbook of the European Iron Age, eds C. Haselgrove, K. Rebay-Salisbury & P.S. Wells. Oxford: Oxford University Press, 717–39.
- Fischer, F., 1992. Gold und Geld: Gedanken zum Schatz von Erstfeld [Gold and money: thoughts about the treasure from Erstfeld]. *Helvetia Archaeologica* 23, 118–38.
- Fischer, F., 1993. Vom Oxus zum Istros: ein Beitrag zur Interpretation kultureller Beziehungen [From the Oxus to the Istros: a contribution to the interpretation of cultural relationships]. *Istanbuler Mitteilungen* 43, 319–29.
- Fitzpatrick, A.P., 2023. Migration, in *The Oxford Handbook of* the European Iron Age, eds C. Haselgrove, K. Rebay-Salisbury & P.S. Wells. Oxford: Oxford University Press, 1137–86.
- Fletcher, R.N., 2012. Opening the Mediterranean: Assyria, the Levant and the transformation of Early Iron Age trade. *Antiquity* 86, 211–20.
- Fowle, F., 2015. The Celtic revival in Britain & Ireland: reconstructing the past, c. AD 1600–1920, in Celts: Art and Identity, eds J. Farley & F. Hunter. London: British Museum, 234–59.
- Freedberg, D., 1989. *The Power of Images: Studies in the history and theory of response*. Chicago (IL): University of Chicago Press.
- Frey, O.-H., 1995. The Celts in Italy, in *The Celtic World*, ed. M. J. Green. London/New York: Routledge, 515–32.
- Frey, O.-H., 2001. Kompositpanzer der frühen Kelten [Composite armour of the early Celts], in Archäologisches Zellwerk: Beiträge zur Kulturgeschichte in Europa und Asien [Archaeological meaning:

contributions to cultural history in Europe and Asia], eds E. Pohl, U. Recker & C. Theune. Rahden: Marie Leidorf, 201–8.

- Frey, O.-H., 2002a. Die Fürstengräber vom Glauberg [The princely burials at the Glauberg], in *Das Rätsel der Kelten vom Glauberg* [The puzzle of the Celts at the Glauberg], eds H. Baitinger & B. Pinsker. Stuttgart: Theiss, 172–85.
- Frey, O.-H., 2002b. Frühe keltische Kunst: Dämonen und Götter [Early Celtic art: demons and gods], in *Das Rätsel der Kelten vom Glauberg* [The puzzle of the Celts at the Glauberg], eds H. Baitinger & B. Pinsker. Stuttgart: Theiss, 186–205.
- Frey, O.-H., 2002c. Menschen oder Heroen? Die Statuen vom Glauberg und die frühe keltische Grossplastik [Humans or heroes? The statues at the Glauberg and early Celtic large sculpture], in *Das Rätsel der Kelten vom Glauberg* [The puzzle of the Celts at the Glauberg], eds H. Baitinger & B. Pinsker. Stuttgart: Theiss, 208–18.
- Frey, O.-H., 2004. The Celtic concept of the gods: some preliminary remarks, in *Irish Historical Studies in Honour* of Peter Harbison, ed. C. Hourihane. Dublin: Four Courts Press, 25–46.
- Frey, O.-H., 2007. Die Erscheinungsform keltischer Götter in vorrömischer Zeit [The appearance of Celtic gods in pre-Roman times], in *Kelten-Einfälle an der Donau* [Celtic invasions on the Danube], ed. H. Birkhan. Vienna: Verlag der Österreichischen Akademie der Wissenschaften, 203–12.
- Frey, O.-H., 2011. The world of Situla Art, in *The Barbarians* of Ancient Europe: Realities and interactions, ed. L. Bonfante. New York (NY): Cambridge University Press, 282–312.
- Frey, O.-H., 2013. Keltisches Denken im Spiegel der frühkeltischen Kunst: zu den Kleinfunden vom Glauberg [Celtic thinking in the context of early Celtic art: on the small finds from the Glauberg]. Berichte der Kommission für Archäologische Landesforschung in Hessen 12, 31–56.
- Frey, O.-H., 2016. Early Celtic art in context, in *Eurasia at the* Dawn of History: Urbanization and social change, eds M. Fernández-Götz & D. Krausse. New York (NY): Cambridge University Press, 370–79.
- Fürst, S., M. Schönfelder & B. Armbruster, 2021. Neues zum sogenannten Trinkhornbeschlag von Bad Dürkheim. Zu Goldblecharbeiten der Frühlatènezeit [New thoughts on the so-called drinking horn attachment from Bad Dürkheim. On sheet gold products of the Early La Tène Period]. *Germania* 99, 57–106.
- Garcia, D., 2013. Le casque corinthien des Baux-de-Provence [The Corinthian helmet from Baux-de-Provence], in L'Occident grec de Marseille à Mégara Hyblea [The Greek west from Marseille to Megara Hyblea], eds S. Bouffier & A. Hermany. Aix-en-Provence: Centre Camille Jullian, 85–90.

- Garrow, D. & C. Gosden, 2012. *Technologies of Enchantment? Exploring Celtic art: 400 BC to AD 100.* Oxford: Oxford University Press.
- Gebhard, R., 2023. Raw materials, technology, and innovation, in *The Oxford Handbook of the European Iron Age*, eds C. Haselgrove, K. Rebay-Salisbury & P.S. Wells. Oxford: Oxford University Press, 797–818.
- Gell, A., 1992. The technology of enchantment and the enchantment of technology, in *Anthropology, Art and Aesthetics*, eds J. Coote & A. Shelton. Oxford: Clarendon Press, 40–63.
- Gell, A., 1998. Art and Agency: An anthropological theory. Oxford: Clarendon Press.
- Gheyle, W., A.D. Wulf, E.P. Dvornikov, A.V. Ebel, R. Goossens & J. Bourgeois, 2016. Early Iron Age burial mounds in the Altay Mountains: from survey to analysis, in *Tumulus as Sema: Space, politics, culture* and religion in the first millennium, eds O. Henry & U. Kelp. Berlin: De Gruyter, 719–31.
- Gibson, J.J., 1986. *The Ecological Approach to Visual Perception*. Hillsdale (NJ): Lawrence Erlbaum Associates.
- Giles, M., 2008. Seeing red: the aesthetics of martial objects in the British and Irish Iron Age, in *Rethinking Celtic Art*, eds D. Garrow, C. Gosden & J.D. Hill. Oxford: Oxbow, 59–77.
- Giles, M., 2012. A Forged Glamour: Landscape,identity and material culture in the Iron Age. Oxford: Windgather Press.
- Ginoux, N., 2012. Images and visual codes of early Celtic warrior elites (5th–4th centuries BC), in *Kunst und Kommunikation* [Art and communication], ed. C. Pare. Mainz: Römisch-Germanisches Zentralmuseum, 179–90.
- Ginoux, N.C. & P.C. Ramsl, 2014. Art and craftsmanship in elite-warrior graves: 'from Boii to Parisii and back again ...', in *Celtic Art in Europe: Making connections*, eds C. Gosden, S. Crawford & K. Ulmschneider. Oxford: Oxbow, 274–85.
- Goldberg, M., 2015. At the western edge of the Christian world, c. AD 600–900, in Celts: Art and identity, eds J. Farley & F. Hunter. London: British Museum, 172–205.
- Golubiewski-Davis, K., 2018. From 3D scans to networks: using swords to understand communities of central European Bronze Age smiths. *Open Archaeology* 4 (1), 123–44.
- Gori, M. & A. Abar, 2022. Comparing apples and oranges? Confronting social science and natural science approaches to migration in archaeology, in *Rethinking Migrations in Late Prehistoric Eurasia*, eds M. Fernández-Götz, C. Nimura, P.W. Stockhammer & R. Cartwright. (Proceedings of the British Academy 254.) Oxford: Oxford University Press/ British Academy, 21–40.
- Gosden, C., 2005. What do objects want? Journal of Archaeological Method and Theory 12(3), 193–211.

- Gosden, C., 2023. Trade and exchange, in *The Oxford Handbook of the European Iron Age*, eds C. Haselgrove, K. Rebay-Salisbury & P.S. Wells. Oxford: Oxford University Press, 871–86.
- Gosden, C., S. Crawford & K. Ulmschneider (eds), 2014. *Celtic Art in Europe: Making connections*. Oxford: Oxbow.
- Gregersen, N.H., 2017. Religion and axiality: theological reflections on Robert N. Bellah's Axial Age hypothesis. *Scottish Journal of Theology* 70(1), 61–73.
- Gregory, R.L., 1998. *Eye and Brain: The psychology of seeing* (5th edn). Oxford: Oxford University Press.
- Griffith, G.T., 1935. *The Mercenaries of the Hellenistic World*. Cambridge: Cambridge University Press.
- Guggisberg, M.A., 2000. Der Goldschatz von Erstfeld: Ein keltsicher Bilderzyklus zwischen Mitteleuropa und der Mittelmeerwelt [The gold treasure from Erstfeld: a Celtic picture cycle between central Europe and the Mediterranean world]. Basel: Verlag Schweizerische Gesellschaft für Ur- und Frühgeschichte.
- Guggisberg, M.A., 2009a. Gotthard gold: the Erstfeld gold treasure, about 380 BC, in *Art of the Celts 700 BC to AD 700*, ed. F. Müller. Bern: Historisches Museum, 196–99.
- Guggisberg, M.A., 2009b. The torque of a Celtic princess: gold jewellery from Reinheim, about 380 BC, in *Art* of the Celts 700 BC to AD 700, ed. F. Müller. Bern: Historisches Museum, 194–5.
- Guggisberg, M.A., 2010. The Mistress of Animals, the Master of Animals: two complementary or oppositional religious concepts in Early Celtic Art? in *The Master of Animals in Old World Iconography*, eds D.B. Counts & B. Arnold. Budapest: Archaeolingua Alapítvány, 223–36.
- Guggisberg, M., 2018. Art on the northern edge of the Mediterranean world, in *The Oxford Handbook of the European Iron Age*, eds C. Haselgrove, K. Rebay-Salisbury & P.S. Wells. Oxford: Oxford University Press, 1305–36.
- Günther, T. & M. Jakobsson, 2016. Genes mirror migrations and cultures in prehistoric Europe – a population genomic perspective. *ScienceDirect* 41, 115–23.
- Guštin, M. & M. Jevtić (eds), 2011. *The Eastern Celts: The communities between the Alps and the Black Sea.* Belgrade: Koper.
- Haffner, A., 1992. Die frühlatènezeitlichen Fürstengräber von Hochscheid im Hunsrück [The Early La Tène princely burials at Hochscheid in the Hunsrück]. *Trierer Zeitschrift* 55, 25–103.
- Haselgrove, C., 2023. Coinage and coin use, in *The Oxford Handbook of the European Iron Age*, eds
 C. Haselgrove, K. Rebay-Salisbury & P.S. Wells. Oxford: Oxford University Press, 887–924.
- Hatt, J.-J., 1980. Die keltische Götterwelt und ihre bildliche Darstellung in vorrömischer Zeit [The Celtic world of deities and their pictorial representation in pre-Roman time], in *Die Kelten in Mitteleuropa: Kultur, Kunst, Wirtschaft* [The Celts in central

Europe: culture, art, economy], ed. L. Pauli. Salzburg: Amt der Salzburger Landesregierung, 52–67.

- Hauschild, M., C. Pare, K.W. Alt, C. Knipper, M. Scheeres & M. Schönfelder, 2013. Nebringen, Münsingen und Monte Bibele: Zum archäologischen und bioarchäometrischen Nachweis von Mobilität im 4./3. Jahrhundert v. Chr. [Nebringen, Münsingen and Monte Bibele: on the archaeological and bioarchaeometric evidence of mobility in the 4th and 3rd centuries BC]. Archäologisches Korrespondenzblatt 43 (3), 345–64.
- Herrmann, F.-R., 2002. Fürstensitz, Fürstengräber und Heiligtum [Princely seat, princely burials and sanctuary], in *Das Rätsel der Kelten vom Glauberg* [The puzzle of the Celts at the Glauberg], eds H. Baitinger & B. Pinsker. Stuttgart: Theiss, 90–107.
- Hess, M.S., 2015a. Bilder und Botschaften: die Darstellung der Interaktion von Mensch und Tier als ein gemeinsames Moment der Frühlatènekunst [Pictures and messages: the representation of interaction between human and animal as a common moment in Early La Tène art]. *Praehistorische Zeitschrift* 90(1–2), 318–38.
- Hess, M.S., 2015b. Bilder und Botschaften: Gesichtsdarstellungen der Frühlatènekunst [Pictures and messages: facial representations in early La Tène art], in *Interpretierte Eisenzeiten: Fallstudien, Methoden, Theorie* [Interpreted Iron Ages: case studies, methods, theory], eds R. Karl & J. Leskovar. Linz: Oberösterreichisches Landesmuseum, 153-62.
- Hodos, T., 2009. Colonial engagements in the global Mediterranean Iron Age. *Cambridge Archaeological Journal* 19, 221–41.
- Hodos, T., 2020. *The Archaeology of the Mediterranean Iron Age: A globalising world, c.* 1100–600 BCE. Cambridge: Cambridge University Press.
- Hodson, F.R., 1968. The La Tène Cemetery at Münsingen-Rain. Bern: Stämpfli.
- Holzer, V., 2014. Roseldorf an enclosed central settlement of the early and middle La Tène period in Lower Austria (Roseldorf/Němčice), in *Paths to Complexity: Centralisation and urbanisation in Iron Age Europe*, eds M. Fernández-Götz, H. Wendling & K. Winger. Oxford: Oxbow, 122–31.
- Hundt, H.-J., 1974. Die Bronzeschnabelkanne aus Grab 112
 [The bronze beaked flagon from Grave 112], in Der Dürrnberg bei Hallein II: Katalog der Grabfunde aus der Hallstatt und Latènezeit [The Dürrnberg at Hallein II: catalogue of grave finds from the Hallstatt and La Tène Periods], eds F. Moosleitner, L. Pauli & E. Penninger. Munich: C.H. Beck, 125–32.
- Jacobson-Tepfer, E., 2015. The Hunter, the Stag, and the Mother of Animals: Image, monument, and landscape in ancient North Asia. Oxford: Oxford University Press.
- Jacobsthal, P., 1944. Early Celtic Art. Oxford: Clarendon Press.

- Jaspers, K., [1949] 1953. *The Origin and Goal of History*. New Haven (CT): Yale University Press. (Translation of 1949 original German.)
- Jones, A.M. & N. Boivin, 2010. The malice of inanimate objects: material agency, in *The Oxford Handbook of Material Culture Studies*, eds D. Hicks & M.C. Beaudry. Oxford: Oxford University Press, 333–51.
- Joy, J., 2010. Iron Age Mirrors: A biographical approach. Oxford: Archaeopress.
- Joy, J., 2019. A power to intrique? Exploring the 'timeless' qualities of the so-called 'grotesque' Iron Age torc from Snettisham, Norfolk. Oxford Journal of Archaeology 38(4), 464–75.
- Joy, J., 2020. How can Celtic art styles and motifs act? A case study from later Iron Age Norfolk, in *Art in the Eurasian Iron Age: Context, connections and scale,* eds C. Nimura, H. Chittock, P. Hommel & C. Gosden. Oxford: Oxbow, 111–26.
- Juliano, A.L., 2018. Preliminary thoughts on the restructuring of the realm of the spirits: zoomorphs, fantastic and hybrid creatures (seventh century BCE to sixth century CE), in *How Objects Tell Stories*, eds K.M. Linduff & K.S. Rubinson. Turnhout: Brepols, 27–50.
- Kaul, F., 2003. The Hjortspring find the oldest of the large Nordic war booty sacrifices, in *The Spoils of Victory: The North in the shadow of the Roman Empire*, eds L. Jørgensen, B. Storgaard, L.G. Thomsen, G.T. Ingvardson & J.S. Andersen. Copenhagen: National Museum, 212–23.
- Keller, J., 1965. *Das keltische Fürstengrab von Reinheim* [The Celtic princely grave of Reinheim]. Mainz: Römisch-Germanisches Zentralmuseum.
- Kiernan, P., 2015. Miniature objects as representations of realia. World Archaeology 47(1), 45–59.
- Kisel, V.A., 2020. The predator scene in Scythian 'Animal Style' as a socio-political indicator, in *Masters of the Steppe: The impact of the Scythians and later nomad societies of Eurasia*, eds S.V. Pankova & J. Simpson. Oxford: Archaeopress, 210–15.
- Knappett, C., 2012. Meaning in miniature: semiotic networks in material culture, in *Excavating the Mind: Cross-sections through culture, cognition and materiality,* eds N. Johanssen, M.D. Jessen & H.J. Jessen. Aarhus: Aarhus University Press, 87–109.
- Kohler-Schneider, M., A. Caneppele & A.G. Heiss, 2015. Land use, economy and cult in late Iron Age ritual centres: an archaeobotanical study of the La Tène site at Sandberg-Roseldorf, Lower Austria. *Vegetation History Archaeobotany* 24(4), 517–40.
- Korolkova, E.F., 2017. Death and burial, in Scythians: Warriors of ancient Siberia, eds S.J. Simpson & S. Pankova. London: British Museum, 256–75.
- Krämer, W., 1964. Das keltische Gräberfeld von Nebringen, Kreis Böblingen [The Celtic cemetery at Nebringen, Kreis Böblingen]. Stuttgart: Verlag Silberburg.

- Krausse, D., M. Fernández-Götz, L. Larsen & I. Kretschmer, 2016. The Heuneburg and the Early Iron Age princely seats. Budapest: Archaeolingua.
- Kruta, V., 2015. *Celtic Art* (trans. K. & A. Bradford). London: Phaidon.
- Küchler, S. & T. Carroll, 2020. A Return to the Object: Alfred Gell, art, and social theory. London: Routledge.
- Lejars, T., 2006. Les Celtes d'Italie [The Celts of Italy], in Les Civilisés et les Barbares du V^e au II^e siècle avant J.-C. [The civilized and the barbarians of the 5th to the 2nd century BC], ed. M. Szabo. Glux-en-Glenne: Bibracte Centre archéologique européen, 77–96.
- Lejars, T., 2020. Les Celtes et les populations étrusques et italiques entre les V^e et III^e siècles av. J.-C. [The Celts and the Etruscan and Italic populations between the 5th and 3rd centuries BC]. *Mélanges de l'École francaise de Rome Antiquité* 132(1), 67–80.
- Lejars, T. & R. Bernardet, 2015. L'épée laténienne du sanctuaire de Junon à Gabies. Les témoignages archéologiques d'une présence celtique dans le Latium [The La Tène sword from the sanctuary of Junon at Gabies. The archaeological evidence for a Celtic presence in Latium]. *Archeologia Classica* 66, 121–88.
- Lucassen, J., 2021. *The Story of Work: A new history of humankind*. New Haven (CT): Yale University Press.
- Lucke, W. & O.-H. Frey, 1962. *Die Situla in Providence* (*Rhode Island*): *Ein Beitrag zur Situlenkunst des Osthallstattkreises* [The situla in Providence (Rhode Island): a contribution on the Situla Art of the Eastern Hallstatt region]. Berlin: Walter de Gruyter.
- Mac Sweeney, N. & P.S. Wells, 2023. Edges and interactions beyond Europe, in *The Oxford Handbook of the European Iron Age*, eds C. Haselgrove, K. Rebay-Salisbury & P.S. Wells. Oxford: Oxford University Press, 619–53.
- Malafouris, L., 2013. The Cognitive Life of Things: How things shape the mind: a theory of material engagement. Cambridge (MA): MIT Press.
- Mannsperger, D., 1981. Münzen und Münzfunde [Coins and coin finds], in *Die Kelten in Baden-Württemberg* [The Celts in Baden-Württemberg], eds K. Bittel, W. Kimmig & S. Schiek. Stuttgart: Konrad Theiss, 228–47.
- Martin, S.R. & S.M. Langin-Hooper (eds), 2018. The Tiny and the Fragmented: Miniature, broken, or otherwise incomplete objects in the ancient world. Oxford: Oxford University Press.
- Megaw, R. & V. Megaw, 1989. *Celtic Art.* London: Thames & Hudson.
- Megaw, J.V.S. & M.R. Megaw, 1990. *The Basse-Yutz Find: Masterpieces of Celtic art*. London: Society of Antiquaries.
- Millet, E., B. Dubuis & R. Bernardet, 2020. La tombe princière de Lavau et le concept d'un artisanat de cour [The princely tomb of Lavau and the concept of a courtly craft]. *Séances de la Société préhistorique francaise* 16, 161–82.

- Mitchell, S., 1993. Anatolia: Land, Men, and Gods in Asia Minor. The Celts in Anatolia and the impact of Roman rule. Oxford: Clarendon Press.
- Mitchell, W.J.T., 2005. What Do Pictures Want? The lives and loves of images. Chicago (IL): University of Chicago Press.
- Moosleitner, F., 1974. Die Funde aus den Grabungen vor 1949 [The finds from the excavations before 1949], in *Der Dürrnberg bei Hallein II: Katalog der Grabfunde aus der Hallstatt und Latènezeit* [The Dürrnberg at Hallein II: catalog of the grave finds from the Hallstatt and La Tène Periods], eds F. Moosleitner, L. Pauli & E. Penninger. Munich: C.H. Beck, 55–91.
- Morphy, H., 2009. Art as a mode of action. *Journal of Material Culture* 14(1), 5–27.
- Müller, F., 2009a. Sources for inspiration: sword-belt mounts and ornamental plaque from Weiskirchen, about 400 BC, in *Art of the Celts 700 BC to AD 700*, ed. F. Müller. Bern: Historisches Museum, 188–9.
- Müller, F. (ed.), 2009b. *Art of the Celts 700 BC to AD 700*. Bern: Historisches Museum.
- Müller-Karpe, A., 2006. Zur historischen Deutung von Funden keltischer Trachtelemente in Anatolien [On the historical meaning of finds of Celtic costume elements in Anatolia], in *Les Civilisés et les Barbares du Ve au Ile siècle avant J.-C.* [The civilized and the barbarians from the 5th to the 2nd century BC], ed. M. Szabo. Glux-en-Glenne: Bibracte – Centre archéologique européen, 119–23.
- Nebelsick, L., 2022. Ups and downs, early Latène mask fibulae as embodied narratives of metamorphosis and salvation, in *Quod erat demonstrandum: Vorgeschichtliche Studien Christopher F.E. Pare gewidmet* [*Quod erat demonstrandum:* Prehistoric studies dedicated to Christopher F.E. Pare], eds B. Nessel & L. Nebelsick. Bonn: Verlag Dr. Rudolf Habelt GmbH, 221–32.
- Nortmann, H., 2016. Frühlatènekunst in der Mittelrheinzone: Charakter, Umfeld, Entstehung [Early La Tène art in the middle Rhine zone: character, environment, emergence]. *Archäologisches Korrespondenzblatt* 46(2), 213–31.
- O'Sullivan, R. & P. Hommel, 2020. Fantastic beasts and where to find them: composite animals in the context of Eurasian Iron Age art, in Art in the Eurasian Iron Age: Context, connections and scale, eds C. Nimura, H. Chittock, P. Hommel & C. Gosden. Oxford: Oxbow, 53–70.
- Olivier, L., 2014. Les codes de représentation visuelle dans l'art celtique ancien [The codes of visual representation in early Celtic art], in *Celtic Art in Europe: Making connections*, eds C. Gosden, S. Crawford & K. Ulmschneider. Oxford: Oxbow, 39–55.
- Olivier, L., 2020a. How Celts perceived the world: early Celtic art and analogical thought, in *Art in the Eurasian Iron Age: Context, connections and scale*, eds C. Nimura, H. Chittock, P. Hommel & C. Gosden. Oxford: Oxbow, 95–110.

- Olivier, L., 2020b. In the eye of the dragon: how the ancient Celts viewed the world, in *Barbaric Splendour: The use of image before and after Rome*, eds T.F. Martin & W. Morrison. Oxford: Archaeopress, 18–33.
- Ong, W.J., 1982. Orality and Literacy: The technologizing of the world. New York (NY): Methuen.
- Ong, W.J., 1986. Writing is a technology that restructures thought, in *The Written World: Literacy in transition*, ed. G. Baumann. Oxford: Clarendon Press, 23–50.
- Osborne, R., 2018. *The Transformation of Athens: Painted pottery and the creation of Classical Greece.* Princeton (NJ): Princeton University Press.
- Osborne, R. & J. Tanner (eds), 2007. Art's Agency and Art History. Oxford: Blackwell.
- Parachaud, K., 2018. Les Galates en Asie Mineure au regard de la culture matérielle. Hellénisation, maintien, acculturation? [The Galatians in Asia Minor with regard to the material culture. Hellenization, maintenance, acculturation?]. Anatolia Antiqua 26, 23–44.
- Parachaud, K., 2020. L'origine européenne des Galates au regard des données archéologiques [The European origin of the Galatians with regard to the archaeological evidence], in Unité et diversité du monde celtique. Actes du 42e colloque international de l'Association française pour l'étude de l'âge du Fer (Prague, 10–13 mai 2018) [Unity and diversity in the Celtic world. Acts of the 42nd international colloquium of the French Association for the Study of the Iron Age (Prague 10–13 May 2018)], eds G. Pierrevelcin, J. Kysela & S. Fichtl. Paris: AFEAF, 475–8.
- Parachaud, K., 2022. Les Galates, 'seigneurs des forts'? [The Galatians, 'lords of the forts'?]. *Dipnot* 13/04/2022. https://dipnot.hypotheses.org/2555/
- Pare, C., 1991. *Fürstensitze*, Celts and the Mediterranean world: developments in the West Hallstatt culture in the 6th and 5th centuries BC. *Proceedings of the Prehistoric Society* 57(2), 183–202.
- Pare, C., 2012. Eastern relations of early Celtic art, in Kunst und Kommunikation: Zentralisierungsprozesse in Gesellschaften des europäischen Barbarikum im 1. Jahrtausend v. Chr. [Art and communication: centralization processes in societies of the European barbaricum during the 1st millennium BC], ed. C. Pare. Mainz: Römisch-Germanisches Zentralmuseum, 153–78.
- Pauli, L., 1975. Keltischer Volksglaube: Amulette und Sonderbestattungen am Dürrnberg bei Hallein im eisenzeitlichen Mitteleuropa [Celtic folk belief: amulets and special burials on the Dürrnberg at Hallein in Iron Age central Europe]. Munich: Beck.
- Pope, R., 2022. Re-approaching Celts: origins, society, and social change. *Journal of Archaeological Research* 30, 1–67.
- Prosdocimi, A., 1987. Celti in Italia prima de dopo il V secolo a.C. [Celts in Italy before and after the 5th century BC], in *Celti ed Etruschi nell'Italia centrosettentrionale dal V secolo a.C. alla romanizzazione*

[Celts and Etruscans in central-northern Italy from the 5th century BC to Romanization], ed. D. Vitali. Bologna: Bologna University Press, 561–81.

- Pulliam, H., 2015. Tracing the Celts? Survival and transformation, c. AD 800–1600, in Celts: Art and identity, eds J. Farley & F. Hunter. London: British Museum, 206–33.
- Randsborg, K., 1996. *Hjortspring: Warfare and sacrifice in early Europe*. Aarhus: Aarhus University Press.
- Rapin, A., 1995. Propositions pour un classement des équipements militaires celtiques en amont et en aval d'un repère historique: Delphes 278 avant J.-C. [Propositions for a classification of Celtic military equipment in the context of a historic landmark: Delphi in 278 BC], in L'Europe celtique du Ve au IIIe siècle avant J.-C. Contacts, échanges et mouvements de populations [Celtic Europe of the 5th to the 3rd century BC. Contacts, exchanges and population movements], ed. J.-J. Charpy. Sceaux: Kronos BY, 275–90.
- Rapin, A., 2001. Un bouclier celtique dans la colonie grecque de Camarina (Sicile) [A Celtic shield in the Greek colony of Camarina (Sicily)]. *Germania* 79(2), 273–96.
- Reeder, E.D. (ed), 1999. Scythian Gold: Treasures from ancient Ukraine. New York (NY): Harry N. Abrams.
- Reinhard, W., 2004. *Die keltische Fürstin von Reinheim* [The Celtic princess of Reinheim]. Gersheim-Reinheim: Stiftung Europäischer Kulturpark.
- Riva, C. & I.G. Mira, 2022. Global archaeology and microhistorical analysis. Connecting scales in the 1st-millennium B.C. Mediterranean. *Archaeological Dialogues* 29, 1–14.
- Robb, J., 2010. Beyond agency. *World Archaeology* 42(4), 493–520.
- Robb, J., 2015. Prehistoric art in Europe: a deep-time social history. *American Antiquity* 80(4), 635–54.
- Robb, J., 2020. Art (pre) history: ritual, narrative and visual culture in Neolithic and Bronze Age Europe. *Journal* of Archaeological Method and Theory 27(3), 454–80.
- Romankiewicz, T., 2020. Vision and visual experience in Early Celtic Art: towards new interpretations from neuro-atypical perspectives. *World Archaeology* 52 (2), 264–83.
- Roncaglia, C.E., 2018. Northern Italy in the Roman World: From the Bronze Age to Late Antiquity. Baltimore (MD): Johns Hopkins University Press.
- Roymans, N. & M. Fernández-Götz, 2019. Reconsidering the Roman conquest: new archaeological perspectives. *Journal of Roman Archaeology* 32, 415–20.
- Rustoiu, A., 2006. A journey to Mediterranean. Peregrinations of a Celtic warrior from Transylvania. *Studia Universitatis Babes-Bolyai, Historia* 1, 42–85.
- Rustoiu, A., 2011. The Celts from Transylvania and the eastern Banat and their southern neighbours. Cultural exchanges and individual mobility, in *The Eastern Celts: The communities between the Alps and the Black Sea*, eds M. Guštin & M. Jevtić. Belgrade: Koper, 163–70.

- Rustoiu, A. & S. Berecki, 2014. Celtic elites and craftsmen: mobility and technological transfer during the Late Iron Age in the eastern and south-eastern Carpathian Basin, in Iron Age Craft and Craftsmen in the Carpathian Basin. ProceedIngs of the International Colloquium from Târgu Mureş 10–13 October 2013, ed. S. Berecki. (BMM-SA VII.) Târgu Mureş: Editure MEGA, 249–78.
- Scheeres, M., C. Knipper, M. Hauschild, et al., 2013. Evidence for 'Celtic migrations'? Strontium isotope analysis at the Early La Tène (LT B) cemeteries of Nebringen (Germany) and Monte Bibele (Italy). Journal of Archaeological Science 40(10), 3614–25.
- Schönfelder, M., 2007. Zurück aus Griechenland Spuren keltischer Söldner in Mitteleuropa [Back from Greece – traces of Celtic mercenaries in central Europe]. *Germania* 85, 307–28.
- Sims-Williams, P., 2006. Ancient Celtic Place-Names in Europe and Asia Minor. Oxford: Philosophical Society.
- Spindler, K., 1976. Der Magdalenenberg bei Villingen: Ein Fürstengrabhügel des 6. vorchristlichen Jahrhunderts [The Magdalenenberg at Villingen: a princely burial mound of the 6th century BC]. Stuttgart: Konrad Theiss.
- Stafford, B., 2007. *Echo Objects: The cognitive work of images*. Chicago (IL): University of Chicago Press.
- Steuer, H., 1982. Frühgeschichtliche Sozialstruktion in Mitteleuropa [Early historical social structures in central Europe]. Göttingen: Vandenhoeck & Ruprecht.
- Stoddart, S., 2022. From the Axial Age to the Fifth Sun. The articulation of the local with the global. *Archaeological Dialogues* 29, 18–21.
- Stöllner, T., 2010. Kontakt, Mobilität und Kulturwandel im Frühlatènekreis: Das Beispiel Frühlatènegürtelhaken [Contact, mobility and culture change in the Early La Tène region: the example of the Early La Tène belt hooks], in Nord–Süd, Ost–West: Kontakte während der Eisenzeit in Europa [North-south, eastwest: contacts during the Iron Age in Europe], eds E. Jerem, M. Schönfelder & G. Wieland. Budapest: Archaeolingua, 277–319.
- Stöllner, T., 2014. Between ruling ideology and ancestor worship: the mos maiorum of the early Celtic 'hero graves', in *Celtic Art in Europe: Making connections*, eds C. Gosden, S. Crawford & K. Ulmschneider. Oxford: Oxbow, 119–36.
- Stöllner, T., 2019. Identity and memory: approaches to understanding the early Celtic art, in *Hallstatt und Italien: Festschrift für Markus Egg* [Hallstatt and Italy: Festschrift for Markus Egg], eds H. Baitinger & M. Schönfelder. Mainz: Römisch-Germanisches Zentralmuseum, 589–619.
- Strobel, K., 1996. Die Galater: Geschichte und Eigenart der keltischen Staatbildung auf dem Boden des hellenistischen Kleinasien [The Galatians: history and character of Celtic state formation in Hellenistic Asia Minor]. Berlin: Akademie Verlag.

- Szabó, M., 1991. Mercenary activity, in *The Celts*, eds S. Moscati, O.-H. Frey, V. Kruta, B. Raftery & M. Szabó. New York (NY): Rizzoli, 333–6.
- Szabó, M., 1995. Guerriers celtiques avant et après Delphes: contribution à une période critique du monde celtique [Celtic warriors before and after Delphi: contribution to a critical period in the Celtic world], in L'Europe celtique du Ve au IIIe siècle avant J.-C. Contacts, échanges et mouvements de populations [Celtic Europe of the 5th to the 3rd century BC. Contacts, exchanges and population movements], ed. J.-J. Charpy. Sceaux: Kronos BY, 49–67.
- Szabó, M., 2006. Les Celtes de l'Est [The Celts of the east], in Les Civilisés et les Barbares du Ve au Ile siècle avant J.-C. [The civilized and the barbarians from the 5th to the 2nd century BC], ed. M. Szabo. Glux-en-Glenne: Bibracte – Centre archéologique européen, 97–117.
- Szabó, M., 2014. Sur la question de l'élite des Celtes orientaux à l'âge du Fer [On the question of the western Celtic elites during the Iron Age]. *Acta Archaeologica Scientiarum Hungaricae* 65, 73–117.
- Thomas, N., 2018. Oceanic Art (2nd edn). New York (NY): Thames & Hudson.
- Thote, A., 2000. Continuities and discontinuities: Chu burials during the Eastern Zhou period, in *Exploring China's Past: New discoveries and studies in archaeology and art*, eds R. Whitfield & T. Wang. London: Saffron Books, 189–204.
- Thote, A., 2016. Elite burials in first-millennium BC China: towards individualization, in *Eurasia at the Dawn of History: Urbanization and social change*, eds M. Fernández-Götz & D. Krausse. New York (NY): Cambridge University Press, 211–24.
- Vedeler, M., 2018. The charismatic power of objects, in Charismatic Objects from Roman Times to the Middle Ages, eds Z.T. Glørstad, E.S. Kirstoffersen, I.M. Røstad & M. Vedeler. Oslo: Cappelen Damm Akademisk, 9–29.
- Verger, S., 1995. De Vix à Weiskirchen. La transformation des rites funéraires aristocratiques en Gaule de Nord et de l'Est au Ve siècle avant J.-C. [From Vix to Weiskirchen. The transformation of aristocratic funerary rituals in northern and eastern Gaul during the 5th century BC]. *Mélanges de l'école francaise de Rome* 107, 335–458.
- Vitali, D., 2004a. I Celti in Italia [The Celts in Italy], in *Guerrieri, principi ed eroi: Fra il Danubio e il Po dalla preistoria all'alto Medioevo* [Warriors, princes and heroes: from the Danube to the Po from prehistory to the Middle Ages], eds F. Marzatico & P. Gleirscherpp. Trento: Provincia autonoma de Trento, 315–29.
- Vitali, D., 2004b. La Cispadana tra IV e II secolo A.C. [The Cispadana from the 4th to the 2nd century BC], in *Des Ibères aux Vénètes* [From the Iberians to the Veneti], eds S. Agusta-Boularot & X. Lafon.

(Collection de l'Ecole française de Rome 328.) Rome: Ecole française de Rome, 278–92.

- Vitali, D., 2010. Die keltische Kunst und die Boier in Italien [Celtic art and the Boii in Italy], in Kelten! Kelten? Keltische Spuren in Italien [Celts! Celts? Traces of Celts in Italy], ed. M. Schönfelder. Mainz: Römisch-Germanisches Zentralmuseum, 34–7.
- Vitali, D. & G. Kaenel, 2000. Un Helvète chez les Etrusques vers 300 Av. J.-C. [A Helvetian among the Etruscans around 300 BCE] Archäologie der Schweiz 23(3), 115–22.
- Voigt, M.M., 2003. Celts at Gordion. The Late Hellenistic settlement. *Expedition* 45(1), 14–19.
- Vorlauf, D., 1997. *Die etruskischen Bronzeschnabelkannen* [The Etruscan bronze beaked flagons]. Rahden: Marie Leidorf.
- Waldhauser, J., 1987. Keltische Gräberfelder in Böhmen [Celtic cemeteries in Bohemia]. *Bericht der Römisch-Germanischen Kommission* 68, 25–179.
- Wells, P.S., 1995. Identities, material culture, and change: 'Celts' and 'Germans' in Late Iron Age Europe. Journal of European Archaeology 3(2), 169–85.
- Wells, P.S., 1999. The Barbarians Speak: How the conquered peoples shaped Roman Europe. Princeton (NJ): Princeton University Press.
- Wells, P.S., 2001. Beyond Celts, Germans and Scythians: Archaeology and identity in Iron Age Europe. London: Duckworth.
- Wells, P.S., 2007. Weapons, ritual and communication in Late Iron Age northern Europe, in *The Later Iron* Age in Britain and Beyond, eds C. Haselgrove & T. Moore. Oxford: Oxbow, 468–77.
- Wells, P.S., 2012. How Ancient Europeans Saw the World: Vision, patterns, and the shaping of the mind in prehistoric times. Princeton (NJ): Princeton University Press.
- Wells, P.S., 2017. Visually complex objects, ontology of space and political dynamics. *Cambridge Archaeological Journal* 27(4), 617–30.
- Wells, P.S., 2020a. Eurasian Iron Age interactions: a perspective on the sources and purposes of La Tène style ('Celtic') art, in Art in the Eurasian Iron Age: Context, connections and scale, eds C. Nimura, H. Chittock, P. Hommel & C. Gosden. Oxford: Oxbow, 37–52.
- Wells, P.S., 2020b. Weapons, ritual and warfare: violence in Iron Age Europe, in *The Cambridge World History of Violence. Vol. 1: The Prehistoric and Ancient Worlds*, eds G.G. Fagan, L. Fibiger, M. Hudson & M. Trundle. Cambridge: Cambridge University Press, 142–59.
- Wells, P.S., forthcoming. Ornate drinking vessels as indices of feasting in Bronze and Iron Age Europe.
- Wendling, H., 2018. Frühkeltische Kunst: Vergangene Bildwelten – Vergessene Mythen [Early Celtic art: past picture-worlds – forgotten myths], in Faber Salisburgi: Festschrift für Wilfried K. Kovacsovics [Faber Salisburgi: Festschrift for Wilfried K. Kovacsovics], eds R. Kastler, F. Lang &

H. Wendling. Salzburg: Eigenverlag Universität Salzburg, 359–75.

- Wexler, B.E., 2006. Brain and Culture: Neurobiology, ideology, and social change. Cambridge (MA): MIT Press.
- Wright, J.W., W. Honeychurch & C. Amartuvshin, 2009. The Xiongnu settlements of Egiin Gol, Mongolia. *Antiquity* 83, 372–87.
- Wu, X., 2017. *Material Culture, Power, and Identity in Ancient China*. Cambridge: Cambridge University Press.

Author biography

Peter S. Wells is Professor of Anthropology at the University of Minnesota. He has written a number of books and numerous papers about the European Iron Age. Among his principal current interests are visual reception of and responses to material culture, interactions between communities and societies, and uses of objects as media of communication.