Late La Tène painted pottery: use and deposition

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Abstract

The earliest pained pottery appeared in Brittany, the Marne and the Champagne-Ardennes regions of France during the early La Tène period (Corradini 1991; Guichard 1994: 103). These wares are decorated with simple curvilinear and vegetal motifs using black paints on a red background and according to Kruta (1991) the imagery is derived or inspired by decorated bronze metalwork. The majority of findspots are from graves (Corradini 1991). Unlike the late La Tène painted pottery complex geometric and zoomorphic designs are unknown. Following a hiatus the production of painted pottery recommenced during the late Iron Age and it is one of the diagnostic finds for this period being found from Hungary in the east, Slovakia, the Czech Republic, Germany, Switzerland, to France in the west (cf. Charpy [ed.] 1991). Such pottery appeared in France during the third century and disappeared during the 1st century BC, although in some areas, such as the Forez (Roanne, dep. of the Loire) (Figure 1), it continued to be made into the Gallo-Roman period with the distinctive 'bol de Roanne' (Grand 1995). The most impressive examples are confined to central and eastern France (Barral, Huet 1998; Guichard 1987; 1994; 2003; Lavendhomme, Guichard 1997; Périchon 1974; 1991; Vaginay, Guichard 1988) from territory that belonged to the tribes of the Arverni, Segusiavi and Aedui, which today corresponds to the modern regions of the Auvergne, Forez and Burgundy. Research on these vessels has focused upon the techniques of manufacture (Andrews 1990; 1991; 1996; 1997; Cumberpatch, Pawlikowski 1988; Guichard, Guineau 1991; Huet et al. 1997) and defining and dating the decorative styles (Guichard 1987; 1994; 2003). The imagery especially the plant motifs (blossoms, lotus buds, palmettes etc) are seen as being derived, or inspired by Mediterranean (Greek, Etruscan) and Middle Eastern cultures (Megaw, Megaw 2001: 20-1). This paper explores the possibility that the decorations might be inspired by imagery resulting from altered states of consciousness (trance imagery). The use and deposition of late La Tène painted pottery in parts of central France is also addressed.

Zusammenfassung

Bemalte Keramik tritt in der Bretagne, dem Marne-Gebiet und der Champagne-Ardennen-Region Frankreichs zum ersten Mal während der frühen Latènezeit auf (Corradini 1991; Guichard 1994: 103). Die Verzierungen bestehen hauptsächlich aus einfachen linearen Kurven und Pflanzenmotiven, in schwarzer Farbe auf rotem Hintergrund aufgebracht, und leiten sich laut Kruta (1991) aus der Metallkunst ab, oder sind von dieser inspiriert. Die Mehrheit der Funde stammt aus Gräbern (Corradini 1991). Anders als bei der spätlatènezeitlichen Bemaltkeramik sind komplexe geometrische und zoomorphische Verzierungen unbekannt. Nach einer Unterbrechung setzt bemalte Keramik neuerlich gegen Ende der Eisenzeit ein und gilt als eines der diagnostischen Merkmale für diese Periode zwischen Ungarn im Osten, der Slowakei, Tschechien, Deutschland, der Schweiz und Frankreich im Westen (cf. Charpy [ed.] 1991). Derartige Keramik tritt in Frankreich ab dem dritten Jahrhundert auf und wird im ersten Jh. v. Chr. wieder aufgegeben, obwohl sich in manchen Gebieten, wie in Forez (Roanne, dep. of the Loire) (Figure 1), die Tradition bis in die gallo-römische Periode mit dem charakteristischen 'bol de Roanne' (Grand 1995) erhält. Die beeindruckendsten Funde beschränken sich auf Zentral- und Ostfrankreich (Barral, Huet 1998; Guichard 1987; 1994; 2003; Lavendhomme, Guichard 1997; Périchon 1974; 1991; Vaginay, Guichard 1988), auf das Gebiet der Arverner, Segusiaver und Haeduer, das den heutigen Regionen Auvergne, Forez und Burgund entspricht. Die Erforschung dieser Gefäße hat sich bisher auf die Herstellungstechnik (Andrews 1990; 1991; 1996; 1997; Cumberpatch, Pawlikowski 1988; Guichard, Guineau 1991; Huet et al. 1997) und die Definition und Datierung der Verzierungsstile konzentriert (Guichard 1987; 1994; 2003). Die Bildsprache, besonders die planzlichen Motive (Lotosblüten, Palmetten usw.), wird von mediterranen (griechischen, etruskischen) und nahöstlichen Vorbildern abgeleitet (Megaw, Megaw 2001: 20-1). Diese Analyse untersucht, ob die Motivik durch Wahrnehmungen während veränderten Bewusstseinszuständen (Trance) inspiriert worden sein könnte. Darüber hinaus wird die Verwendung und Deponierung von spätlatènezeitlicher Bemaltkeramik in Zentralfrankreich besprochen.

Late Iron Age painted pottery

Painted vessels were made on a fast wheel, are generally tall, with a narrow mouth, and were decorated with a variety of geometric, vegetable/floral and spectacular animal motifs, using red, white, brown or black slips, although most images primarily make use of white and red slips (Andrews 1997). The decorative style is often negative, in that the image is formed by the underlying vessel slip and a second slip, often brown or black, is used to outline the image, or to add other decorations.

Chronology

Recent work on the chronology of the late Iron Age sites in the Auvergne central France (Mennessier-Jouannet [ed.]1999; 2000; 2001; 2002; Deberge et al. 2002a; 2000b, Deberge et al. in prep.1) allows us to understand the appearance and the evolution of these vessels in some detail (Figure 2). Painted wares first appeared during the later 3rd century BC (La Tène B2/C1 and C1) with examples at La Grande Borne Aulnat/Chantier 4 in Chemin 8 (Guichard, Orengo 2000a) and ditch 12-13 (Guichard, Orengo 1999) (Figure 3). These earliest vessels are decorated with simple bands of colour, or vessels coated in either red or white. By the start of the 2nd century BC (La Tène C2), these

wares become more common (Figure 2) although only geometric designs are found. The frequency of painted wares peaks in the horizon dating to c.175-150 BC (La Tène C2b) (Figure 2), which sees the first appearance of complex vegetal and zoomorphic designs. Painted wares become rarer during the late 2nd (La Tène D1a recent, 125-100 BC) and 1st century BC (La Tène D1b-D2) and the complex geometric and zoomorphic designs tend to disappear. Vessels with the elaborate decorations are therefore associated with the pre-*oppida* settlements including the agglomeration at Aulnat/Gandaillat (Deberge et al. in prep. 2). They are also found on many of the rural farmsteads in the region such as at Le Pâtural (Deberge et al. in prep. 3) suggesting that access to these vessels was relatively open. Such wares are poorly represented on the 1st century BC *oppida* here (Corent, Gondole and Gergovie).

A similar picture emerges for the adjacent Forez region (dep. Loire): painted wares are absent from the site of Châtelard Lijay, which dates to the second half of the 3rd century BC (La Tène B2) (Belfort et al. 1986) and appear at Roanne in the first horizon dating to 160-140 BC (La Tène C2/D1) (Lavendhomme, Guichard 1997: 114) (Figure 3). Geometric and zoomorphic designs are found in horizon 1 at Roanne but like the Auvergne do not survive into the 1st century BC (Lavendhomme, Guichard 1997: 117). The distribution of these vessels are not confined to the major settlements with important assemblages at the sites of Feurs (Vaginay, Guichard 1987) and at Goincet (Poncins) (Vaginay, Guichard 1984) dating to the 2nd century BC.

In contrast to central France, painted wares are found in considerably lower numbers in central Europe. For the Czech Republic these wares are confined to the *oppida* although they also turn up in moderate numbers on village type settlements while for Slovakia and Poland they are more evenly distributed (Cumberpatch 1995: 65-7). Cumberpatch suggests that for central Europe these vessels were valuable and high status and were rarely exchanged (1995: 81).

Function: wine service?

Many of the insides of the painted vessels from the Auvergne and the Forez are lined with resin and it has been suggested that they were prestige items (equivalent

1: Roanne
2: Feurs
3: Châtelard de Lijay
4: Goincet
5: Levroux Les Arènes
6: Hannogne
7: Bibracte
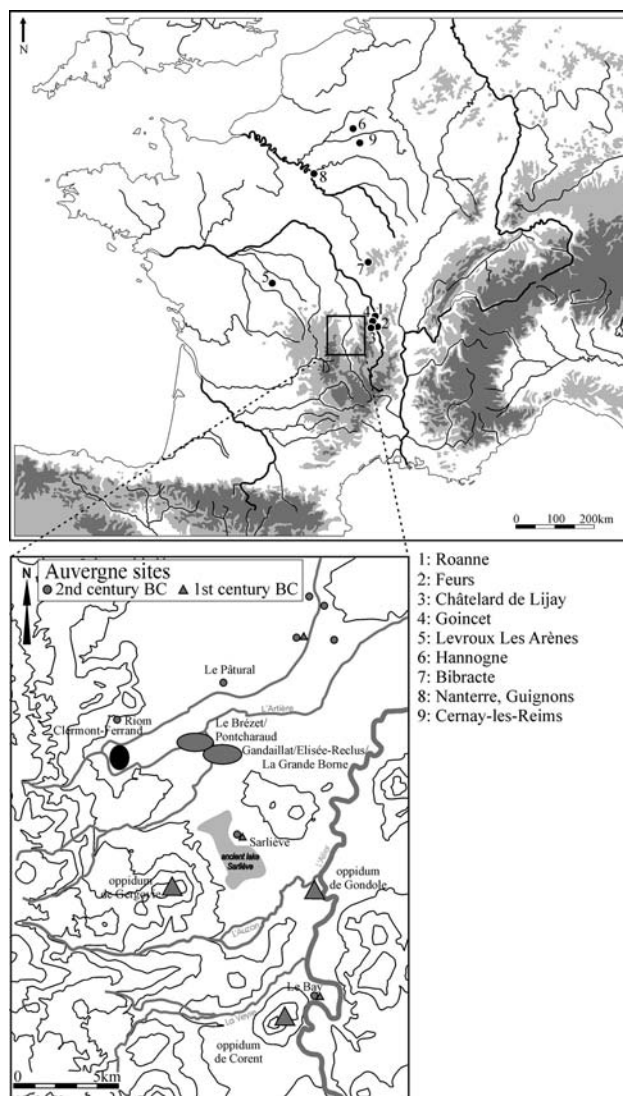8: Nanterre, Guignons
9: Cernay-les-Reims

Figure 1.
Location of the main French sites mentioned in the text.

to metallic vessels) for the serving and the consumption of imported wine (Guichard 1994: 119-20; Huet et al. 1997: 1478). The association of painted vessels with a Dressel 1 amphora, a Campanian cup and a bronze Kelheim jug in one of the La Tène D tombs at Hannogne (dep. Ardennes) also leads Chossenot (1991: 188) to suggest that painted wares served as part of the wine service. However, for both the Auvergne and the Forez painted pottery is found in contexts predating the importation of Italian wine amphorae. For example, amphorae are rarely found in contexts dating to before 150 BC (La Tène C2) in the Auvergne and only appear in large numbers during the later 2nd century BC (La
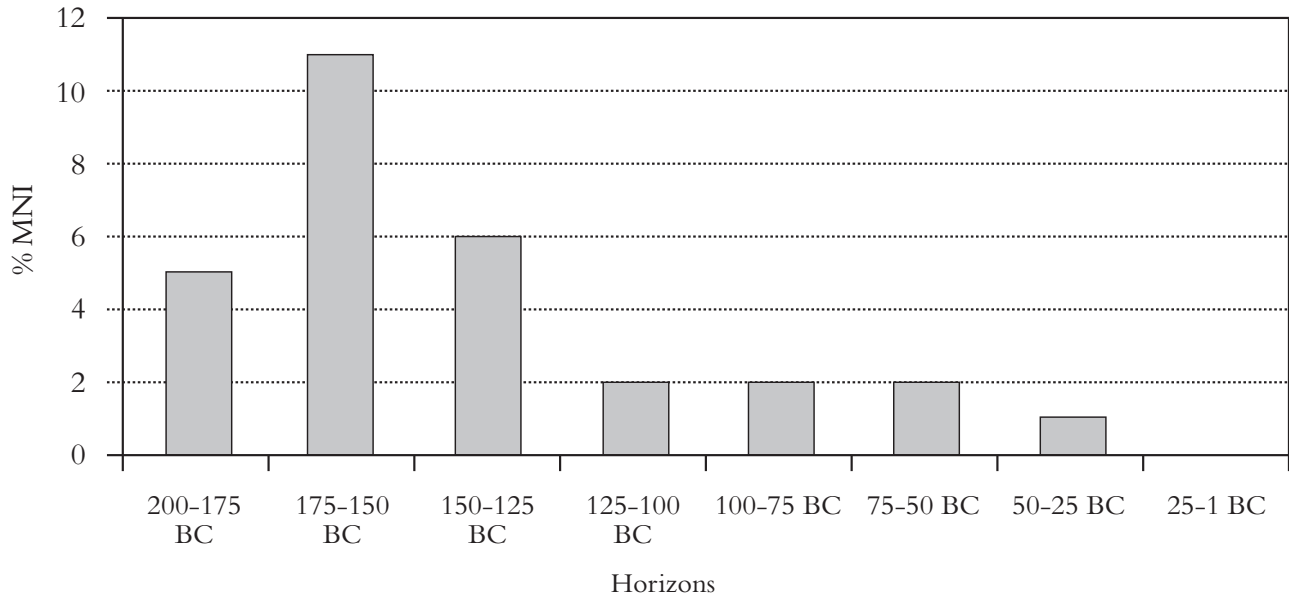
Auvergne painted pottery

Figure 2.
Frequency of painted pottery (% of the total number of ceramic vessels) for the chronological horizons for the Auvergne (after Deberge et al. 2002a; 2002b).

Tène D1) (Loughton in Deberge et al. in prep.1). At Roanne the first two chronological horizons (160-140 and 130-120 BC), contain hardly any amphorae but a considerable number of painted vessels (Figure 4) (Lavendhomme, Guichard 1997: 114 fig. 101, 133 fig 115). In contrast, horizons 3 and 4 contain many amphorae but the lowest frequencies of painted vessels (Lavendhomme, Guichard 1997: 114 fig. 101, 133 fig. 115). Painted pottery is rare for other parts of central France, such as Berry (Soyer 1991), where wine amphorae are found in large quantities at Levroux Les Arènes (Loughton 2003). It appears that for central France painted vessels were not used exclusively for the serving of wine and were initially used for serving beer or mead, and only later adopted as part of the wine service. As the decline in the frequency of painted pottery coincided with the large-scale importation of Republican amphorae it is tempting to argue for a link between the two.

Trance imagery

In 1988, Lewis–Williams and Dowson suggested that European Upper Palaeolithic cave art might be linked to altered states of consciousness. This idea has been developed and applied to other material from the Palaeolithic period (Lewis–Williams 1991, 1997a, 1997b) including figurines (Dowson, Porr 2001). In altered states of consciousness, or trance states, visual imagery is produced in the eyes and the brain independently of any outside source of light (Lewis–Williams, Dowson 1988: 202). This imagery is known as entoptic phenomena (also sometimes referred to as phosphenes or form constants) and includes various geometric shapes. Entoptics can be combined, superimposed and rotated to form complex images. Such states can be produced by the use of psychotropic substances, sensory deprivation, visual stimulation, rhythmic dancing, drumming, migraine and schizophrenia (Lewis–Williams 1997a: 817; 2002: 124-30; Lewis–Williams, Dowson 1988: 202). Various drugs and hallucinogenic substances were available during the Iron Age including alcohol, cannabis, henbane and various fungi (Dronfield 1995b: 262-5).

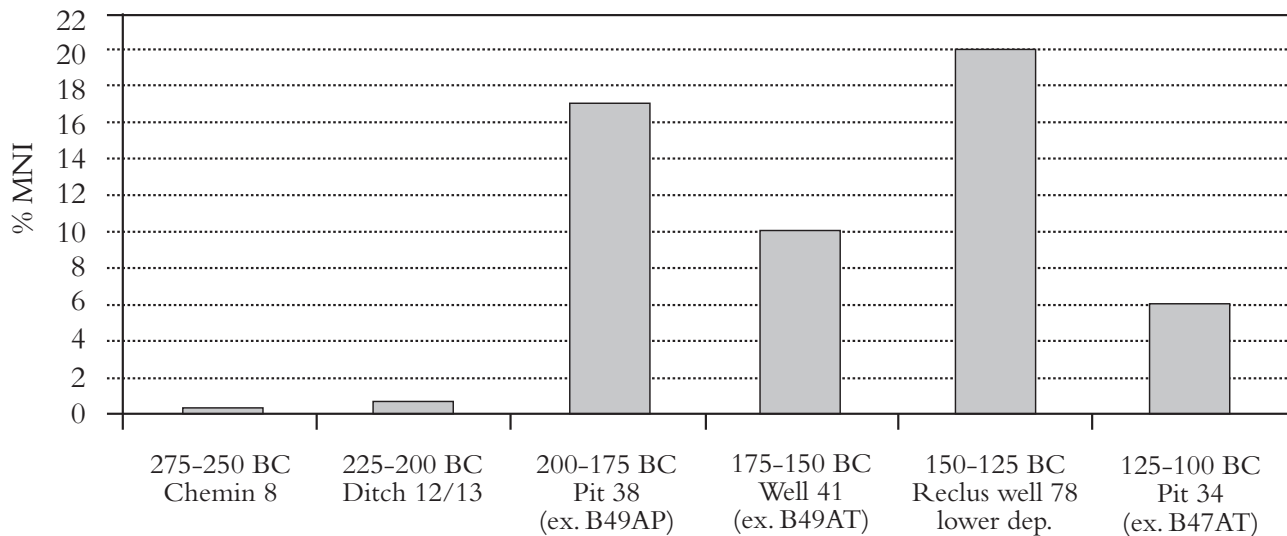## Painted pottery at La Grande Borne Aulnat

Figure 3.
Frequency of painted pottery (% of the total number of ceramic vessels) at selective features from the late La Tène agglomeration of Aulnat (after Mennessier-Jouannet [ed.] 1999; 2000; 2001).

The six most frequent and fundamental entoptic forms are: grid/lattice/hexagonal pattern, parallel lines, dots and short flecks, zigzag lines, nested catenary curves and meandering lines (Lewis–Williams, Dowson 1988: 203). Dronfield has recently suggested that not all of these forms are equally diagnostic as some can be produced by non-trance states (non-subjective imagery) while many shapes, regardless of their mode of origin, can resemble entoptics (1993). According to Dronfield triangles and rectangles are typical of non-trance imagery although they do occur in art of a known trance origin (1993: 185, 188-9).

Lewis–Williams and Dowson outlined three stages of developing and increasing imagery although they are not necessarily sequential (1988: 203-4; Lewis–Williams 2004: 107-8). The first stage consists of just entoptic phenomena, which by stage two become transformed into iconic objects. In stage three subjects may experience a vortex and iconic images can be framed by entoptic phenomena (Lewis–Williams 2002: 130, 150-2, 206-7). During this stage, individuals may believe that they are turning into an animal, flying, or even underwater and that their limbs are exceedingly long (Lewis–Williams 2002: 147-50). Individuals can

also feel that they are actually becoming dissociated from their body and participating in their hallucinations. Images from this stage combine entoptics with animal and human imagery (Lewis–Williams, Dowson 1988: 211).

Evidence for trance derived imagery has been found in material from various periods of prehistory. Examples include the decorations found on Neolithic tombs in Brittany and Ireland (Bradley 1989; Lewis–Williams, Dowson 1993; Dronfield 1995a; 1995b; Patton 1990) and the decorations found on later Neolithic grooved ware ceramics from Scotland and southern England (Bradley 1989: 74). Dronfield has argued that the passages within Neolithic Irish tombs were physical representations of the tunnel experience, which helped to create an environment conducive to the production of trance imagery (1996: 52). Recently, a trance origin has been proposed for the decorations found on British Iron Age coins (Creighton 1995; 2000: 43-52) while Miranda Green has suggested that many animal human hybrid cult images, often interpreted as representing deities, are instead representations of shamans and those undergoing trance hallucinations (2001). Hybrid human-animal imagery is encountered on various types
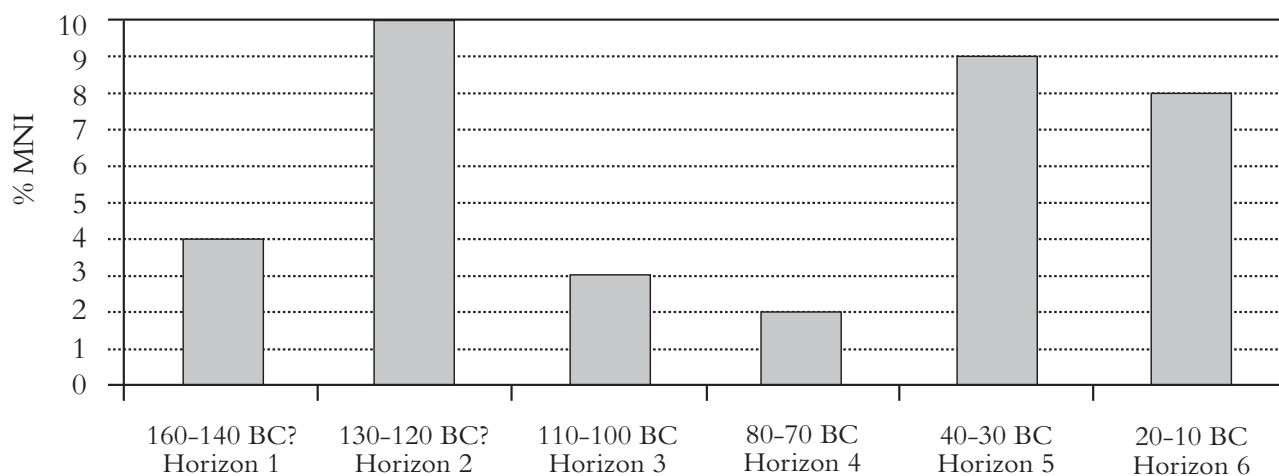
Painted pottery at Roanne (dep. Loire)

Figure 4. The frequency of painted pottery (% of the total number of ceramic vessels) for the different chronological horizons for the settlement of Roanne (after Lavendhomme and Guichard 1997: 114 fig. 101).

of Iron Age material culture including brooches, bronze flagons etc (Frey 1998: 6-8, 10) while early La Tène art frequently uses combinations of lotus flowers, tendrils and palmettes to depict simplified human faces. Early Iron Age representations of human heads are often exaggerated and contain animal features (Frey 1998: 8). There are also strong associations between human heads and vegetal designs such as the leaf crowns of mistletoe leaves found on the Pfalzfeld (St Goar, Germany) stone pillar (Green 1996: 52) and the Glauberg (Frankfurt, Germany) statues (Frey 1998: 4). Celtic art has been characterised as exhibiting "shape-changing ambiguity, of motif rather than myth,…where seemingly *abstract decoration becomes imbued with human and animal forms*" (Megaw, Megaw 2001: 22, my emphasis). This description resembles one of the key characteristics of trance induced imagery that of the creation of iconic imagery via the interpretation of entoptic imagery during deeper hallucinations. Given these examples it seems reasonable to investigate whether other types of material culture may also have been inspired by these states. Late La Tène painted pottery with its spectacular geometric and zoomorphic imagery seems a strong candidate. Does trance imagery provide an explanation for the painted pottery decorations?

Painted pottery imagery

The geometric decorations found on painted pottery furnishes considerable evidence for many of the entoptic forms (Figure 5) including the six main types (Lewis-Williams, Dowson 1988: 203, Fig. 1) (Figure 6). Many painted vessels, including the '*bols de Roanne*' (Grand 1995: fig. 9), are dominated by the image of a curvilinear vegetal motif ('yin-yang') or simple spirals (Figure 7 no. 2, 4) which could be vortex representations typical of stage three trance imagery. However, there are many shapes (Figure 5) which are not entoptic including triangles and rectangles which Dronfield has identified as non-subjective (1993: 185 fig. 5).

The majority of zoomorphic designs consist of images of horses, or deer (Guichard 1987; 1994). These images are however not straightforward representations and many show unusual features, which could be suggestive of trance imagery. Many zoomorphic images are framed by entoptic forms (Figure 7 no.11) and contain entoptic shapes such as zigzags, dots or flecks, nested catenary curves (Figure 7 no. 6, 8, Figure 8 no. 2-4) and vortex symbols (Figure 7 no. 7, 10, Figure 8 no. 5). The images also show various deformations especially of the head (Guichard 1987: 117). These include
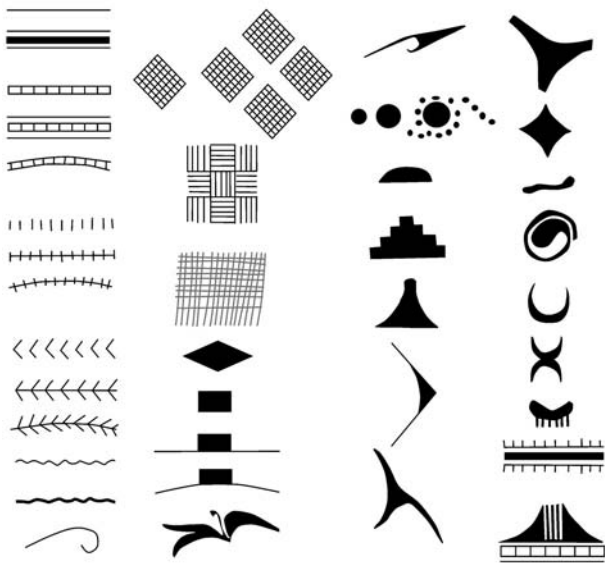
Figure 5.
Types of geometric motifs found on painted pottery (after Grand 1995: 187 fig. 9, with additions).

Figure 6.
Six main types of entoptic phenomena (after Williams and Dowson 1988: 206 fig. 1) with examples from late La Tène painted pottery.

elongated ears and noses (Figure 8, Figure 7 no. 10-11), which in some examples have become elongated into beaks (Figure 7 no. 10-11). Legs are also elongated in many images while vegetable motifs may become transformed into legs (Figure 7 no. 9-10). The extenuation of limbs is a typical sensation of individuals undergoing extreme hallucinations. Some of these transformations give the impression of weightlessness with the animals appearing to be floating upward (Figure 7 no. 10-11). On several images lines (antlers or ears?) appear to be shooting out or escaping from the head as if representing departing spirits (Figure 7 no. 11, Figure 8 no. 1). Flying and spirit motif are suggested on some vessels by geometric shapes, such as elongated v-shapes, which have been transformed into bird-like beings (Figure 7 no. 6). On one vessel from Gandaillat (dep. Puy-de-Dôme) horses appear to sprout wings (Figure 7 no. 9). These various aspects clearly indicate that these images were not representations of normal everyday animals but instead special beings.

It could be argued that images typical of the extreme stage three hallucinations, showing the combination of human and animal forms, are lacking. There is no reason why imagery depicting all three stages should be produced, indeed many societies concentrate upon the geometric imagery produced by low level states while others concentrate upon the iconic imagery of deeper states (Lewis-Williams 1997a: 824). A further point worth noting is that stage two and three imagery can sometimes be difficult to identify as the geometrical form may be masked by the realistic iconic imagery (Lewis-Williams 1997b: 326). That said, such imagery appears to be found on Iron Age coins (Creighton 2000: 45–9, fig. 2.7). On closer inspection, occasional vessels may include imagery suggestive of extreme trance states. A vessel from Elisée-Reclus (Figure 9 no. 2) shows a horse (or deer) whose ears (or antlers?) appear to have become transformed into a human face or perhaps a mirror (palmette motif with a triskele), which is emerging, or escaping, from the top of its head.

Figure 7.
Painted pottery with geometric and zoomorphic designs from central and eastern France. 1: Le Bay, 2, 5, 7: La Grande Borne, 3–4: Ro-anne, 6: Le Brézet, 8-11: Details of zoomorphic designs (not to scale); 8: Roanne, 9: Gandaillat, 10: La Grande Borne, 11: Bibracte.

Horses and deer

The majority of zoomorphic designs are either of horses or deer although it is difficult to be sure which species is being represented and they are often referred to as quadrupeds (Guichard 1987: 139 note 46; 1994: 108). Recent discoveries from the site of Gandaillat include clear images of stags with massive stylized antlers (study by Y. Deberge). Representations of other animals are rare; a vessel from Gandaillat included a dog (study by Y. Deberge). This ambiguity could be deliberate, as realistic images could have easily been created. It is possible then that many of the animals represent mythical horse-deer hybrids. Both the horse and the deer were a rich source of symbolism and beliefs during the Iron Age (Green 1986; 1989; 1993). The stag with its annual growth and shedding of antlers might have symbolised the fertility/life cycle while for the Gallo-Roman period there is evidence for the antlered deity *Cernunnos* (Green 1989: 87-91). The deer/stag might also be linked with the symbolism of the hunt including aggression and martial qualities, and also with death and resurrection (Green 1989, 100-103). The horse may have been perceived as a symbol of fertility (Green 1993: 60) but also as a liminal and a boundary motif (Green 2001: 208). The Gallo-Roman horse-goddess *(Epona)* was similarly associated with water and healing, death and rebirth (Green 1989: 16-24). In many societies, specific animals were used to symbolise the power that individuals used to enter trances (Lewis-Williams, Dowson 1988: 214). The horse had an important symbolic role in the shamanism of central Asia as not only could horses transport shamans to the spirit world they could also transport the souls of the dead (Rozwadowski 2001: 72–3). This function is also found in many Scandinavian myths (Ellis-Davidson 1964: 148; 1988: 53; Williams 2001: 204).

The postures of these animals are often distinctive and worth commenting upon. On some vessels the animals appear to be bowing down or in homage (Figure 8 no. 1-2, 5), while others appear to be dead or injured (?) (Figure 8 no. 3-4). Dead animals are frequently depicted in trance imagery: in San rock art upside down animals indicate death (Lewis-Williams 2001: 30); while trance art of various North American tribes depict bighorn sheep with raised tails which in real life signifies either defecation or death (Lewis-Williams 2002: 174). There are examples of painted horses or deer depicted with raised tails (Figure 7 no. 11, Figure 9 no.1). Some of the animals are alert with their heads held up high (Figure 7 no. 11, Figure 9 no. 1) and such a posture in horses signifies resistance and possible aggression. Some vessels contain freezes of animals forming a procession and on one example from Le Pâtural (Puy-de-Dôme) they appear to be rearing up (Guichard 1987: 120-2 fig. 8; 2003: 106 fig. 30). The postures cover a range of states from being alert, aggressive, to deference and even death. It is possible that some of the bowing/deference postures might actually represent animals being reborn and rearing back into life (Figure 8 no. 2, 5).

Colour

Recent research has investigated the role and meaning of colour in prehistoric societies (Jones, MacGregor 2002; Cambridge Journal of Archaeology 1999: 109-26). As previously stated the majority of painted decorations make use of the colours red and white and it is worth giving a brief discussion on the significance and possible meaning of this. The colour red in many societies can stand for metaphors connected with blood, evil and death, in contrast white is associated with milk, semen, fertility, light, the spirit world and purity (Boric 2002; Gage 1999; Jones, Bradley 1999; Spence 1999). In some of the early Welsh myths the colours red and white were associated with the otherworld (Green 1993: 73). In the Irish myths red was the colour of death and red horses harbingers of death while shining white animals were often supernatural beings and messengers of the otherworld (Green 1993: 32). Bright and shinning objects have been associated with special properties, such as ancestral power (Taçon 1999), as metaphors for light and being (Cooney 2002) and the human soul (Darvill 2002) in various societies. In this light, it is worth noting Andrews' (1996) analysis of the slips of the painted pots; he has suggested that they were given an initial undercoat of white slip, which would have given these vessels and the outlined decoration, a vivid shinning white appearance when new. The appearance and the colours of the painted wares could indicate a link with the spirit world, and with the souls of the dead. The depositional contexts for these vessels further supports this hypothesis.

Context

Grave goods

The Auvergne sees the continuation of inhumation burial (within settlements, pits or small cemeteries) during the late Iron Age alongside the use of cremation (Deberge, Orengo in prep.). Painted vessels are found in a high proportion of the 2nd century BC burials and account for a significant percentage of the total number of ceramic grave goods (Deberge, Orengo in prep.). Painted vessels were also included in cremation burials in the region (Deberge, Orengo in prep.). A possible cremation pit at Riom 'La Gravière' (dep. Puy-de-Dôme) contained several painted vessels with zoomorphic decorations which had been deliberately broken and burnt, although no cremated human bone was recovered (Guichard 2003: 93; 1994: 104 note 3). The late La Tène rich cremations *(tombes à char)* at Pul-vérières (Puy-de-Dôme) contained a considerable number of painted vessels (Dunkley *et al.* 2005). Painted vessels are also found in many of the cremations at the late 2nd to 1st century BC cemetery at rue St-Antoine at Feurs (Forez) (Guichard et al. 1991). For the cemetery at Feurs, painted vessels represent 14% of the ceramic grave goods in contrast to a frequency of 6-8% on the settlement (Guichard, Vaginay 1993: 241). Similarly, for the Champagne region of northern France painted vessels (including all the vessels with zoomorphic decorations), have been found at 12 La Tène cremation cemeteries, in contrast to only two findspots from settlements (Chossenot 1991: 174, 188). Several of the findspots of painted vessels from north-eastern France are also from funerary contexts (Cliquet et al. 1991: 201-4).

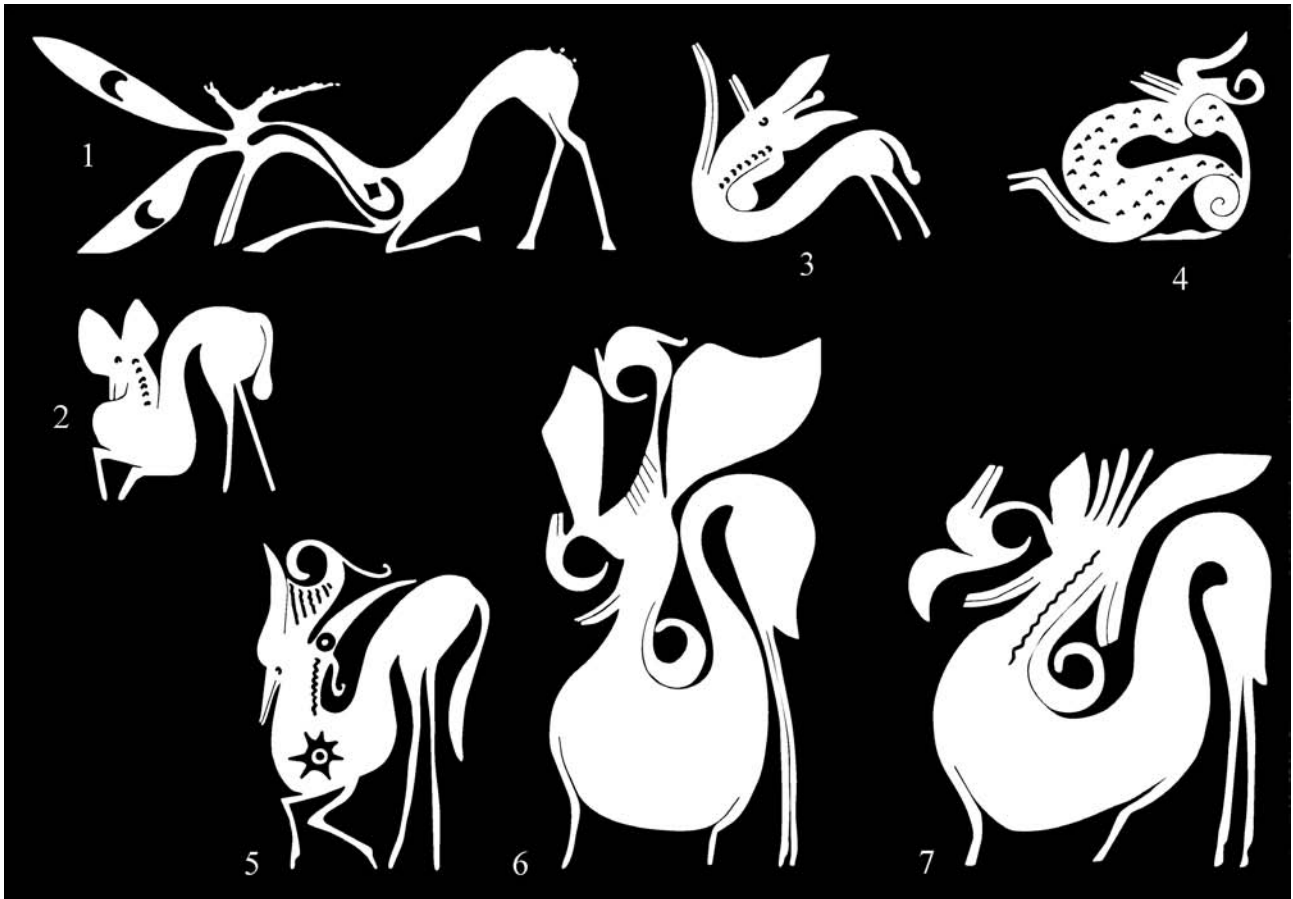In the majority of the Auvergnian burials, the painted vessels are found close to the head and are typical-

Figure 8. Zoomorphic designs (after Guichard 1994: 136 fig. 16). 1–5: La Grande Borne, 6: Feurs, 7: La Celle–St–Martin.

ly interpreted as containing drinks for the deceased hence their placement near to the mouth (Deberge, Orengo in prep.). However, they may also have been positioned to act as a special container to gather the spirit of the deceased. The zoomorphic designs could have symbolised the transportation of the soul to the otherworld and/or aided the soul on its final journey. The vessels may have served as substitute guides or representations of the soul of the deceased. A similar idea has been expressed by Williams (2001: 202-3) concerning the sacrifice of animals during Anglo-Saxon funerary rites, which he suggests were more to do with the final journey of the soul rather than with the social identity and status of the deceased. The vessels with geometric designs may have served a similar purpose. Boric argues that ethnographic evidence shows that geometric designs are associated with trapping "harmful forces…defining the threshold between the world of the living and that of the newly deceased. Furthermore they aid the safe journey of the newly deceased…to the underworld" (2002: 27). Hence, we should expect to see a bias towards the use of vessels with complex zoomorphic and geometric designs as grave goods. Sadly, for many of the painted vessels from funerary contexts in the Auvergne, the preservation is such that it is not possible to tell. However, two vessels from the cemetery of Pontcharaud appear to contain traces of geometric or zoomorphic designs, while two painted wares from burials at the site of Sarliève were also decorated (Deberge, Orengo in prep.). Although the evidence is not conclusive, it is possible that the painted vessels selected for use as grave goods were those decorated with the more complex geometric and animal inspired imagery.

Soul to soul?

Several classical writers refer to the Gauls belief in the immortal soul, which after death could be passed from one body to another (Green 1986: 121). The contents (beer, wine etc) of the painted vessels from funerary contexts could have been seen as becoming imbued with the spirit and the powers of the deceased. Perhaps these powers could then be passed on to another individual by drinking the content of the vessel. Two burials at the site of Sarliève contained painted vessels with small holes near their base perhaps for the inser-

tion of straws which could have allowed their contents either be topped-up (Deberge, Orengo 2002; in prep.), or if the vessels were sealed their contents drunk.

Pits and wells

At several sites in the Auvergne intact or partially complete painted vessels appear to have been deliberately deposited within pits and wells. Certain features contain elevated numbers of painted vessels (Figure 3) – La Grande Borne Ch. 4 pit 38 (Guichard, Orengo 2000b) and a La Tène C2 (200-150 BC) pit at Varennes-sur-Allier (dep. of the Allier) (Lallemand 2000: 127). At the late La Tène site of Guignons Nanterre (dep. Hauts-de-Seine), many of the painted vessels came from just one structure (Pasquier 1997). A noteworthy example from the Auvergne is the placing of four complete vessels, decorated with fine zoomorphic and geometric designs (Figure 9), in the base of a well at Elisée-Reclus/Aulnat (Guichard 2003; Deberge et al. 2001). Recent excavations in another part of this site, at Gandaillat (excavations by C. Vermeulen), have uncovered further vessels with spectacular designs and many intact vessels deposited within wells dating to La Tène C2 (200-150 BC) (study by Y. Deberge). In the base of one well (F34), a complete painted vessel was deposited along with two human skulls and several human bones (Vermeulen et al. 2002). At the nearby late 2nd century BC sanctuary of Le Brézet painted vessels were deposited in some of the pits and wells along with ritual deposits of amphorae and animal bones (Deberge 2000; Poux, Vernet 2001). The most noteworthy feature from the site was the burial of a horse (a pottery sherd had been placed within its mouth) with a painted vessel and a glass bead, within a pit (Poux, Vernet 2001). Although the majority of painted vessels from sites in the Forez are in a fragmentary state one pit at Feurs contained a deliberate offering of three complete vessels including one painted ware with geometric decoration, an iron knife and some cereal grains (Vaginay et al. 1987: 40-1 fig. 43). It is worth mentioning here the deposition of a painted vessel with geometric decoration in the well, or ritual shaft, within the Fellbach–Schmiden Viereckschanze (Baden–Württemberg, Germany) (Planck 1991). The fill of this structure also contained three wooden carvings of two goats standing upright being held by a now missing central human
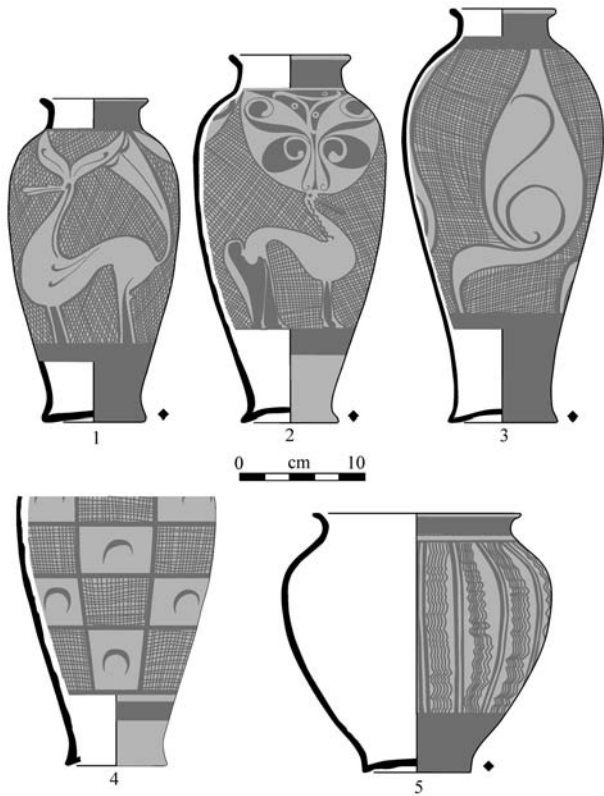
Figure 9.
Painted vessels from rue Elisée-Reclus, well 78 (after Guichard 2003: 98-9 fig. 11-15).

figure and the forequarter of a stag also standing on its hind legs. Some of the sculptures apparently contained traces of paint (Plank 1991). For central and eastern France painted vessels may have been frequently used and deposited within sanctuaries and cult sites although the evidence from the Auvergne and Forez demonstrates that they were also used and deposited on rural settlements.

The vortex, experienced by individuals during more extreme hallucinations, may explain the preferential deposition of painted vessels in pits and wells. Lewis-Williams notes that those in a trance may see the vortex as a pit and as entering a hole in the ground from which the visions appear to originate (2002: 129). It is possible that some Iron Age pits were not dug for functional reasons, but instead to tap the spirits of the underworld. It is possible that offerings were made as soon as the pit was dug and should be seen as gifts for the visions received from the spirit world to guarantee their continued creation. Painted wares may have been

placed within these features to be become immersed and charged with supernatural power or they may have been perceived as powerful, dangerous, and requiring to be kept away from the everyday world. Alternatively, a profane explanation is possible in that the presence of complete painted vessels within wells simply reflects their use as water vessels and accidental losses. Some pits may have been deliberately in-filled to symbolically end their use as a source of visions and sever their connection with the underworld.

Conclusion

Trance behaviours provide a fruitful avenue of inquiry for understanding late Iron Age painted pottery and depositional practices. Painted pottery provides evidence for stage one and two trance imagery while there are also suggestions of imagery deriving from extreme hallucinations on some vessels. Simple entoptic forms however appear to be the most frequent representation. The overall impression of many of the painted wares is of a psychedelic appearance, some images appear to pulsate and have the appearance of motion (Vaginay, Guichard 1988: 70 fig. 63). This is not to say that painted pottery was made by individuals undergoing trances, instead the decorations were influenced by these states and sought to recreate such imagery. The actual holding of these vessels may have helped to transmit supernatural powers and to facilitate the transformation into trance states. Similarly, the touching of San rock-art helped draw supernatural powers (Lewis-Williams 2001: 34). In some accounts, it is worth noting that the vortex is actually referred to as being a vessel (Lewis-Williams 2002: 129).

Evidence from the Auvergne, the Forez and parts of northern France suggests that painted wares may also have served as special vessels for use within funerary rituals and for the containing and the transportation of the soul of the deceased. This is especially true of the vessels with the zoomorphic and possibly the geometric decorations. Given that in several societies the entrance into trance states is perceived as death and killing, actually physical death may have been seen within the same framework as the ultimate and final trance journey.

The end of painted pottery with complex geometric and zoomorphic designs in the Auvergne and the Forez

corresponds with the foundation of the *oppida* during the late 2nd/early 1st century BC. It has been suggested that the movement of the artisans to new production centres closer to the *oppida* or the adoption of new ceramics derived from Mediterranean forms (Guichard 2003: 110) was behind this. However, it is clear for the Auvergne that painted vessels without complex designs continued to be made during the period of the *oppida* suggesting that the centres of production and the artisans still existed. Instead, it is possible that other mediums of display were preferred for the trance derived imagery and coinage, which sees an increase in frequency around the time of the formation of the *oppida*, is a strong candidate. Some of the zoomorphic and geometric imagery on the painted vessels resembles those found on some coin issues (Creighton 2000; Guichard 1987: 140). Creighton (2000) refers to the 1st century BC Arvernian silver coin with the legend IIPOMIIDVOS (EPOMEDVOS) in which the IIPO refers to horse, MIID to ritual intoxication and VOS a personal name. The change of medium for such imagery may imply the appropriation of such imagery by the elite?

Bibliography

Andrews, K. (1990), 'The technology of Late La Tène 'painted pottery' decoration'. In: Budd, P., Chapman, B., Jackson, C., Janaway, R., Ottaway, B. [ed.], Archaeological Sciences 1989. Oxford: Oxbow Books: 1-7.

— (1991), 'Slip decorated Iron Age ceramics from central France'. In: Pernicka, E., Wagner, G. [ed.], Archaeometry 90. Berlin: Birkhauser: 229-36.

— (1996), 'The technology of white ground slip productions on Iron Age finewares from Aulnat, France'. In: Demirci, Ş., Özer, A. M., Summers, G. D. [ed.], Archaeometry 94. Anakara: Tübitak: 179-88.

— (1997), 'From ceramic finishes to modes of production: Iron Age finewares from central France'. In: Cumberpatch, C. G., Blinkhorn, P. W. [ed.], Not so much a pot, more a way of life. Oxford: Oxbow Books: 57-75.

Barral, P., Huet, N. (1998), 'L'artisanat céramique'. In: Gruel, K., Vitali, D. (ed.), L'oppidum de Bibracte. Un Bilan de onze années de recherché (1984–1995). Gallia 55: 65-73.

Belfort, J.-C., Delporte, H., Guichard, V. (1986), 'L'occupation protohistorique du Châtelard de Lijay (Loire)'. Cahiers Archéologiques de la Loire 6: 19-45.

Boric, D. (2002), 'Apotropaism and the temporality of colours: colourful Mesolithic-Neolithic seasons in the Danube Gorges'. In: Jones, A., MacGregor, G. [ed.], Colouring the past. The significance of colour in archaeological research. Oxford and New York: Berg: 23-43.

Bradley, R. (1989), 'Death and entrances: a contextual analysis of Megalithic art'. Current Anthropology 30: 68-75.

Charpy J.-J. [ed.] (1991), La céramique peinte celtique dans son contexte Européen. Rheims: Mémoires de la Société archéologique champenoise.

Chossenot, M. (1991), 'La céramique peinte champenoise de la Tène finale'. In: Charpy, J.-J. [ed.], La céramique peinte celtique dans son contexte Européen. Rheims: Mémoires de la Société archéologique champenoise: 173-89.

Cliquet, D., Lambot, B., Leman-Delerive, G., Lepart, T., Remy-Watté, M. (1991), 'La céramique peinte dans la partie occidentale de la Gaule Belgique'. In: Charpy, J.-J. [ed.], La céramique peinte celtique dans son contexte Européen. Rheims: Mémoires de la Société archéologique champenoise: 191-210.

Cooney, G. (2002), 'So many shades of rock: colour symbolism and Irish stone axeheads'. In: Jones, A., MacGregor, G. [ed.], Colouring the past. The significance of colour in archaeological research. Oxford and New York: Berg: 93-107.

Corradini, N. (1991), 'La céramique peinte à décor curviligne rouge et noir en Champagne: approche technologique et chronologique'. In: Charpy, J.-J. [ed.], La céramique peinte celtique dans son contexte Européen. Rheims: Mémoires de la Société archéologique champenoise: 109-42.

Creighton, J. D. (1995), 'Visions of power: imagery and symbols in Late Iron Age Britain. Brittania 26: 285-301.

— (2000), Coins and power in Late Iron Age Britain. Cambridge: Cambridge University Press.

Cumberpatch, C. G. (1995), 'Production and Society in the later Iron Age of Bohemia and Moravia'. In: Hill, J. G., Cumberpatch, C. G. [ed.], Different Iron Ages: studies on the Iron Age in temperate Europe. Oxford: BAR S602: 67-93.

Cumberpatch, C. G., Pawlikowski, M. (1988), 'Preliminary results of mineralogical analyses of Late La Tène painted pottery from Czechoslovakia'. Archeologické Rozhledy 40: 184-93.

Darvill, T. (2002), 'White on blonde: quartz pebbles and the use of quartz at Neolithic monuments in the Isle of Man and beyond'. In: Jones, A., MacGregor, G. [ed.], Colouring the past. The significance of colour in archaeological research. Oxford and New York: Berg: 73-91.

Deberge, Y. (2000), 'Un puits à cuvelage en bois de La Tène finale au Brézet (Clermont-Ferrand)'. Revue Archéologique du Centre de la France 39: 43-62.

Deberge, Y., Orengo, L. (2002), 'La nécropole de "Sarliève" à Cournon'. In: Mennessier-Jouannet, C. [ed.], Projet collectif de recherche sur les mobiliers du second âge du Fer en Auvergne. Mirefleurs: Association pour la recherche sur l'âge du Fer en Auvergne: 99-119.

Deberge, Y., Orengo, L. (in prep.), 'Les mobiliers et practiques funéraires en Basse Auvergne du IIIe au Ier s. av. n.è.'. In: Mennessier-Jouannet, C. [ed.], L'archéologie de l'âge du Fer en Auvergne, Actes du XXVIIe colloque international de l'Association Française pour l'Etude de l'âge du Fer (Clermont-Ferrand 2003). Lattes: Monographies d'Archéologie Méditerranéenne.

Deberge, Y. Guichard, V., Loughton, M. E. (2001), 'Clermont-Ferrand, "Rue Elisée Reclus", puits 78'. In: Mennessier-Jouannet, C. [ed.], Projet collectif de recherche sur les mobiliers du second âge du Fer en Auvergne. Mirefleurs: Association pour la recherche sur l'âge du Fer en Auvergne: 91-115.

Deberge, Y., Guichard, V., Lallemand, D., Orengo, L., Loughton, M. E. (2002a), 'Détermination des phases récentes de La Tène: le IIe s. avant J.-C'. In: Mennessier-Jouannet, C. [ed.], Projet collectif de recherche sur les mobiliers du second âge du Fer en Auvergne. Mirefleurs: Association pour la recherche sur l'âge du Fer en Auvergne: 35-61.

Deberge, Y., Guichard, V., Lallemand, D., Wittmann, A., Izac-Humbert, L., Orengo, L., Loughton, M. E., Pasquier, D. (2002b), 'Détermination des phases récentes de La Tène: le Ier s. avant J.-C.' In: Mennessier-Jouannet, C. [ed.], Projet collectif de recherche sur les mobiliers du second âge du Fer en Auvergne. Mirefleurs: Association pour la recherche sur l'âge du Fer en Auvergne: 62-98.

Deberge, Y., Orengo, L., Loughton, M. E., Verrier, G. (in prep.1), 'La culture matérielle de la Grande Limagne d'Auvergne du IIIe au Ier avant notre ère'. In: Mennessier-Jouannet, C.[ed.], L'archéologie de l'âge du Fer en Auvergne, Actes du XXVIIe colloque international de l'Association Française pour l'Etude de l'âge du Fer (Clermont-Ferrand 2003). Lattes: Monographies d'Archéologie Méditerranéenne.

Deberge, Y., Collis, J. R., Vermeulen, C. (in prep.2), 'Le complexe de "Gandaillat/La Grande Borne": un état de la question'. In: Mennessier-Jouannet, C. [ed.], L'archéologie de l'âge du Fer en Auvergne, Actes du XXVIIe colloque international de l'Association Française pour l'Etude de l'âge du Fer (Clermont-Ferrand 2003). Lattes: Monographies d'Archéologie Méditerranéenne.

Deberge, Y., Collis, J. R., Dunkley, J. [ed.] (in prep. 3), Le site du

"Pâtural" à Clermont-Ferrand: évolution d'un établissement agricole gaulois (IIIe-IIe s. av. J.-C.) en Limagne d'Auvergne, Clermont-Ferrand. Paris: Documents d'Archéologie Française.

Dowson, T. A., Porr, M. (2001), 'Special objects-special creatures: Shamanistic imagery and the Aurignacian art of southwest Germany'. In: Price, N. [ed.], The Archaeology of Shamanism. London: Routledge: 165-77.

Dronfield, J. (1993), 'Ways of seeing, ways of telling: Irish passage tomb art, style and the universality of vision'. In: Lorblanchet, M., Bahn, P. G. [ed.], Rock Art Studies: the post-stylistic era or where do we go from here? Oxford: Oxbow books: 179-93.

— (1995a), 'Subjective vision and the source of Irish megalithic art'. Antiquity 69: 539-49.

— (1995b), 'Migraine, light and hallucinations: the neurocognitive basis of Irish Megalithic art'. Oxford Journal of Archaeology 14/3: 261-75.

— (1996), 'Entering alternative realities: cognition, art and architecture in Irish Passage-tombs'. Cambridge Journal of Archaeology 6/1: 37-72.

Dunkley, J., Blaizot, F., Caillat, P., Deberge, Y., Colonge, D., Orengo, L., Bastard, V. (2005), 'Site B5 (F+) – Pulvérières, Cime des Bruyères : La Tène finale'. In: Colonge, D. [ed.], A89 – Section 8 Le Sancy - Combronde (Puy-de-Dôme). Tome 1 – volume général. Rapport final d'opération de sondages et évaluations archéologiques. Clermont-Ferrand: Service Régional de l'Archéologie d'Auvergne: 85-149.

Ellis-Davidson, H. R. (1964), Gods and myths of northern Europe. London: Penguin Books.

— (1988), Myths and symbols in pagan Europe. Early Scandinavian and Celtic religions. Manchester: Manchester University Press.

Frey, O. H. (1998), 'The stone knight, the sphinx and the hare: new aspects of early figural Celtic art'. Proceedings of the Prehistoric Society 64: 1-14.

Gage, J. (1999), 'Did colours signify? Symbolism in the red'. Cambridge Archaeology Journal 9/1: 110-12.

Grand, K. (1995), 'Le repertoire decorative de la céramique peinte gallo-romaine de Roanne (Loire)'. Revue Archéologique du Centre de la France 34: 177-94.

Green, M. A. (1986), The Gods of the Celts. Gloucester: Alan Sutton.

— (1989), Symbol and image in Celtic religious art. London and New York: Routledge.

— (1993), Celtic Myths. London: British Museum Press.

— (1996), 'Art and religion: aspects of identity in Pagan Celtic Europe'. Studia Celtica 30: 35-58.

— (2001), 'Cosmovisions and metaphors: monsters and Shamans in Gallo-British cult-expression'. European Journal of Archaeology 4: 203-32.

Guichard, V. (1987), 'La céramique peinte à décor zoomorphe des IIe et Ier s. avant J.-C. en territoire ségusiave'. Études Celtiques 24: 103-43.

— (1994), 'La céramique peinte des IIe et Ier s. avant J.-C. dans le nord du Massif central: nouvelles données'. Études Celtiques 30: 81-114.

— (2003), 'Un dernier moment de folie: le repertoire ornemental de la céramique peinte dans le nord-est du Massif central au IIe siècle avant J.-C.'. In: Buchsenschutz, O., Bulard, A., Chardenoux, M.-B., Ginoux, N. [ed.], Décors, images et signes de l'âge du Fer Européen. XXVIe colloque de l'Association Française pour l'Etude de l'âge du Fer Paris et Saint-Denis 2002. 24e supplément à la Revue Archéologique du Centre de la France. Tour: FERACF: 91-112.

Guichard, V., Guineau, B. (1991), 'Quelques observations sur les pigments et la technique picturale de la céramique peinte celtique du second âge du Fer'. In: Charpy, J.-J. [ed.], La céramique peinte celtique dans son contexte Européen. Rheims: Mémoires de la Société archéologique champenoise: 315-20.

Guichard, V., Vaginay, M. (1993), 'Les mobiliers funéraires en Gaule aux IIéme et Ier siècles avant J.-C. reflexions methodologiques'. In: Cliquet, D., Remy-Watte, M., Guichard, V., Vaginay, M. [ed.], Les Celtes en Normandie. Les rites funéraires en Gaule (IIIème – Ier siècle avant J.-C.). Actes du 14ème colloque de l'Association Française pour l'Etude de l'âge du Fer Evreux 1990. Revue Archéologiqu de l'Ouest, supplément n°6: 231-43.

Guichard, V., Orengo, L. (1999), 'Le fossé 12/13 du site de La Grande Borne à Clermont-Ferrand'. In: Mennessier-Jouannet, C. [ed.], Projet collectif de recherche sur les mobiliers du second âge du Fer en Auvergne. Mirefleurs: Association pour la recherche sur l'âge du Fer en Auvergne: 67-91.

— (2000a), 'Clermont-Ferrand "La Grande Borne", chemin 8 (Puy-de-Dôme)'. In: Mennessier-Jouannet, C. [ed.], Projet collectif de recherche sur les mobiliers du second âge du Fer en Auvergne. Mirefleurs: Association pour la recherche sur l'âge du Fer en Auvergne: 87-107.

— (2000b), 'Clermont-Ferrand "La Grande Borne", fosse 38 (B49AP) (Puy-de-Dôme)'. In: Mennessier-Jouannet, C. [ed.], Projet collectif de recherche sur les mobiliers du second âge du Fer en Auvergne. Mirefleurs: Association pour la recherche sur l'âge du Fer en Auvergne: 109-22.

Guichard, V., Picon, M., Vaginay, M. (1991), 'La céramique peinte gauloise en pays ségusiave aux IIe et Ier siècles avant notre ère'. In: Charpy, J.-J. [ed.], La céramique peinte celtique dans son contexte Européen. Rheims: Mémoires de la Société archéologique champenoise: 211-27.

Huet, N., Guichard, V., Barral, Ph, J.-M., Seguier J.-M., Pasquier, I. (1997), 'Late La Tène figurative painted pottery: diffusion of a product or a concept?'. Key Engineering Materials 132–6: 1476-9.

Jones, A., Bradley, R. (1999), 'The significance of colour in European Archaeology'. Cambridge Archaeology Journal 9/1: 112-4.

Jones, A., MacGregor, G. [ed.] (2002), Colouring the past. The significance of colour in archaeological research. Oxford and New York: Berg.

Kruta, V. (1991), 'La céramique peinte de la Champagne dans le contexte de l'art celtique du IVe siècle avant J.-C.'. In: Charpy, J.-J. [ed.], La céramique peinte celtique dans son contexte Européen. Rheims: Mémoires de la Société archéologique champenoise: 143-57.

Lallemand, D. (2000), 'Un ensemble de La Tène C2 au 33, rue Claude Labonde à Varennes-sur-Allier (Allier)'. In: Mennessier-Jouannet, C. [ed.], Projet collectif de recherche sur les mobiliers du second âge du Fer en Auvergne. Mirefleurs: Association pour la recherche sur l'âge du Fer en Auvergne: 123-49.

Lavendhomme, M.-O., Guichard, V. (1997), Rodumna (Roanne, Loire), le village gaulois. Paris: Documents d'Archéologie Française 62.

Lewis-Williams, J. D. (1991), 'Wrestling with analogy: a methodological dilemma in Upper Palaeolithic art research'. Proceedings of the Prehistoric Society 57: 149-62.

— (1997a), 'Agency, art and altered consciousness: a motif in French (Quercy) Upper Palaeolithic parietal art'. Antiquity 71: 810-30.

— (1997b), 'Harnessing the brain: vision and Shamanism in Upper Palaeolithic Western Europe'. In: Conkey, M., Soffer, O., Stratmann, D., Jablonski, N. G. [ed.], Beyond Pleistocene Image and Symbol. California: Memoirs of the California Academy of Sciences 23: 321-42.

— (2001), 'Southern African shamanistic rock art in its social and cognitive contexts'. In: Price, N. [ed.], The Archaeology of Shamanism. London: Routledge: 17-34.

— (2002), The mind in the cave. London: Thames and Hudson.

— (2004), 'Neuropsychology and Upper Palaeolithic art: observations on the progress of altered states of consciousness'. Cambridge Archaeology Journal 14/1: 107-11.

Lewis-Williams, J. D., Dowson, T. A. (1988), 'The signs of all times: entoptic phenomena in Upper Palaeolithic art'. Current Anthropology 29.2: 210-45.

— (1993), 'On vision and power in the Neolithic: evidence from the decorated monuments'. Current Anthropology 34.1: 55-65.

Loughton, M. E. (2003), 'The distribution of Republican amphorae in France'. Oxford Journal of Archaeology 22/2: 177-207.

Megaw, R., Megaw, V. (2001), Celtic Art. London: Thames and Hudson.

Mennessier-Jouannet, C. [ed.] (1999), Projet collectif de recherche sur les mobiliers du second âge du Fer en Auvergne. Mirefleurs: Association pour la recherche sur l'âge du Fer en Auvergne.

— [ed.] (2000), Projet collectif de recherche sur les mobiliers du second âge du Fer en Auvergne. Mirefleurs: Association pour la recherche sur l'âge du Fer en Auvergne.

— [ed.] (2001), Projet collectif de recherche sur les mobiliers du second âge du Fer en Auvergne. Mirefleurs: Association pour la recherche sur l'âge du Fer en Auvergne.

— [ed.] (2002), Projet collectif de recherche sur les mobiliers du second âge du Fer en Auvergne. Mirefleurs: Association pour la recherche sur l'âge du Fer en Auvergne.

Pasquier, J. (1997), 'La céramique peinte d'un habitat de La Tène finale: "Les Guignons" à Nanterre (Hauts-de-Seine)'. Revue Archéologique du Centre de la France 36: 23-37.

Patton, M. (1990), 'On entoptic images in context: art, monuments, and society in Neolithic Brittany'. Current Anthropology 31/5: 554-8.

Périchon, R. (1974), La céramique peinte celtique et Gallo-Romaine en Forez et dans le Massif Central. Roanne.

— (1991), 'La céramique peinte du deuxième Age du Fer dans le Massif Central'. In: Charpy, J.-J. [ed.], La céramique peinte celtique dans son contexte Européen. Rheims: Mémoires de la Société archéologique champenoise: 229-36.

Planck, D. (1991), 'The Fellbach-Schmiden sanctuary'. In: Moscati, S., Frey, O. H., Kruta, V., Raftery, B., Szabó, M. [ed.], The Celts. New York: Rizzoli: 534-5.

Poux, M., Vernet, G. (2001), 'Sanctuaire protohistorique'. L'Archéologique, Archéologie nouvelle 54: 42-5.

Rozwadowski, A. (2001), 'Sun gods or shamans? Interpreting the 'solar-headed' petroglyphs of Central Asia'. In: Price, N. [ed.], The Archaeology of Shamanism. London: Routledge: 65-86.

Soyer, C. (1991), 'La céramique peinte de Levroux (Indre)'. In: Charpy, J.-J. [ed.], La céramique peinte celtique dans son contexte Européen. Rheims: Mémoires de la Société archéologique champenoise: 237-9.

Spence, K. (1999), 'Red, white and black: colour in building stone in Ancient Egypt'. Cambridge Archaeology Journal 9/1: 114-7.

Taçon, P. S. C. (1999), 'All things bright and beautiful: the role and meaning of colour in human development'. Cambridge Archaeology Journal 9/1: 120-3.

Vaginay, M., Guichard, V. (1984), 'Une fosse de La Tène moyenne du site de Goincet (Poncins, Loire)'. Revue Archéologique de l'Est et du Centre-Est 35: 191-226.

— (1988), L'habitat gaulois de Feurs (Loire): fouilles récentes (1978–1981). Paris: Documents d'Archéologie Française 14.

Vaginay, M., Leyge, F., Guichard, V. (1987), Les Gaulois dans la plaine du Forez. Les Ségusiaves a l'âge du Fer. Lyon: Tixier and Fils.

Vermeulen, C., Blaizot, F., Forest, V., Guichard, V., Loughton, M. E., Mennessier-Jouannet, C., Orengo, L. (2002). Puy-de-Dôme − Clermont-Ferrand (63) Gandaillat. Rapport de l'opération preventive de fouille Archéologique, Clermont-Ferrand Service Régional de l'Archéologie.

Williams, H. (2001), 'An ideology of transformation: cremation rites and animal sacrifice in early Anglo-Saxon England'. In: Price, N. [ed.], The Archaeology of Shamanism. London: Routledge: 193-212.