

Cognition, materiality and monsters: the cultural transmission of counter-intuitive forms in Bronze Age societies

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David Wengrow

Institute of Archaeology, University College London, UK

Abstract

In seeking to explain why some cultural traits are more ‘catching’ than others, evolutionary anthropologists have invoked the influence of cognitive constraints on the transmission of culture. Pascal Boyer’s explanation of the global popularity of religious beliefs in terms of their psychologically ‘counter-intuitive’ nature is a strong example. Drawing upon archaeological evidence from early civilizations, this article argues that such an approach does not in fact account satisfactorily for the observable distribution of a central type of counter-intuitive representation: that of the composite figure, or ‘monster’. A surprising feature of that distribution is the scarcity of composite figures in prehistoric art, prior to the Urban Revolution of the 4th millennium BC, after which their spread follows a highly patterned and selective (rather than ‘contagious’) trajectory of expansion. In interpreting this patterned spread of counter-intuitive forms, technological and institutional factors are brought into account alongside cognitive ones, with wider methodological implications for evolutionary approaches to the transmission of culture.

Keywords

ancient Mediterranean and Near East, art, cognition, culture, elites, evolution, monsters, religion

Now the human understanding is infected by the sight of what takes place in the mechanical arts, in which the alteration of bodies proceeds chiefly by composition or separation, and so imagines that something similar goes on in the universal nature of things. (Francis Bacon, *The New Organon*, 2000[1620, Works I: 47–69])

Corresponding author:

David Wengrow, Institute of Archaeology, University College London, 31–34 Gordon Square, London WC1H 0PY, UK.

Email: d.wengrow@ucl.ac.uk

The main problem is not so much how the conception got into art, as how it got into the human mind. (Arthur Hocart, 1987[1929], *Many-Armed Gods*: 114)

Introduction: some problems with evolutionary theories of religion

It has sometimes been suggested that archaeology is to anthropology as borrower to lender, and that archaeological data cannot form an independent basis for substantive critique of anthropological theories. In at least one area of current anthropological theorizing, the inverse may be true. The ‘epidemiology of representations’ is a method proposed by Dan Sperber to account for the spread of culture (e.g. Sperber, 1996a, with further references). It is explicitly concerned with large-scale distributions of cultural facts, and Sperber himself has compared it to the diffusionist method in early 20th-century archaeology, while noting as a flaw of the latter its lack of engagement with the role of cognition in the transmission of culture. The ‘epidemiology of representations’ is grounded in evolutionary theory, because it seeks to account for observable distributions of culture in terms of universal – and therefore evolved – constraints on human behaviour. There is, however, an immediate problem with an anthropological theory of this scale and ambition, which is simply that social and cultural anthropologists no longer compile the kind of data it requires, i.e. large-scale distributions of cultural facts. As a result, attempts to implement the theory using ethnographic data are obliged to make abrupt and dizzying shifts between the micro-scale of village ethnography and the universals of human behaviour that they are trying to study.

An example, which forms the starting point of this paper, is Pascal Boyer’s work on the evolution of religious ideas (e.g. Boyer, 1994, 2001). Like other ‘epidemiologists’ of culture, Boyer is concerned with the analysis of cultural traits at a scale of ‘populations’. Simply put, this means that cultural facts should not be studied within pre-defined boundaries – for example, those of the sedentary group, ecological unit, or nation-state – but at their fullest observable distribution. Only then does it become possible to begin to relate those distributions to other factors, which might explain their popularity. In practice, however, this is not quite what Boyer does. In books such as *The Naturalness of Religious Ideas* (1994), the reader will find very little in the way of distribution maps or charts, showing the spread of cultural phenomena from one place to another, or their shifting relationships from one chronological period to the next. Instead, a selection of historically unrelated examples, drawn from the ethnographic record and occasionally ancient texts, forms the basis for claims about the universality of religious ideas, and the reasons for their ubiquity.

In this article, I will examine a core element of Boyer’s explanation for the popularity of religious phenomena in the light of some actual distributions of cultural facts. I will be concerned in particular with what he calls ‘counter-intuitive’ representations. Representations of this kind are central to Boyer’s theory of why societies the world over entertain beliefs about supernatural agents such as gods, demons and ancestors, and engage in broadly comparable discourses about them. As Sperber (1975) first pointed out, the ubiquity of beliefs and discourses of this kind is puzzling from an evolutionary

point of view, as they cannot be based on acquired experience of the empirical world, of the kind that must have shaped the cognitive faculties of our remote hominin ancestors. Omnipotent and all-seeing gods, spirits that walk through walls, winged horses, flying witches, cult statues that feel hunger and oracles that look into the future simply do not exist in that sense.

The answer to this evolutionary problem, according to Boyer (and also Sperber, 1996a: 140), resides in the manner in which religious concepts ‘piggy-back’ on what are considered to be universal structuring principles of human cognition. ‘Modularity of mind’ (and especially the kind of ‘massive modularity’ assumed by theories of this kind) is not uncontroversial in cognitive psychology (for a review of current issues, see Barrett and Kurzban, 2006; also Boyer, 1992; Hirschfeld and Gelman, 1994). Its central claim, very broadly stated, is that the human mind-brain is not a general-purpose learning mechanism, but is adaptively specialized to cope with particular sorts of environmental stimuli. Hence, at a very young age, infants will begin to develop what psychologists call ‘innate’, ‘naïve’, or ‘folk’ versions of psychology, physics and biology. They will know intuitively, for instance, that other people possess minds but that chairs and tables do not; that solid objects and persons cannot pass through walls and floors; and that non-human living kinds (plants and animals) fall into hierarchical and mutually exclusive classes, the boundaries of which – as Scott Atran (1990) has argued – exhibit only limited variability across cultures.

According to Boyer, what religious concepts do, and the reason they are able to attach themselves to our minds and spread so effectively, is to tweak, mix and distort these categories in ways that we find inherently stimulating, but which also remain sufficiently close to modular common sense to allow their effective processing, retention and transmission. Since the modular tools at our minds’ disposal are limited in number, so too are the possibilities for violating them, and hence – he argues – the cross-cultural catalogue of basic religious concepts is relatively small and finite (see also Boyer, 2000). In short, supernatural concepts, according to Boyer and Sperber, spread widely and successfully in human populations because they are provocations to, rather than outright departures from, our innate understanding of how the world works.

As Maurice Bloch (2005: 103–122, 2008) has pointed out, these theories, in fact, fall considerably short of providing an evolutionary explanation of ‘religion’, which he views as a temporally shallow (rather than deep or primordial) cultural category. As he further points out, religious experience is not generally based on violations of mundane problem-solving procedures of the kind we use to get around in our everyday lives. Rather, it is based on the performance of collective rituals, often accompanied by the ingestion of special substances, which temporarily change the cognitive ground rules and induce the kind of mental states that Durkheim famously called ‘effervescent’. Under such conditions, the ordinary boundaries between human and animal, mortal and immortal, self and other, past and future can easily become blurred. The work of Boyer and some other evolutionary theorists, Bloch suggests, is not concerned with the practice of religion as such, but with discourses about or representations of supernatural experiences.

Even taking these criticisms and limitations into account, we are still left with a provocative theory about how counter-intuitive concepts spread successfully in human

populations, becoming, as Boyer (2000: 196) puts it, ‘both relatively stable within a group and recurrent among different groups’. In what follows, I seek to evaluate this theory through the kind of data that only archaeology can currently provide: a long-term distributional pattern of counter-intuitive cultural facts, in this case, images of composite beings or ‘monsters’.

Some definitions: ‘monsters’ and ‘distributions’

Most everyday definitions of the monstrous have a moral component. The Latin root ‘monstrum’ links the monstrous to intimations of misfortune – portentous signs and evil omens. In the culture-historical and psychoanalytical literature, monstrous forms are often analysed as material manifestations of that which is unknown, anomalous, and also feared (Asma, 2009; Cohen, 1996). They have been variously considered as symbolic expressions of social difference or moral corruption (Arnheim, 1966[1949]: 255–257; Strickland, 2003), as metaphors of geographical and cultural remoteness (e.g. Mitter, 1992; Romm, 1992; Wittkower, 1942), or as public responses to the disquieting (or perceived ‘unnatural’) effects of new technologies (e.g. Graf, 1999; Smits, 2006). But monsters – in the sense of composite or compound beings – can also embody life-affirming forces, as with the protective spirits whose images, in the ancient Near East, were strategically placed at the threshold of the house and at the head of the bed to ward off invisible bearers of misfortune and disease (Wiggermann, 1992). For the purposes of an ‘epidemiological’ study, what is required is an amoral definition of the monstrous figure, of the kind supplied by theories of cognition and classification. My use of the term ‘monster’ in what follows is therefore limited to a technical description of images that depict composite beings, comprising incongruous elements of human and/or animal anatomy. As taxonomic anomalies, blending elements from two or more species, monsters – following this limited definition – are good exemplars of ‘counter-intuitive’ representations (see also Sperber, 1975, 1996b). According to the expectations of Boyer’s model, they should therefore be robust carriers of ideas about supernatural agency, capable of moving between a wide array of ritual contexts, and of absorbing a variety of religious connotations.

Evaluating this expectation against the archaeological record inevitably brings us up against issues of taphonomy and biases of preservation. To appreciate what may be lost from earlier periods, it is only necessary to consider the fantastic imagery on skin tattoos and felt textiles, miraculously preserved in the frozen Iron Age tombs of Pazyryk, some 1600 metres above sea level on the High Altai (Rudenko, 1970). What we are seeing in any one period is a fraction of what existed, and specifically that fraction which, through a combination of physical durability and depositional circumstances, has survived into the present. It may not be necessary to go as far as David Napier (1985: 52), who suggests that we are dealing at all times with objects ‘that are known to us because they are made of durable materials, not because they represent any enduring categories of thought’. In fact, from an epidemiological perspective on culture, issues of preservation should have a positive analytical value because the epidemiology of representations is concerned, not just with the spread of cultural facts in space, but also with their durability in time.

With regard to ‘counter-intuitive’ representations, the issue of preservation can be further related to Harvey Whitehouse’s (2004) distinction between modes of ritual communication, which he respectively terms ‘doctrinal’ and ‘imagistic’. As with Fredrik Barth’s (1990) contrast between the ‘guru’ and the ‘conjurer’, the difference rests upon the frequency with which ritual media are brought into social circulation. In the ‘imagistic’ mode, the power of ritual displays is predicated on the fact that they are rare events whose spectacular nature imprints itself on long-term memory. The cultural content of such displays should ordinarily remain hidden and may consist largely of ephemeral or intangible media, such as masks, dances, or incantations. The intermittent character of ‘imagistic’ rituals also implies relatively high levels of distortion in cultural content from one ceremonial performance to the next. In the ‘doctrinal’ mode, on the contrary, media of ritual communication are highly visible on a routine, even daily, basis; and the cultural content of religious practice is standardized over time and space through the use of canonical texts, permanent sites of worship, durable cult images, and other such props.

These two ‘modes of religiosity’, as Whitehouse terms them, can be expected to produce very different kinds of archaeological signatures, and he speculates as to whether the ‘doctrinal’ mode first rose to prominence in ancient Mesopotamia (today’s Iraq) during the Urban Revolution of the 4th millennium BC (Whitehouse, 2000: 169–172). That period also saw the invention of the world’s first system of writing and textual archives – initially for economic bookkeeping rather than liturgy – accompanied by the emergence of a specialized class of scribes and ritual practitioners, whose activities were concentrated in monumental precincts at the heart of the earliest cities. As I now want to illustrate, the 4th millennium BC also represents an important threshold in the history of monsters, which on first inspection might seem to lend considerable support to Boyer’s theories about the culturally contagious character of counter-intuitive representations.

Civilization: a monstrous dawn

Despite appearing to be free creations of the mind, images of composite beings often have strikingly conservative histories. The same figures appear with remarkable frequency over time and space, crossing widely between distinct cultural milieux. Some of the oldest known to us, like the sphinx and griffin, are still acquiring new forms and functions today, after more than five millennia of circulation. The earliest known evidence, anywhere in the world, for large-scale distributions of composite figures is concentrated around the first centres of urbanization and state formation in the ancient Near East and Eastern Mediterranean regions, which are the focus of this article. An association between the depiction of imaginary beings and the efflorescence of urban life and elite culture has been discussed for other areas, notably China, that lie beyond its scope (e.g. Chang, 1983; Kesner, 1991). Clearly, what follows is not intended to be in any way comprehensive, but rather a broadly accurate outline of some major trends and processes (with reference to more comprehensive specialist studies of particular bodies of iconography).

A striking characteristic of the composite beings that appear at the dawn of urban life, towards the end of the 4th millennium BC, is their propensity to travel widely (Teissier, 1987). In Mesopotamia and the neighbouring lowlands of western Iran, serpent-necked

lions and griffins are among the images that circulated through the medium of cylinder seals, which were used to impress miniature designs onto the clay closures of portable containers and doorways, and to authenticate inscribed clay tablets and other devices used in urban systems of administration (Frankfort, 1939: 25-27; for the function of cylinder seals, see Pittman, 1995). Shortly after their debut on the floodplains of the Tigris and Euphrates, these same composite creatures performed a remarkable migration, appearing far to the west, on ceremonial objects found in the valley and delta of the Nile, where a parallel process of state formation was underway. Upon arrival in Egypt, they were accorded central places in an emerging ideology of sacred kingship. On the obverse of the Narmer Palette, an early royal monument, the intertwined necks of serpent-necked lions are ingeniously adapted to form a protective rim around the grinding area where ritual substances were processed before being ingested or applied to a body or cult statue (Wengrow, 2006: 40–44, 187–195). The rendering of these fantastic animals in raised relief, and their confinement within horizontal registers, points towards copying from a cylinder seal or its impression (Figure 1).

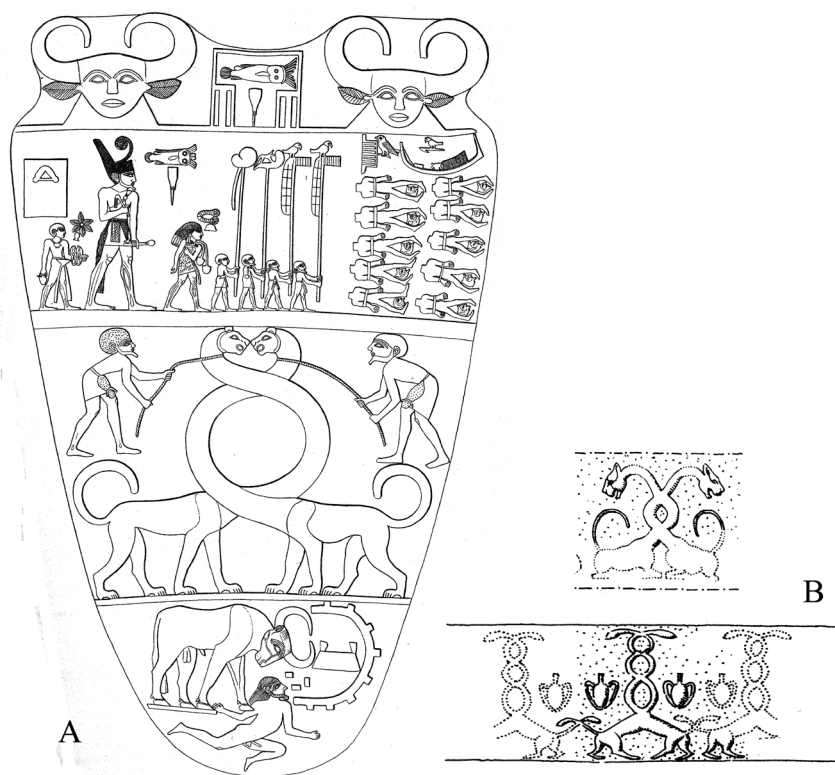


Figure 1. Serpent-necked felines carved in relief on the central register of the Narmer Palette, from Hierakonpolis in southern Egypt (A) and on cylinder seal impressions from Uruk in southern Mesopotamia (B); late 4th millennium BC (after Frankfort, 1939; Wengrow, 2006).

A no less impressive transposition was achieved, approximately a millennium later, by the Egyptian monster *Taweret*, closely associated with the protection of women in childbirth in her area of origin (see Figure 2; Weingarten, 1991). On surviving evidence, she leapfrogged from the banks of the Nile to the maritime cities of the Levantine coast (modern-day Lebanon), and thence to Crete, appearing on scarab-shaped seals that were placed with the dead in collective tombs (see Karetsou et al., 2001). On arrival, *Taweret* picked up a mixture of Aegean and perhaps Anatolian features (Mellink, 1987) and paved the way for a series of further monstrous migrations from the east, including the sphinx and griffin, whose watchful eyes overlooked the birth of the Minoan palaces. A few centuries later the same three monsters – sphinx, griffin, and *Taweret* in her new Minoan form – migrated further westward, blending seamlessly into the warrior culture of the Greek mainland and taking up privileged places of residence in the newly constructed palaces at Mycenae and Pylos (Crowley, 1989; Lambrou-Phillipson, 1990). Concurrent with her penetration into the Aegean world, *Taweret* also moved south into Africa, where she was adopted by indigenous elites and incorporated into royal rituals at Kerma, a burgeoning urban centre located astride the Third Cataract of the Nile (Reisner, 1923, pl. 55; see also Bonnet, 2000).

The Bronze Age pattern of monstrous ‘invasion’, accompanied by an efflorescence of elite culture in the host society, invites comparison with later episodes of cross-cultural interaction in the Mediterranean. As Robin Osborne (1998: 43) writes of Archaic Greek art:

The animals of the eighth century [BC] are predominantly domestic, those of the seventh century fantastic. Creatures of the imagination colonise pots and dedications alike. Not only do fantastic creatures appear in scenes that show stories, but all sorts of parts of vessels of clay, metal, wood, and stone turn into animals’ bodies. From the late eighth century moulded snakes writhe their way around the shoulders of Athenian Late Geometric amphorae, and the tripod cauldrons, prestigious dedications at major sanctuaries, sprout griffins’ heads.

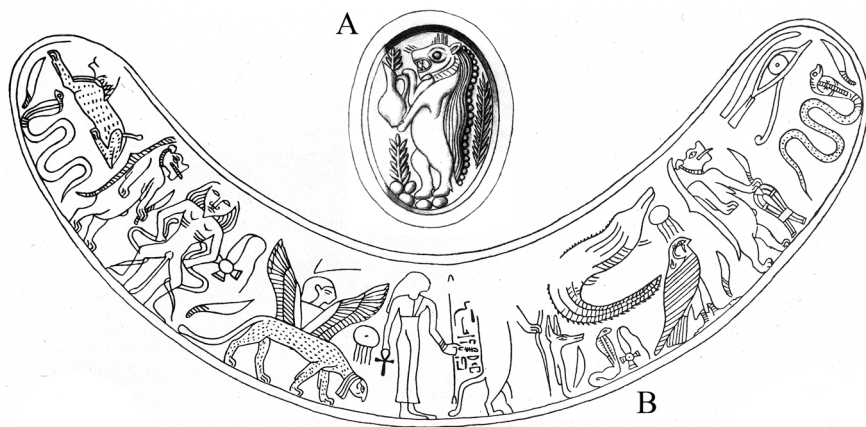


Figure 2. Cretan rendering of the Egyptian demon *Taweret*, on stamp seal impression from Phaistos (A), and Egyptian rendering of the same and other magical figures incised on an ivory wand of the Middle Kingdom; early/mid 2nd millennium BC (B) (after Weingarten, 1991; Petrie, 1927).

What Osborne captures so effectively is the intrusion of composite beings – all of them imported from remote eastern sources – into the heart of an existing cultural milieu that was previously free of them. As in earlier periods, these ‘orientalizing’ monsters (as they are unhelpfully termed) were incorporated by elite groups into specific aspects of material culture, closely associated with techniques of ritual initiation and transformation: the means of passage between various bodily and social states (for the unfolding of similar processes in Iron Age Etruria, see Riva, 2010).

In the case of Archaic Greece, James Whitley (1994) has provided a valuable analysis of local variability in the reception of such images, highlighting their wider significance at a time of institutional change on the Greek mainland. For Whitley, the incorporation of composite animals into local idioms of elite display is an ambivalent process, reflecting both a positive interest in the foreign and a desire to circumscribe its influence within established cultural codes. David Napier (1985, 1990) similarly notes how imported composites were given discursive prominence in archaic Greek art as points of engagement with the foreign, and as a means of encompassing and modulating the transformative effects of exposure to outside influence, in a way that served the interests of particular groups in local arenas of status competition. The face of the Gorgon – prominently deployed on public architectural surfaces and feasting equipment – was thus interlaced with characteristic forms and postures of alien composites, reflecting the Greek desire to have their own monster ‘be equal to or superior in power to these demons of the Near East, to compete and win out, if you will, on similar iconographic terrain’ (Napier, 1985: 99; cf. Kantor, 1962: 111–114; Figure 3).

A similar pattern of elite self-transformation through the assimilation of a monstrous ‘other’, as Napier (1990) describes it, is evident in the earlier (Bronze Age) examples mentioned previously. *Taweret*, following her arrival in the Aegean, adopts the role of ‘libation carrier’, as though she had been born into the lustrous rituals of palace life



Figure 3. Gorgon figures in Near Eastern ‘master of animals’ and running (*Knielauf*) poses, on a shield arm-piece from Olympia (A) and on a clay relief plaque from Syracuse (B); early/mid 1st millennium BC (after Kantor, 1962; Payne, 1931).

(Figure 2A); while at Kerma, in northern Sudan, her figure ornaments the head- and foot-rests of ceremonial beds, used to carry the elite dead to their final resting places. Likewise, the sphinxes and griffins that arrived on the Greek mainland took up prominent roles in the heroic pageant of Mycenaean kingship, merging into the newly ordered space of the palatial *megaron*, where sacrifices were performed before the throne of the *wanax* (ruler), and pulling the royal chariot (Krzyszkowska, 2005: 258–267; Morgan, 1988: 49–54).

In each case, the adoption of composite beings from a remote and culturally foreign source is associated with periods of marked social transformation: the ‘proto-’ or ‘archaic’ periods, in which both the self-image and public persona of elites was taking form and therefore was also at its most vulnerable. The earlier absorption of Mesopotamian monsters into the cultural milieu of proto-dynastic Egypt, at the end of the 4th millennium BC, is no exception. It heralded the unification of the ‘Two Lands’ of Upper and Lower Egypt under a form of sacred kingship that lasted, in its essentials, until the Greco-Roman period. The core ingredients are all there, unfolding over a similar time span of three to four centuries: an influx of fantastic creatures from distant and alien sources carried on expanding routes of long-distance maritime and overland trade; their incorporation into culturally salient objects and practices that were previously free of them; and their deployment as forms of supernatural protection by new and powerful groups, whose influence transcended that of earlier factions on both the local and supra-local levels (Baines, 1995; Wengrow, 2006).

An association between urban efflorescence and the cultivation of an imagery of the fantastic – including composite beings – can also be traced in the Early Bronze Age of South and Central Asia, during the 3rd millennium BC. We do not know the names of these imaginary creatures, but they are clearly recognizable among the regional styles of seal imagery produced in the first cities of the Indus Valley (Parpola, 1994; Possehl, 2002) and the Persian Gulf (Al-Sindi, 1999), and subsequently in Bactria and Margiana (covering parts of modern Turkmenistan, and neighbouring countries; Aruz, 1999). The stone or metal seals on which they were executed were themselves highly durable and portable objects, which occasionally moved over great distances, together with the commodities they marked.

The patchiness of prehistoric monsters

On first inspection, the patterns of transmission and reception I have described would seem to bear out some central claims of the epidemiology of cultural representations. As counter-intuitive forms, particular composite beings spread widely and with remarkably little distortion among multiple societies, inserting themselves into a variety of ritual milieux, and acting as effective carriers for an array of supernatural agents. There is, however, one major problem with all these examples, at least in terms of the kind of evolutionary theory proposed by Boyer and others; and that is simply that they all belong to the Bronze Age or later periods. If the popularity of counter-intuitive representations is to be explained by their core cultural content and its indirect relationship to universal cognitive tendencies, why are images of composite beings not similarly widespread in the extensive record of prehistoric and pre-urban art?

To be clear, the issue here is not whether Palaeolithic and Neolithic societies created images of imaginary beings. It is beyond doubt that they did (cf. Nakamura and Meskell, 2009), although the number of convincing examples is smaller than might be imagined. What matters in the present case is whether or not such images ever became ‘both relatively stable within a group and recurrent among different groups’ (Boyer, 2000: 196) across the many thousands of years of cultural development that preceded the onset of urban life. For this, there seems to be very little evidence. In fact, monstrous or hybrid images are strikingly isolated in both the Palaeolithic and Neolithic records (*contra* Mithen, 1998; Borić, 2007). An opposite impression is easily given by the prominence of such images in modern publications on prehistoric art and ritual, which arguably says more about their attractiveness to modern interpreters than it does about prehistory.

One especially prominent image in popular and scholarly publications of Palaeolithic art is that of the so-called ‘sorcerer’ from Les Trois-Frères, in the Ariège uplands of southern France. The original was executed around 14,000 years ago. But the image that is still most often selected for publication is that created by the Abbé Henri Breuil (1952: 166, 170–177) – a strong proponent of magical interpretations of Palaeolithic rock art – in the early 20th century (Figure 4). As was already pointed out some decades ago by Peter Ucko and Andrée Rosenfeld (1967: 204–206), the original allows for other (less monstrous) interpretations (see also Ucko, 1992; Bahn and Vertut, 1988: 41–42; and note Breuil’s own [1952: 170] reservations about recording conditions at Trois-Frères). Again, the key issue here is not whether composite or masked beings were depicted in early hunter–gatherer societies. Better examples exist than the ‘sorcerer’ (e.g. Taborin et al., 2001), going back to the ‘lion-man’ of Hohlenstein-Stadel around 30,000 years ago (but see Guthrie [2005: 446], for its alternative interpretation as a bear). What does matter, from an epidemiological standpoint, is the extent to which they were accurately



Figure 4. Early-20th-century rendering by Abbé Henri Breuil of an Upper Palaeolithic carved and painted figure, from Les Trois-Frères cave in southern France, often referred to as ‘the sorcerer’ (after Breuil, 1952).

replicated and transmitted: their ‘catchiness’ as Boyer puts it. In the case of Upper Palaeolithic rock art – with its overwhelming emphasis on large mammals, birds, fish and mainly female humans – there is little evidence for the contagious character of such counter-intuitive representations.

Similar points can be made about the more diverse figural art of the Neolithic period in the Middle East, where the domestication of plants and animals first took place around 10,000 years ago. Plastered human skulls and clay miniatures of humans and animals may in some sense represent ‘the birth of the gods’, as Jacques Cauvin (2000) argued, but they do not appear to represent a parallel birth of ‘the monster’ as a widely and durably distributed type of image (although again there can be no doubt that early villagers sometimes experimented with such forms). Among the few archaeologists to comment directly on this fact is Klaus Schmidt (2006), the excavator of Göbekli Tepe, an early Neolithic ceremonial centre, located between the mountains and plains of southeast Turkey. A rich assemblage of monumental relief carvings and free-standing sculpture, dating to the 9th millennium BC, is built into the stone architecture of this remarkable site. The figures depicted include a wide range of animals, some of which have a ferocious aspect. Their sensory power is beyond doubt, but, as Schmidt (2006: 210–220) observes, they make very little play on the possibilities of hybrid combinations, sticking largely (but not exclusively) to representations of natural wild species: things that can be seen in the world.

The observation gains in interest as we broaden our horizons to neighbouring regions and to later phases of prehistoric art, such as the painted pottery traditions of Egypt and the Near East, which are notably ‘monster-free’ (Goff, 1963; Wengrow, 2001b, 2006: 99–115; although once again the frequent publication of exceptional images can give the opposite impression). All of this is by marked contrast with widespread evidence for the deliberate combination of human and animal body parts in contexts of ritual deposition (Wengrow, 2001b), a practice that can be traced back as far as the Palaeolithic period (Mithen, 1998). Of the many examples that might be used as an illustration, the inclusion of a plastered human skull alongside the headless body of a gazelle is particularly striking (Goring-Morris and Kolska Horwitz, 2007). This composite assemblage was sealed beneath a plaster floor around 10,000 years ago, at the site of Kfar Ha-Horesh, in the Jezreel Valley of northern Israel. Composite burials, using the horns of cattle rather than gazelle to adorn human corpses, became a common feature of Neolithic funerary rituals in the Nile Valley from around 6000 to 4000 BC (Wengrow, 2006: 56–59). But outside the confines of such short-lived ritual performances, durable images of composite beings remain exceptionally rare in the Neolithic record. If they were produced, then it was in relatively ephemeral media and contexts – such as masked performances – that have left little or no archaeological trace.

It is tempting to explain the scarcity of durable composites in prehistoric art in terms of Harvey Whitehouse’s ‘imagistic’ mode of ritual communication, with its fleeting revelations of supernatural power (cf. Johnson, 2005). But while this might be adequate for the Palaeolithic record, it would not account for the ongoing rarity of such images in early farming (Neolithic) societies with their much higher investments in durable material culture for the conduct of rituals (e.g. plastered skulls, clay figurines, monumental carvings, painted pottery, and so on; cf. Hodder, 2006). An answer to the question of why

images of composite beings only become widely visible in the archaeological record of the beginnings and spread of urban life must therefore incorporate a wider range of factors, both technological and institutional.

The materiality of monsters

In considering the popularity of particular types of counter-intuitive imagery – their ability to become, as Boyer (2000: 196) puts it, ‘both relatively stable within a group and recurrent among different groups’ – we can hardly afford to ignore the material procedures through which they were replicated. In the ancient Near East and Mediterranean, the visual milieu of composite figures typically includes techniques of mechanical image-reproduction, such as cylinder or stamp seals, and subsequently casting moulds, which (by the onset of the 2nd millennium BC) were widely used in Mesopotamia and surrounding regions to replicate standardized images of monstrous faces or figures on terracotta plaques. Many of the latter are likely to have had protective–magical roles within the household, guarding its boundaries against the intrusion of misfortune and disease – an ‘epidemiology of representations’, certainly, but of a more literal kind than that proposed by Sperber and Boyer (see Moorey, 1975, 2003; for later examples, in the 1st millennium BC, see Nakamura, 2004; Rittig, 1977, see Figure 5).

Intaglio carving, integral to the production of both seals and casting moulds, is a highly specialized technique, requiring the artist to master the manual and cognitive habits necessary for working in negative space. In the case of cylinder seals, the restricted properties of the resulting image were intensified by its minute size and – from at least the 2nd millennium BC onwards – by the use of mechanized wheel-cutting techniques for its execution (Sax and Meeks, 1994), placing the final image at a still further remove from the possibilities of manual carving. Seals thus had a dual effect on

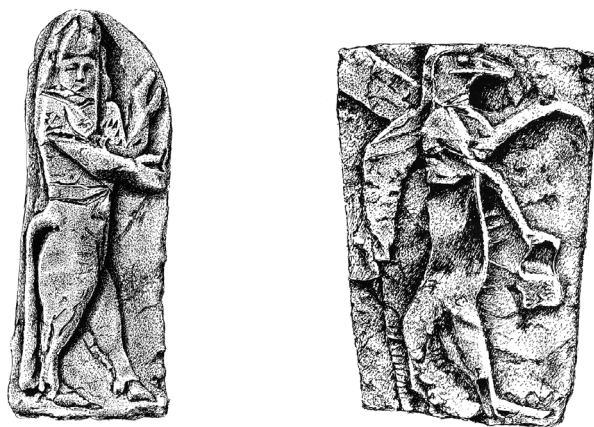


Figure 5. Mould-made terracotta plaques (heights c. 12 and 14 cm) with images of protective spirits, from Assur in northern Iraq, early 1st millennium BC (after Rittig, 1977).

the dissemination of images, comparable in some respects to that of the much later printing press: they made possible the faithful replication of complex images on an unprecedented scale, but they also restricted the production, modification and circulation of such images to a small group of artisans and their elite patrons (cf. Melion and Kùchler, 1991).

It is important to stress that no universal or causal relationship can be posited between mechanical reproduction and the spread of fantastic imagery. This is readily demonstrated by counter-examples, such as the aforementioned bronzes of early China (see Bagley, 2006), or the monster-masks of the Pacific North-West Coast, famously studied by Claude Lévi-Strauss (1982; for further discussion and illustration of composite animals in non-Western art, see also Descola, 2010; Karadimas, 2010). In Bronze Age societies distributed across a broad area of the western Old World, the association between these two phenomena is nevertheless strong and consistent and requires further comment.

To place the point in its wider context, let us recall the argument that counter-intuitive representations are inherently robust media for the construction of culturally specific ideas about the supernatural and therefore have innate currency as receptacles and transmitters of supernatural agency. For Boyer, in particular, cultural forms that manipulate basic ontological expectations about what can exist in the world provide the universal cognitive scaffolding to which discourses about supernatural agents attach themselves and through which they spread effectively in human populations. From the perspective of an epidemiological approach to culture, a close association between mechanical replication and the dissemination of counter-intuitive forms therefore seems puzzling and implies a strong element of redundancy – a kind of superfluous cultural prosthesis to hard-wired cognitive predispositions that are already biased towards their successful transmission.

Conclusion

To resolve this apparent paradox in the epidemiology of culture, I suggest it is necessary to consider not only cognitive factors and modes of production, but also the distinctive types of institutional context – urban and elite – in which images of composite beings took root and spread. My observations on the paucity of composite figures in pre-urban art are not intended to ‘disprove’ the evolutionary claim that counter-intuitive representations are deeply rooted in human culture; nor are they logically capable of doing so. But they do serve to highlight an important shift, first played out around the time of the Urban Revolution, towards a new set of material loci for the manifestation and transmission of these particular kinds of counter-intuitive forms; a shift that was embedded in wider transformations of institutional life, notably through the centralization of ritual and political authority in urban centres and the concurrent devaluing or dissolution of smaller ritual economies on the fringes of urban life (cf. Wengrow, 2001a; Bloch, 2008).

As Canetti (1984[1962]: 337–382) intimated long ago, the institutional significance of the composite figure – rendered *as image*, rather than through masking or disguise – resides in its ability to fix and standardize processes of personal transformation:

From the unending flux of possible transformations, *one* is picked out and given permanent form. The very process of transformation, or rather a peculiar instance of it, is secured forever and thus, in comparison with all those which are excluded, is filled with special significance.

He goes on, in terms that seem especially pertinent to the mechanical replication of counter-intuitive forms, to emphasize the rigid and unchanging character of the composite figure: a 'particular metamorphosis' rendered 'fixed and permanent', and capable of being repeated 'over and over again'.

Sealing practices, as I have noted, allowed the faithful transmission of images that were often highly complex and counter-intuitive, while also providing elite groups with new means of fixing and securing the content of what was disseminated: a central feature of Whitehouse's 'doctrinal' mode of religiosity (cf. Barth, 1990, on the bureaucratized charisma of the 'guru' as opposed to the dramaturgical charisma of the 'conjuror'). In the mechanical dissemination of composite figures – a process first attested with the depiction of masked humans on stamp seals, at the transition between village and urban life (Figure 6) – are we then witnessing attempts by fledgling urban elites to encompass the transformative power of the counter-intuitive, and harness it to new modes of governmentality?

The impression is reinforced by subsequent distributions of composite beings in the visual record of Bronze (and, later, Iron) Age societies. As I have outlined in this article, these distributions do not suggest a random or contagious pattern of transmission. They seem, rather, to cling to the frontiers of urban civilization and state formation, emanating outwards along expanding lines of long-distance trade (in metals and other precious commodities) that linked the fortunes of urban elites across a substantial part of the western Old World. In contexts of sustained exposure to outside commercial and cultural influence (an inherent feature of the encounter between an urban core and its economic margins), the incorporation of exotic monsters into established modes of ritual display had important institutional dimensions, marking out – on a local scale – the ability of particular groups to engage with and encompass the foreign (cf. Napier, 1985, 1990). It was, I suggest, in the context of such encounters that images of composite beings obtained

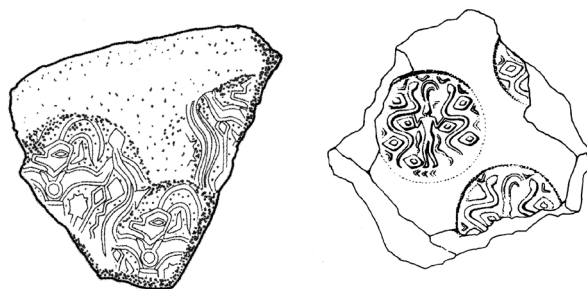


Figure 6. Clay sealings of ceramics jars, impressed with multiple stamp seal-images of masked or composite figures, from Susa in western Iran, early 4th millennium BC (after Cool Root, 2005, original drawings by Jennifer E. Gates).

their peculiar logic of cultural expansion among the first urban societies of the ancient Near East and Mediterranean.

To conclude: the question of how monsters ‘got into the human mind’ – as Arthur Hocart puts it in my opening citation – has proved surprisingly difficult to divorce from that of ‘how they got into art’. Nature may have rendered us peculiarly susceptible to such images; but their transmission, I have suggested, is primarily the work of cultural nurture. None of this is intended to discredit epidemiological approaches to culture. Rather it is to insist that, among those forms of constraint that act upon the spread of culture, we must always include the technological and the social, alongside the psychological. And in this regard, as Marcel Mauss (1903) pointed out long ago, magic and religion are no exceptions.

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Biographical note

David Wengrow is Reader in Comparative Archaeology at the Institute of Archaeology, University College London. His research explores early cultural transformations across the boundaries of Asia, Africa and Europe, including the emergence of the first farming societies, states and systems of writing. He has also written on the history of archaeological thought and the role of the remote past in shaping modern political identities. Recent publications include *What Makes Civilization? The Ancient Near East and the Future of the West* (Oxford University Press, 2010) and *Cultures of Commodity Branding* (Left Coast Press, 2010, edited with Andrew Bevan).