

**The hooting past. Re-evaluating the role of owls
in shaping human-place relations
throughout the Pleistocene**

Shumon T. HUSSAIN

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The hooting past. Re-evaluating the role of owls in shaping human-place relations throughout the Pleistocene

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ABSTRACT

Previous research concerned with the significance of animals in early human evolution has overwhelmingly focussed on large mammals – especially the iconic suite of herbivores and carnivores once inhabiting the Eurasian Mammoth steppes. Building on earlier work of the author, this paper addresses the underrated importance of owls for human life throughout the Pleistocene – predatory birds which only occasionally feature in Palaeolithic visual culture and have hitherto attracted scholarly attention mainly as taphonomic agents. We argue that Pleistocene strigiformes had a crucial role to play in the formation, consolidation and perpetuation of the human sense of place, contributing vitally and in various ways to evolving ideas of landscape and the human spatial experience. By reviewing the archaeological evidence before the dawn of the Holocene warm period, we show that two consecutive phases of early human-owl interaction can be distinguished: a pre-Upper Palaeolithic phase during which hominins and owls shared similar locales, yet cohabitation was essentially non-contiguous; and an Upper Palaeolithic phase during which human-owl relations became increasingly variable and region-specific, so that some strigiform others could emerge as meaningful neighbours. The paper demonstrates how the contextualisation of instances of Upper Palaeolithic owl imagery can clarify the entanglement of these birds with early place-making practices. These data add to the appreciation of deeply interlaced, co-evolutionary human-animal trajectories shaping the human condition. Despite their often-peripheral sociocultural significance, owls must be acknowledged as an irreducible part of the animal context through which the making of humanity was ultimately made possible.

KEY WORDS

Strigiformes,
archaeo-ornithology,
human-animal studies,
Palaeolithic,
animal history,
multispecies ecology,
more-than-human
geography,
visual culture,
parietal art,
place-making.

RÉSUMÉ

Le passé du hululement. Une réévaluation du rôle des Strigiformes dans le développement des relations homme-espace durant le Pléistocène.

Les recherches précédentes sur la signification des animaux dans les débuts de l'évolution humaine ont été axées de manière prépondérante sur les grands mammifères, en particulier sur la série emblématique d'herbivores et de carnivores qui peuplaient autrefois la Steppe à Mammouths eurasienne. S'appuyant sur des travaux antérieurs de l'auteur, cet article aborde l'importance largement sous-estimée des rapaces nocturnes pour la vie humaine durant le Pléistocène – des oiseaux prédateurs qui ne figurent que rarement dans la culture visuelle Paléolithique et qui jusqu'ici ont attiré l'attention des chercheurs principalement en tant qu'agents taphonomiques. Nous soutenons que les Strigiformes du Pléistocène ont joué un rôle crucial dans la formation, la consolidation et la perpétuation du sens du lieu de l'homme, en contribuant de manière vitale et variée à l'évolution de la conceptualisation du paysage et de l'expérience spatiale humaine. En examinant les témoins archéologiques avant l'aube de la période chaude de l'Holocène, nous montrons que l'on peut distinguer deux phases consécutives d'interactions précoces homme-Strigiforme: une phase du pré-Paléolithique supérieur au cours de laquelle hominidés et Strigiformes ont partagé des lieux similaires, mais où l'habitation était essentiellement non contiguë; et une phase du Paléolithique supérieur au cours de laquelle les relations homme-Strigiforme sont devenues de plus en plus variées et spécifiques à une région, de sorte que l'« autre » Strigiforme puisse devenir un voisin significatif. L'article montre comment la contextualisation des exemples d'images de chouettes et de hiboux du Paléolithique supérieur peut clarifier l'enchevêtrement de ces oiseaux avec les pratiques humaines d'aménagement de l'espace. Ces données s'ajoutent à l'appréciation des trajectoires homme-animal profondément enchevêtrées et co-évolutives, qui ont façonné la condition humaine au cours du temps. En dépit de leur signification socioculturelle supposée négligeable, les Strigiformes doivent être reconnus comme une partie irréductible du contexte animal grâce auquel la création de l'humanité a finalement été rendue possible.

KEY WORDS

Strigiformes,
archéo-ornithologie,
études homme-animal,
Paléolithique,
histoire animale,
écologie multi-espèces,
géographie plus-que-
humaine,
culture visuelle,
art pariétal,
aménagement de l'espace.

INTRODUCTION

Owls (*Strigiformes*) are captivating birds and their intriguing gaze – highly evocative and somewhat reminiscent of the human face – as well as their upright stance and frequent philopatry render them prominent targets of sociocultural conceptualization through space and time (Sparks & Soper 1970; Benker 1993; Morris 2014; Chopra 2017). Yet, not only are owls poorly understood as *objects* of human thought and behaviour, they should be recognized as potent and difference-making historical *subjects* in their own right (cf. Rivto 2007; Haraway 2008; Hill 2013, 2019; Krüger *et al.* 2014; Porr 2015; Wirth *et al.* 2016; Bird-David 2017; Pearson 2017; Kost & Hussain 2019). This paper outlines the remarkable entanglement of people and owls throughout the earliest part of human prehistory, and provides a deep-historical perspective on the distinct contribution of owls to the human story¹.

1. The here followed approach has been laid out in detail in Kost & Hussain (2019) and has been developed through a series of publications by the present author (especially Hussain & Floss 2015; Hussain & Breyer 2017; Hussain 2018a; 2019). In contrast to traditional approaches to human-animal relations in the human deep past, this approach rests on insights and concepts elaborated by the metadisciplinary project of *Human-Animal Studies* (e.g., Rivto 2007; Haraway 2008; Demello 2012) and, to some extent, the emerging *Environmental Humanities* and is based on strictly relational premises. Methodologically, this involves the analysis of so-called “triangles of interaction” (cf. Kost & Hussain 2019) and the comparative investigation of animal agency under varying human mobility, cultural and socio-technical regimes as well as chan-

What were the characteristics and ramifications of human-owl relations before humans became sedentary, built permanent settlements and irrevocably transformed the surface of the earth?

Even though owls are known to have played important roles in Greek and Roman mythology (Sparks & Soper 1970; Scobie 1978; Deacy & Villing 2001; Morris 2014), ancient Egyptian thought and cosmology (Newberry 1951; Houlihan 1986; Coyette 2015), the folklore of the European Middle Ages (Russel 1972; Sax 2009) and traditional African and Amerindian systems of belief (Prince 1961; Hewitt 1986; Grube & Schele 1994; Anderson & Tzuc 2005; Krech 2009; Low 2011), their significance in the long and erratic process of becoming human is much less understood (cf. Hussain 2018a, 2019). This is surprising given the fact that owls share a long evolutionary history with the hominin clade, with the oldest fossil specimens of owls deriving from geological formations which date back about 38–54 million years (Brodkorb 1971; Rich & Bohaska 1976, 1981; Kurochkin & Dyke 2011).

While the details of owl evolution remain controversial, the fossil record indicates that owls became more commonplace during the Pleistocene epoch (Janossy 1972; Mourer-Chauviré 1987), roughly in the same broader timespan in which major hominin radiation events occurred (Foley 2002). Some Pleistocene owls, which are extinct today, were probably much

ing ecological conditions. A central ambition is to de-centre our narratives of the human past, to give proper credit to animal contributions and to disrupt nature-culture polarities.

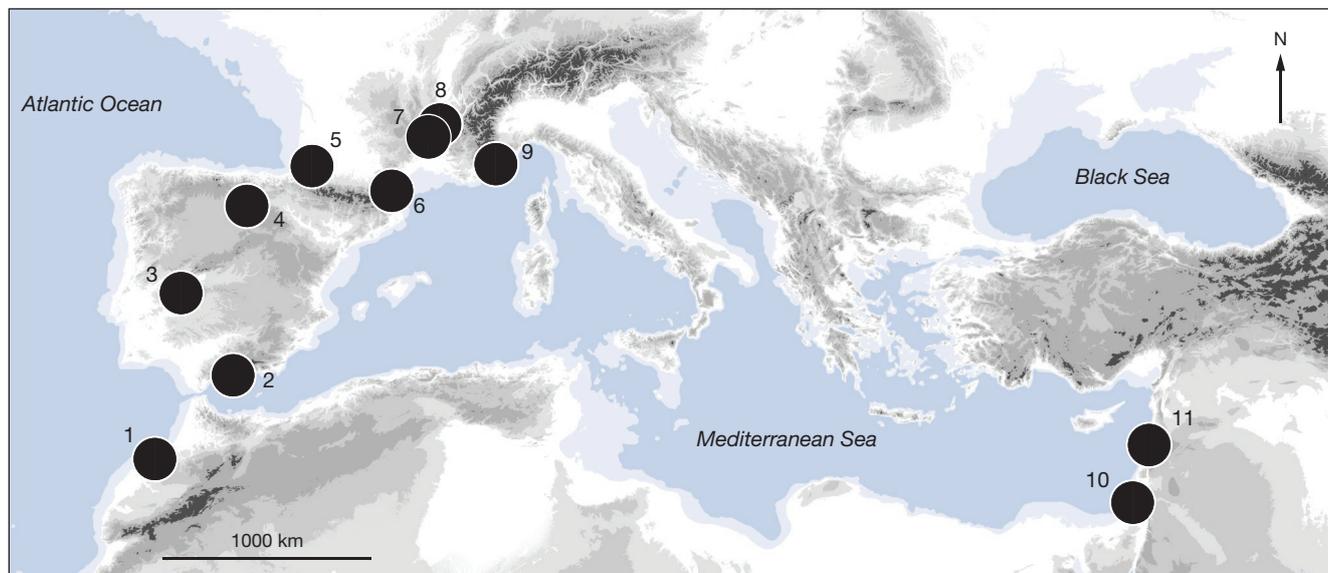


FIG. 1. — Selected sheltered Middle and early Late Pleistocene sites mentioned in the text yielding evidence for non-contiguous human-owl cohabitation. **1**, Oulad Hamida 1, grotte des Rhinocéros (Morocco); **2**, Zafarraya (Spain); **3**, Maltravieso, Sala de los Huesos (Spain); **4**, Sima del Elefante, Atapuerca (Spain); **5**, Bras-sempouy, grottes des Hyènes (France); **6**, La Caune de l’Arago (France); **7**, Barasses II (France); **8**, Baume Moula Guercy (France); **9**, grotte du Lazaret (France); **10**, Qesem (Israel); **11**, Ksâr’Akil (Lebanon).

larger than their contemporary counterparts (Mourer-Chauviré 1994). For example, *Ornimegalonyx* – essentially a gigantic barn owl – could presumably reach two or three times the size of present-day American great horn owls (*Bubo virginianus* (Gmelin, 1788)) (Arrendondo 1975). These giant owls are documented in the Late Pleistocene of Mediterranean Europe and the larger Circum-Caribbean region (Arrendondo 1975; Pavia 2008). We should also not forget that other Pleistocene owls – given the notable diversity of strigiformes in the past (Mourer-Chauviré 1994) – with possibly unique behaviours and appearances may still await initial identification and description. Hence, there are many different reasons to revisit the relationship between people and owls in deep human prehistory and to critically assess the place of these iconic predatory birds in early human evolution.

The paper draws together emerging evidence on changing human-owl relations from the Palaeolithic (*c.* 3.3 mya [millions of years ago] to 11 kya [thousands of years ago]), when hominins started to systematically employ stone tools (Semaw *et al.* 1997; Harmand *et al.* 2015), and places these insights into a wider evolutionary context. We argue that the available long-term evidence points to hitherto neglected co-evolutionary dynamics between humans and owls, and demonstrates that changing modes of “cohabitation” form the basis of early relationships between the two taxa. We begin with a survey of human-owl articulations before the onset of the Upper Palaeolithic (*c.* 45 to 11 kya) and then turn to the representation of owls in the visual culture of the European Upper Palaeolithic. This interactional deep prehistory of humans and owls is then put into perspective by reconsidering the role of these birds in shaping both the human condition and basic qualities of human landscape experience, which ultimately helped fashion our species’ sense of place.

SIGNS OF NON-CONTIGUOUS COHABITATION: HUMAN-OWL RELATIONS BEFORE THE UPPER PALAEO-LITHIC

The earliest stages of human evolution are characterized by a heightened diversity of hominin species, some of which may have occupied the same ancestral landscapes (e.g., Galway-Witham *et al.* 2019). The lifestyle and socioecology of these various hominins remain poorly understood, and it is therefore difficult to evaluate their possible exposure to, or the extent of niche overlap with, owls. Today, over 40 species of owls are known from the African continent alone, many of which inhabit savannah and grassland environments (Voous 1966). We can thus safely assume that a significant number of owls were also present some two million years ago, even though many of the relevant Pleistocene environments should be expected to have harboured non-analogue faunal and floral communities (e.g., Foury *et al.* 2016; Faith *et al.* 2019). That said, the archaeological evidence of human-owl interactions from this early timeframe remains fairly elusive. Owls themselves are for example only rarely documented in early anthropogenic bone assemblages from Africa and it is unlikely that the birds formed a regular part of hominin diets. Evidence for owl activity in this period is largely related to the role of these predatory birds as taphonomic agents and bone accumulators (Andrews 1990; Geraads 1994, 2006; Lyman 1994; Reed 2005; Desclaux *et al.* 2011; Hanquet 2011; Stoetzel *et al.* 2012; Fig. 1).

In early hominin cave sites, owl foraging and roosting behaviour can account for a substantial portion of the imported microvertebrate remains (Brain 1981; Fernandez-Jalvo *et al.* 1998). This contribution of strigiformes to the formation of archaeological layers is notable: it reveals that hominins and

owls at least occasionally visited the same locales and would have consequently encountered each other from time to time. Apart from the distinct and highly recognisable screeching voice of many owls, owl pellets and dropped feathers would have also served as a latent reminder of their presence in the immediate and wider surroundings (Stahl 1996). The use of cave and rock shelter sites by early hominins has therefore certainly fostered a sense of cohabitation between the two species – albeit intangible and unstable.

Altogether, the archaeological record of the Plio-Pleistocene and earlier part of the Pleistocene seems to suggest that this *status quo* between hominins and owls did not change dramatically throughout the next 1.5 million years both in and outside of Africa, attested for example by evidence from key sites such as Ksâr’Akil in current-day Lebanon (Kersten 1991) and the Sima del Elefante of Atapuerca in contemporary Spain (Núñez-Lahuerta *et al.* 2016). The Lower Palaeolithic site of Qesem cave (Gopher *et al.* 2005), located in what today is Israel, has so far produced the richest and most instructive evidence for better characterizing this impalpable mode of early human-owl cohabitation (Smith *et al.* 2013, 2016; Blasco *et al.* 2019) (Fig. 1).

Qesem cave is situated in a Turonian limestone ridge between the Israeli coastal plain and the Samaria hills. Its archaeological layers have been dated to between *c.* 400 and 200 kya and yielded diagnostic Acheuleo-Yabrudian stone artefact assemblages – a typical manifestation of the Levantine Middle Pleistocene (Barkai *et al.* 2003; Gopher *et al.* 2005; Meignen & Bar-Yosef 2020). Today, Qesem encompasses a relatively small karstic cavity, some 20 × 15 meters in size. Its sequence of anthropogenic and geogenic input has been estimated to have preserved more than 10 meters of Pleistocene sediment (Gopher *et al.* 2005; Barkai *et al.* 2018). Careful archaeological excavations, starting in 2001, have opened up a hitherto unique window into the habitational dynamics of the former cave dwellers, including currently unknown hominins and their owl contemporaries (Smith *et al.* 2013, 2016; Blasco *et al.* 2019). The provided insights are relevant for better understanding the behavioural evolution of owls, but also illustrate the fragile relationship between these birds and Middle Pleistocene hominins in the Levant. Qesem’s high-resolution record allows for the identification of spatially discrete concentrations of well-preserved macro- and microfaunal remains, some of which can be interpreted in terms of their potential producers (Maul *et al.* 2011, 2016).

One of these well-defined concentrations – termed “Concentration 1” by the excavators of the cave – contained primarily microvertebrates (Smith *et al.* 2013, 2016). Its faunal composition includes the bones of chameleons, smaller reptiles and geckos (Smith *et al.* 2013). Meticulous taphonomic analysis of these remains – paying close attention to part abundance, breakage patterns, corrosion as well as surface colour and condition – has indicated that this concentration was most likely accumulated by barn owls² (Smith *et al.* 2013, 2016).

2. Notably, the dietary signature of the evidenced Middle Pleistocene barn owls strongly deviates from the prey that their present-day counterparts typically take and hence suggests “non-analogue” behavioural profiles in the past (Smith *et al.*

The multidisciplinary team of researchers working at Qesem was even able to pinpoint the likely roosting or nesting location of the owls within the former (and now collapsed) cave structure (Smith *et al.* 2013). This small ledge is consistent with what we know about the preferred roosting locations of these birds today and is situated immediately above the microvertebrate concentration. Moreover, the roosting area is close to the excavated central hearth of the cave where hominins seem to have consumed large game, especially deer, as well as tortoises (Stiner *et al.* 2009; Blasco *et al.* 2014; Barkai *et al.* 2018), though the two features are not exactly from the same stratigraphic level (Smith *et al.* 2013).

Taken together, the data from Qesem are consistent with the notion that ancient cave environments provided a medium for intangible, irregular and overall fragile engagements between hominins and owls. The two agents would sometimes utilize the same rock cavities, although with very little temporal overlap or direct interaction, since barn owls are known to be sensitive to any kind of interference and usually prefer remote locales where there is little external disturbance (Shawyer 1987). The virtual lack of owl remains from the archaeological bone assemblages of Qesem (Sánchez-Marco *et al.* 2016; Blasco *et al.* 2019) as well as the possible seasonal signature of the microvertebrate accumulation support this conclusion (Smith *et al.* 2013).

The association of both players, notwithstanding, would have created a latent sense of spatial community, companionship and landscape sharing, rooted in the recognition of similar needs, spatial behaviours and preferences. The overarching architecture of human-bird relations in the Middle Pleistocene and early Late Pleistocene has likely afforded ideas of complementarity, such as the perception that owls and hominins share basic eco-behavioural affinities and mirror each other in meaningful ways (hominin-cave *vis-à-vis* owl-cave, diurnality vs. nocturnality, etc.). The general picture, consistent with other relevant findings from the Middle Pleistocene Levant and beyond (e.g., Marder *et al.* 2011), emphasizes non-contiguous, penecontemporary cohabitation and mutual awareness as key features of earliest human-owl interfaces.

PATTERNS OF CONTIGUOUS COHABITATION: THE DIVERSIFICATION OF HUMAN-OWL RELATIONS IN THE EUROPEAN UPPER PALAEOLITHIC

The European Upper Palaeolithic heralded profound changes in the architecture of relationships between humans and owls. A key motivator for this transformation was probably the increasing regionalization and diversification of hominin lifeways at the end of the Late Pleistocene (Richter 2017). The European Upper Palaeolithic has seen an unprecedented homogenization of material culture on continental and sometimes transcontinental scales, while at the same time

2016). At present, however, it remains unclear whether this observation indicates a different position of the barn owl in Middle Pleistocene ecosystems of the Levant or whether we are dealing with a now extinct species of *Tyto*.

documenting amplified regional signatures (Vanhaeren *et al.* 2006; Bon 2009). This pattern seems to indicate that human groups became strongly interconnected and both objects and ideas could circulate in geographic space, but local communities would nevertheless seek to differentiate themselves and to devise situated identities, anchored in the local conditions of their varied daily experiences (cf. Hussain 2018b: 133). A notable consequence of this new logic of sociocultural organization – grounded in the dialectics between large-scale societies and small-scale communities (*sensu* Tönnis 1970; Schneider 2010) – was an increase in dependency on local resources, animal ecologies and physical landscape settings (Bon 2009). In other words, local social identities could be expressed not only in terms of material culture, symbols, or particular systems of knowledge and belief, but also by means of existing and emerging ties between humans and animal others (Hussain & Floss 2015; Hussain 2018a). It is against this broader evolutionary background that we have to explore the dynamics of human-owl relations during the European Upper Palaeolithic.

The Upper Palaeolithic differs from previous periods insofar as the human grasp of the animal world seems to have expanded considerably to integrate a broader range of animal species into the repertoire of material objects and symbols anchoring regional identities (Conard *et al.* 2013; Hussain & Floss 2015). Given the already noted tendency of tethering human communities to local environments, this is perhaps not particularly surprising and opens up the interesting possibility that socio-evolutionary trajectories in the Late Pleistocene were framed, fostered and, to some extent, catalysed by the pluralization of human-animal relationships. How has this pluralization affected human-owl intersections and the roles owls could assume for and in human societies? Would the concomitant reconfiguration of human-landscape relations change the exposition of humans and owls, alter interaction dynamics and the significance granted to the latter?

Among the anthropogenic avian remains forming a regular part of most archaeological bone assemblages from the Early Upper Palaeolithic onwards, owl remnants are typically rare. If the bones of strigiformes are recorded in the archaeological record, however, their treatment is often conspicuous. The Early Aurignacian site of La Quina aval (*c.* 33 kya) (Dujardin 2005) provides an instructive example: its faunal assemblage does not only include cut-marked remains of medium-to-small sized mammal species such as wolf, fox, and hare, but also the bones of snowy owls (*Bubo scandiacus* (Linnaeus, 1758)) with unequivocal traces of human butchery (Mallye *et al.* 2013); the recovered remains comprise exclusively owl foot bones and the location of the documented incisions are characteristic of cutting gestures aiming to dismember the sharp claws of the birds (Laroulandie 2000; Mallye *et al.* 2013). A complementary case has been reported from the Châtelperronian levels of the grotte du Renne in Arcy-sur-Cure (*c.* 50–40 kya), where late Neanderthals seem to have intentionally isolated the talon of an eagle owl (*Bubo bubo* (Linnaeus, 1758)) (Mourer-Chauviré 2019; Vanhaeren *et al.* 2019). The emerging evidence thus underscores that the exploitation of larger owls was oriented

towards the retrieval of claws, hence implicating the artisanal and social domain of quotidian life in the Early Upper Palaeolithic (cf. Laroulandie *et al.* 2020).

Comparable but more extensive cases of Upper Palaeolithic humans taking advantage of owl resources are known from a cluster of Magdalenian sites in the Aquitaine region of present-day France (*c.* 20 to 14 kya; cf. Eastham 1998; Laroulandie 2004, 2016). The treatment of owl bones in these Late Upper Palaeolithic contexts differs from the handling of the co-present remains of other bird species, suggesting that a suite of largely “cultural” factors has motivated the import of owl carcasses and individual bones to late Magdalenian sites (Laroulandie 2016). Some phalanges and long bones of snowy owls were even decorated with regular, quasi-parallel incisions (e.g., Dachary *et al.* 2008). A similarly complex treatment of strigiformes, targeting the meat and claws of the snowy owl, has recently been attested for the late Magdalenian site of Trou de Chaleux in present-day Belgium (Goffette *et al.* 2020).

Overall, it is probably more than coincidence that especially *Bubo scandiacus* became a recurrent focus of human attention in the later part of the European Magdalenian. Snowy owls are more easily detectable in the landscape than most of their relatives, and are known to regularly dwell on exposed hills, stones or tree trunks (König & Weick 2010). A recent study on the display capacity of snowy owls has concluded that both the plumage colouring and the typical behaviour of these birds maximise their visibility and perceptual prominence in the landscape (Bortolotti *et al.* 2011). For human foragers operating in the same environments, these birds would have easily come into view as watchful “custodians” and “overseers” of the land. Where they constituted a salient pillar of local ecologies, snowy owls may thus have emerged as potent vehicles for negotiating human socio-cultural identities within the larger Magdalenian ecumene (cf. Laroulandie 2016).

Even though birds are rarely depicted in the rich visual culture of the Upper Palaeolithic (Paillet & Man-Estier 2011: 518; Braun 2018; Sauvet 2019) – a pictorial corpus which is dominated by ungulates, mammoths and large carnivores (Leroi-Gourhan 1965; Mithen 1988; Tosello 2003; Sauvet & Włodarczyk 2008; Floss 2016) – avian species nonetheless appear to have been progressively represented throughout the Upper Palaeolithic (Nicolau-Guillaumet 2008). This trend may indicate that birds were increasingly recognized as a cornerstone of human lifeworlds (Kost & Hussain 2019); it also suggests that birds acquired a new significance as a means to “think with” (*sensu* Tambiah 1969; Haraway 1989; Tsing 1995), helping to negotiate and understand the place of humans in the world.

The overall scarcity of strigiformes in Upper Palaeolithic art – even in comparison to other bird taxa – is notable (Lorblanchet 1974, 2000: 57–61) and their infrequent depiction may be a consequence of the intangible and elusive presence of these birds in human surroundings. Diurnal bird species are more readily encountered and observed, and they interfere more directly with human everyday life and settlement activity. The few cases of Upper Palaeolithic owl representations that exist may thus tell us something important about the under-

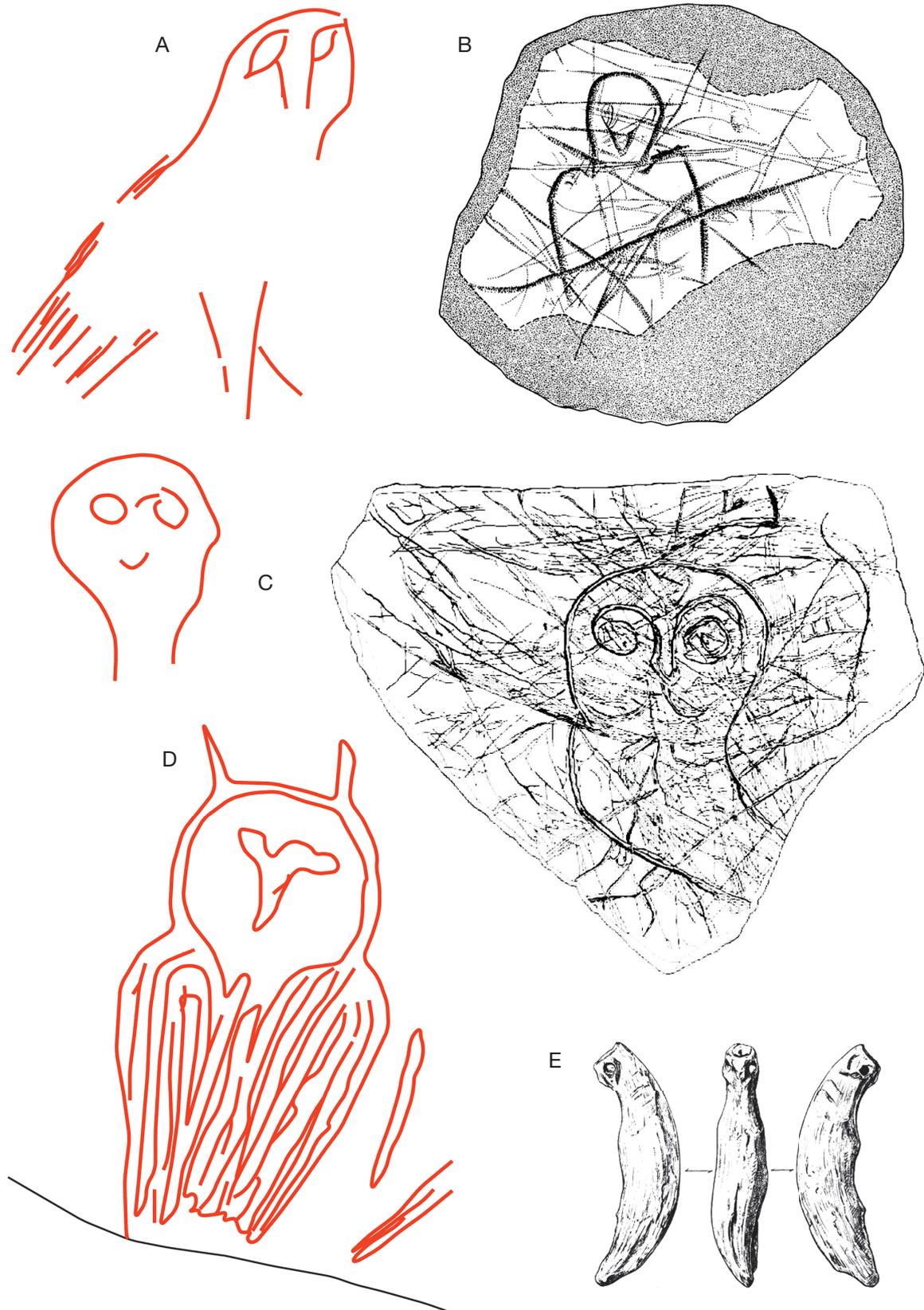


FIG. 2. — Early and Late Upper Palaeolithic strigiform imagery. **A**, owl engraving from Marsoulas placed next to a quadrangular sign (redrawn from Fritz & Tosello 2007: 28) [top] and *fantôme*/anthropomorph from Marsoulas [bottom] (redrawn from Vialou 1986: 215, fig. 177); **B**, owl-like engraving on a sandstone slab from Abri Morin (Deffarge *et al.* 1974: fig. 6); **C**, owl-like engraving from La Marche (Chisena & Delage 2018: fig. 25); **D**, finger tracing of an owl from Chauvet cave mounted on an overhanging rock next to the image of a horse (redrawn from Chauvet *et al.* 1996: fig. 33); **E**, probable owl-head on horse tooth from the rock-shelter of Le Mas d'Azil (Braun 2018: fig. 5). No scale.

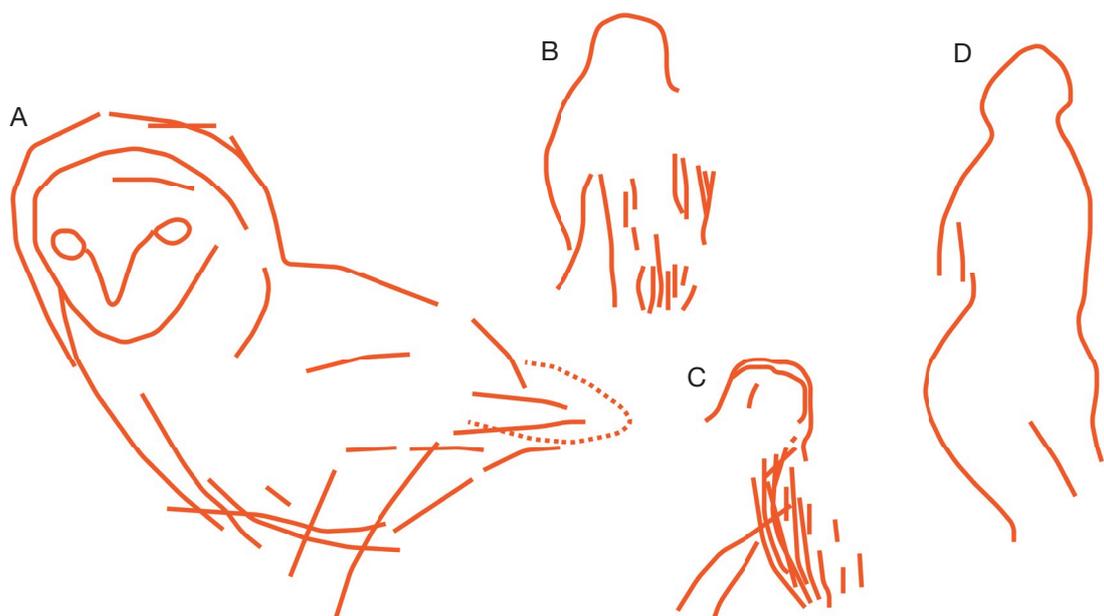


FIG. 3. — Engravings from the Middle-to-Late Upper Palaeolithic parietal art corpus of grotte Margot. **A**, owl depiction (nr. 74) focalizing body and gaze (redrawn from Guigon & Pigeaud 2018: fig. 6A); **B**, abstract owl-like outline (nr. 168b; redrawn from Guigon & Pigeaud 2018: fig. 6B); **C**, abstract owl-like outline with hinted beak (nr. 44; redrawn from Guigon & Pigeaud 2018: fig. 6B); **D**, anthropomorph (nr. 110; redrawn from Pigeaud *et al.* 2012: fig. 12). No scale.

lying configuration of human-owl relations, both in terms of the status of these birds in human lifeworlds and the locales in which they made their appearance.

The oldest known image of an owl in Upper Palaeolithic art is a detailed *en face* engraving discovered in the salle Hillaire of Chauvet cave in Southern France (Clottes 1995, 2010; Braun 2018: fig. 1a; Fig. 2D). The position of this figure is notable: it “sits” on the lower limit of an overhanging wall section and takes advantage of the natural morphology of the rock cavity. The owl is portrayed with its head turned around; the gaze evocatively faces the observer but the body of the bird is shown from the back, foregrounding the unique ability of owls to rotate their heads almost 360 degrees. In addition, the owl image features ears, perhaps representing a long-eared owl or a Eurasian eagle-owl, but probably not a snowy owl or a barn owl. Even though the owl engraving cannot be directly dated, it most likely belongs to the Aurignacian-Gravettian corpus of Chauvet’s parietal imagery, which has been placed into the timeframe between *c.* 37 and 28 kya (Quiles *et al.* 2016).

Within the hybrid, “more-than-human” space of Chauvet’s interior – shaped and partly co-constructed by various human, geological and animal agencies – the owl image occupies a transitory position. The salle Hillaire harbours plenty of biogenic traces, especially cave bear bones and vestiges of bear activity, many of which were likely already in place when Upper Palaeolithic humans first visited the cave. The chamber is located at the crossroads of the salle du Crâne and the galerie des Mégacéros – two key areas of human interference – and opens up the distal part of the cave structure. The salle Hillaire documents a diverse set of human activities, reflected in charcoal remains and markings, imprints of branches, and pieces of flint, and it may

thus not be by mere chance that the owl image has been placed at a topological verge within the cave, where human and nonhuman activity meet and resonate.

Another example of strigiform imagery from the Upper Palaeolithic derives from the newly discovered, rich parietal art repertoire of grotte Margot, Mayenne department, in Northwestern France (Pigeaud *et al.* 2010, 2012). Grotte Margot has furnished an exceptionally large assemblage of avian engravings with at least three owl-shaped figures (Guigon & Pigeaud 2018; Fig. 3). Although these images remain difficult to date, their iconographic and archaeological context suggests a Middle to Late Upper Palaeolithic origin (Pigeaud *et al.* 2012). This chronological attribution is supported by two radiocarbon dates taken from pigments of Mayenne-Sciences cave in the same river valley (Pigeaud *et al.* 2003), and by a stylistically comparable set of avian engravings on portable art from the neighbouring cave of Rochefort with a Solutrean age (Pigeaud & Hinguant 2017). The most complete and realistic strigiform from Margot (nr. 74) is depicted in profile, while the head is shown *en face* (Guigon & Pigeaud 2018: fig. 6A; Fig. 3A). The other two owl-like figures (nr. 44 and 168b) are more abstract renderings and focalize the frontal view, especially the head and characteristic outline of the bird (Guigon & Pigeaud 2018: fig. 6B; Fig. 3B-C).

The discovery of Upper Palaeolithic owl figures in grotte Margot is important not only because of the rarity of this kind of imagery, but also because of the notable palaeogeographic and ecological context of the locality. The by Upper Palaeolithic standards unusual composition of motifs with a strong emphasis on avian renderings is not only found far away from the epicentre of Franco-Cantabrian cave art, it is also situated in a vibrant biodiversity hotspot (Guigon & Pigeaud 2018). Detailed taphonomic and zooarchaeological

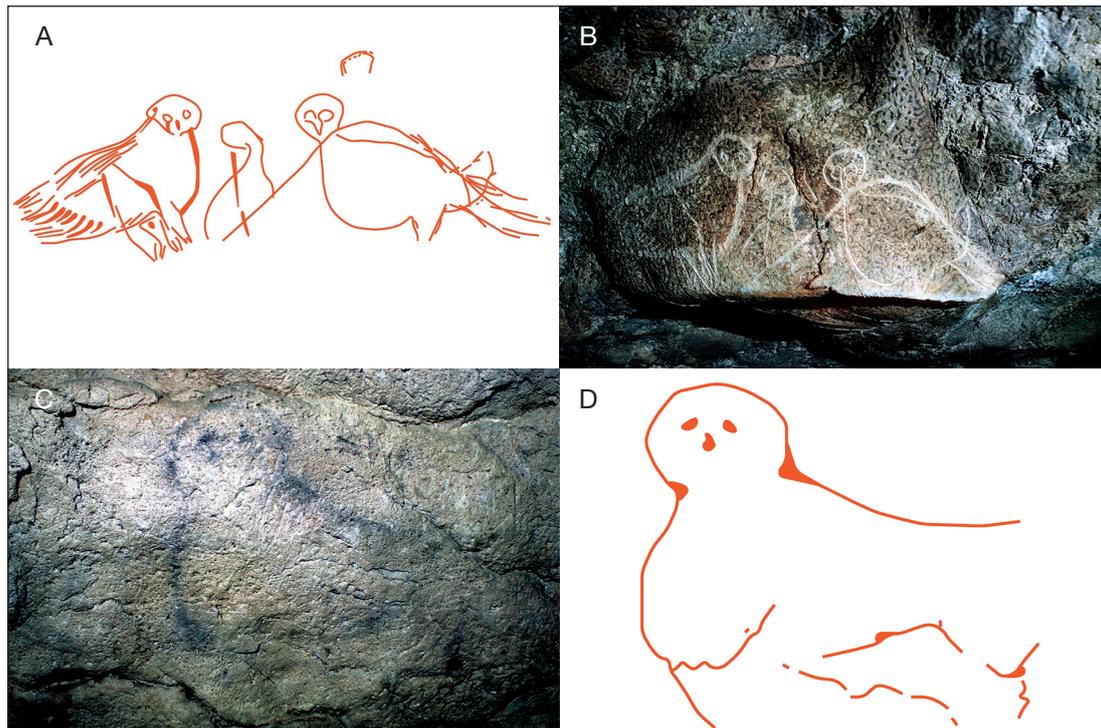


FIG. 4. — Late Upper Palaeolithic strigiform representations on cave walls. **A, B**, Two owls with a hatchling or anthropomorph in the cave of Les Trois Frères (© Wendel Collection, Neanderthal Museum Mettmann/outline redrawn from Clot & Mourer-Chauviré 1986: fig. 6); **C, D**, owl-like image from the galerie Jeannel of Le Portel cave (© Wendel Collection, Neanderthal Museum Mettmann/outline redrawn from Clot & Mourer-Chauviré 1986: fig. 6). No scale.

analysis of the rodent remains from the Solutrean levels of Rochefort cave in the same river valley has shown that the LGM-interface of the region must have harboured a diverse community of medium-sized nocturnal raptors, such as the snowy owl, the great grey owl (*Strix nebulosa* Forster, 1772) and the long-eared owl (*Asio otus* (Linnaeus, 1758)), and indicates a combination of steppe and wet wooded environments (Hanquet *et al.* 2016). This specific palaeoecological setting, probably acting as a micro-cryptic refugium during the LGM (Late Glacial Maximum), signals unique conditions of human-owl interaction. The fact that strigiform representations from Margot are earless is consistent with this reading and anchors the imagery within the wider palaeoecological setting of the cave, dominated by arboreal and steppe-dwelling owls.

The remaining cases of known owl-themed Upper Palaeolithic parietal art derive from Magdalenian contexts and are at least eight to ten thousand years younger than the iconic owl depiction from Chauvet. The best-known example is the pair of owls from the galerie des Chouettes in the cave complex of Les Trois-Frères (Bégouën & Breuil 1958; Fig. 4A, B). The torso of the birds is depicted in profile, while the heads are shown in frontal view (Bégouën *et al.* 2014; Braun 2018: fig. 2A). The scene comprises two adult owls facing each other and sandwiching a small owllet. The galerie de l'Hémione within the same cave hosts yet another owl image, again rendering the body in profile and the head *en face* (Lorblanchet 2000: 59; Bégouën *et al.* 2014). Two further engravings of owls have been identified on two different image-panels in the cave of

Marsoulas, Haute-Garonne department, some 30 kilometers to the northwest (Fritz & Tosello 2007, 2010; Fig. 2A). Archaeological excavations have shown that Marsoulas was occupied during the Middle Magdalenian (*c.* 19-17 kya), suggesting that the owl images originate from roughly the same time interval.

A last instance of an owl figure from the corpus of Upper Palaeolithic parietal art comes from Le Portel cave, not far away from Les Trois-Frères at the footsteps of the Pyrenees (Beltrán *et al.* 1966; Lorblanchet 1974: 114; Braun 2018: figs 3A, 4B). The case of Le Portel is less clear, however, and there is some debate as to whether the image actually depicts a bird or rather a birdly “ghost” (Leroi-Gourhan 1965). Ghost images are found in many Upper Palaeolithic caves of the Franco-Cantabrian region (Lorblanchet 2000: 63; Montañés 2015) and some of them may indeed be interpreted as reduced owl outlines. As noted by Laroulandie (2016: 191), the boundaries between “anthropomorphs” and “strigimorphs” might have been deliberately blurred at least in some of the relevant cases. The cross-reference of and spatial association between human and owl images in some of these parietal art contexts, for example in Les Trois-Frères, at least lends support to the idea that Upper Palaeolithic image-worlds might express a conceptual link between humans and strigiformes, for instance playing with the possibility that some properties of both agents such as their prominent gaze are in principle interchangeable and signal a background of bodily affinity and shared origin (see especially Hill 2019 for a discussion of this general conception).

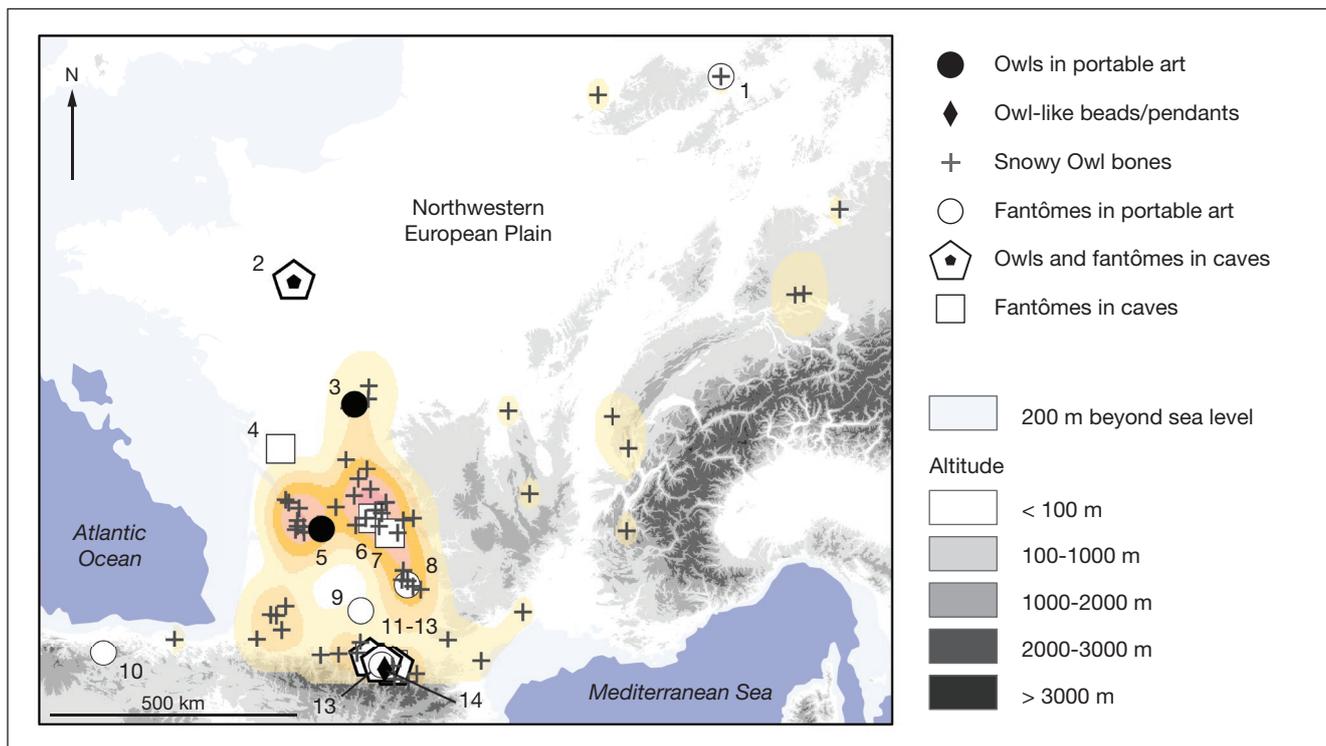


FIG. 5. — Spatial juxtaposition of owl faunal remains, often bearing traces of complex processing, and instances of owl and possible owl-related imagery during the Magdalenian. 1, Gönnersdorf; 2, grotte Margot; 3, La Marche; 4, Taillebourg; 5, Morin; 6, Les Combarelles; 7, Cougnac; 8, Bruniquel; 9, Fontalès; 10, La Garma; 11, Marsoulas; 12, Les Trois Frères; 13, Le Portel; 14, Enlène; 15, Le Mas d’Azil. Colour shading indicates relative density of owl remains (from yellow to red) across the Magdalenian ecumene (calculated with the Kernel Density Tool in ArcGIS 10.3 based on presence/absence data from Laroulandie 2016: table 1, fig. 1).

The geographic position of the owl representations from Les Trois-Frères, Marsoulas and Le Portel is noteworthy since all of these caves are located in the southwest of France, close to the Pyrenees and not far away from the Aquitaine basin where the exploitation of owl carcasses is extensively documented during the Upper Magdalenian (Laroulandie 2016; Fig. 5). The depicted owls in the mentioned caves are earless and emerging palaeozoological datasets indicate a marked presence of snowy owls in the Atlantic region of Southwestern France and Northern Spain during the Late Pleistocene (Núñez-Lahuerta *et al.* 2016). Moreover, bones of snowy owls have been discovered in the galerie du Grand Éboulis of Les Trois-Frères and the lack of anthropogenic material indicates that the birds died there naturally or were brought to the cave by other non-human agents (Mourer-Chauviré 1975). Although there is a chronological disconnect between the parietal strigiformes, whose context often suggests a Middle Magdalenian origin, and the systematic manipulation of owl carcasses, which is so far mainly a phenomenon of the Upper Magdalenian, the total configuration of the evidence suggests that the placement of owl images was at least partly motivated by the intimate entanglement of living owls and the image-housing landscapes. Snowy owls appear to have emerged as regular animal co-dwellers in these areas and they seem to have mediated human-environment relations in significant ways.

The listed examples of Upper Palaeolithic parietal art can be complemented by a small number of owl representations in the sphere of portable visual culture. In the Upper Magdalenian lay-

ers of Morin cave, for example, archaeologists have discovered a small, pink sandstone item bearing the engraving of a human or owl figure in frontal view (Deffarge *et al.* 1974; Fig. 2B). Another possible owl engraving has been unearthed from La Marche, Vienne department, probably dating to the Middle Magdalenian and yielding an abstract owl-like outline with eyes and perhaps a beak (Pales & Tassin de Saint-Péreuse 1976: 152-154; Chisena & Delage 2018: fig. 25; Fig. 2C). A further example of a potential owl figuration is provided by the famous site of Le Mas d’Azil, Ariège department, where a Magdalenian horse tooth has been reworked into an owl-like pendant (Péquart & Péquart 1963; Braun 2018: fig. 5; Fig. 2E). Even though the interpretation of some of these pieces remains controversial, they were discovered in the same larger region where most of the previously reported cases of Late Upper Palaeolithic owl imagery are concentrated (cf. Fig. 5). If we accept that the distinction between humans and owls is deliberately problematised and socio-culturally mediated, the larger context of Late Upper Palaeolithic visual culture may be interpreted as conveying a belief world in which owls uphold a place as “borderline” persons, “quasi-people” or “camouflaged” humans – much in the same spirit as Amerindian perspectivism considers the distinct vantage points of humans, animals and more-than-human spirits as derived states of a common biological origin and shared spiritual genealogy (Viveiros de Castro 1998, 2004).

Other notable examples of owl-like portable visual culture pre-date the Magdalenian period and can be attributed to the Pavlovian (*c.* 29-25 kya), a regional expression of the ear-

lier phase of the East-Central European Gravettian (Bougard 2011; Svoboda & Frouz 2011; Oliva 2014; Hussain 2018a, 2019). These Pavlovian owls form the hitherto most eminent and extensive assemblage of portable owl-shaped items from the Upper Palaeolithic of Western Eurasia. The small set of objects comprises owl-like burnt clay figurines and perforated owl-shaped pendants made of ivory (Svoboda & Frouz 2011; Fig. 6A). The owls are highly stylized and mimic only the most characteristic features of these nocturnal predators – their distinct outline, ears and beak (cf. Fig. 6A-D). This abstract representation makes them generally difficult to identify as owls, and the low number of objects that can be addressed as owl-like must thus be regarded as a minimum estimate. The most conspicuous aspect, however, is the provincial distribution of the respective owl representations, earmarking them as a specific material expression of the early Gravettian settlement complex in the Pavlovian Hill region of Southern Moravia (Hussain 2019). This confined spatiotemporal occurrence suggests that the relationship between humans and owls must have had a typifying character for Gravettian life in this area, constituting a central pillar of human identity and “place-making” in the diverse landscapes of the Pavlovian Hill region (cf. Hussain & Breyer 2017; Hussain 2018a, 2019). Consistent with available paleontological and zooarchaeological evidence, environmental and ecological datasets invoke a comparably tree-rich glacial landscape – a “wood steppe” (Svoboda *et al.* 2015) – which must have supported a diverse owl community.

The archaeological evidence further points to the differential treatment of owl bones relative to other faunal remains (Wertz *et al.* 2016), and shows that early Gravettian settlement in the Pavlovian Hill region was unusually intense and long-lived (e.g., Novák 2005; Svoboda *et al.* 2016). Owl-related material culture is therefore encountered in a context in which Palaeolithic communities display heightened levels of stationarity, domesticity and perhaps even sedentarity – Pavlovian settlements cover extensive ground, exhibit durable structures and yield material culture of “reduced mobility” such as ground stones (Hussain 2019) – and where owls, themselves typically philopatric, appear to have been relatively abundant (cf. Hussain & Breyer 2017; Hussain 2019). This situational matrix and the unique exposure of owls and humans it supports would have rendered the owl a distinguished animal neighbour, affording notions of mutuality, cohabitation, respect and sharing (Hussain 2018a).

This interpretation is also supported by the fact that the documented Pavlovian owl representations exhibit well-defined ears, indicating that the context of human-owl engagement was predominantly boreal or semi-boreal rather than karstic. In contrast to the pre-Upper Palaeolithic cases discussed above, the solicited mode of human-owl cohabitation in the Pavlovian is contiguous and implies physical neighbourhood, promoting notions of non-human personhood and social intimacy (cf. Hussain 2019). Sharing the immediate environment, coordinating landscape claims and “living with” owl others (*sensu* Kirksey & Helmreich 2010) thus appears to have reached a new quality in this particular Upper Palaeolithic ecocultural setting.

A comparable intersection of Upper Palaeolithic humans and owls might be reconstructed during the Eastern Gravettian with its large complex of sites spanning from the central Russian Plain to the Don River ((Soffer 1985; Bulovchnikova 1998; Hoffecker 2002a; Sinitsyn 2007; Otte 2015; Iakovleva 2016), including such iconic techno-cultural entities as the Kostenkian (Kostenki-Avdeev-Borshevo complex) and the Mezinian (Mezhirich-Mezin-Kotylevo complex). Broadly dated to the late phase of the Valdai glaciation (*c.* 30-12 kya), the Eastern Gravettian yields an exceptionally rich artistic tradition, primarily rooted in bone and ivory objects (e.g., Rogachev 1962; Abramova 1997; Grigoriev 1995; Gvozdover 1995; Demischenko 2006) and comprising a range of unique items – variously addressed as spatula and mattock-like objects in the literature (cf. Soffer 1985) – which may be taken to evoke owl associations (cf. Fig. 6). The identification of these items as owl-related remains ambiguous, however, even though the implied equivocation of figurative, functional and material references might again be deliberate. Eastern Gravettian owl conjurations may thus include zoomorphic and anthropomorphic handles of bone and ivory spatula as well as the non-functional ends of some organic mattocks and zoomorphic points designating this easternmost section of the Gravettian world (Fig. 6E-I; cf. especially Soffer 1985: fig. 2.51 after Zaverneyev 1978: figs 5, 6). The only more tangible image of a possible owl is mounted on the proximal end of a bone spatula excavated from the site of Avdeev (Goutas 2013: fig. 4.12; Fig. 6G), but this zoomorphic rendering can also be interpreted as a feline and the latter reading has typically been favoured.

If strigiformes are implicated or referenced in the material culture of the Eastern Gravettian, two observations seem noteworthy: first, the embedded design of the possible owl figurations is characterized by strongly reduced outlines, exhibiting only head, ears and perhaps eyes. This makes the possible depictions difficult to discern and to identify taxonomically and an important aspect of this visual culture may again be to open up a field of multi-semantic references, to play with perspectivism, ambiguities and possibilities and to integrate human, material and animal traits in counterfactual fashion. Second, some spatula handles, especially from the site of Avdeev, bear deep perforations reminiscent of “eyes” and their placement is consistent with this qualification (Fig. 6H). If these “eyes” cannot be explained away by functional arguments, they focalize the gaze and vision of the represented beings and cherish the *en face* view – features that also earmark owls and set them apart from many other animals. Interestingly, the famous female figurine from Dolní Věstonice 1 in the Pavlovian Hill region yields similar eye-like markings on the top of its head as the spatula heads from Avdeev several hundred kilometres to the east (e.g., Králík *et al.* 2002: fig. 13; Oliva 2004: 76; Fig. 6I). Given the ecocultural significance of owls in the Pavlovian and the placement of these markings on an anthropomorphic figurine, this may be taken to support the invocation of strigiform properties in Eastern Gravettian material culture and the deliberate blurring of human-animal boundaries. In formal terms, these eye-bearing *en face* representations share general affinities with the masks and ghosts/*fantômes* of Franco-Cantabrian cave art and may thus belong to the same dispositional

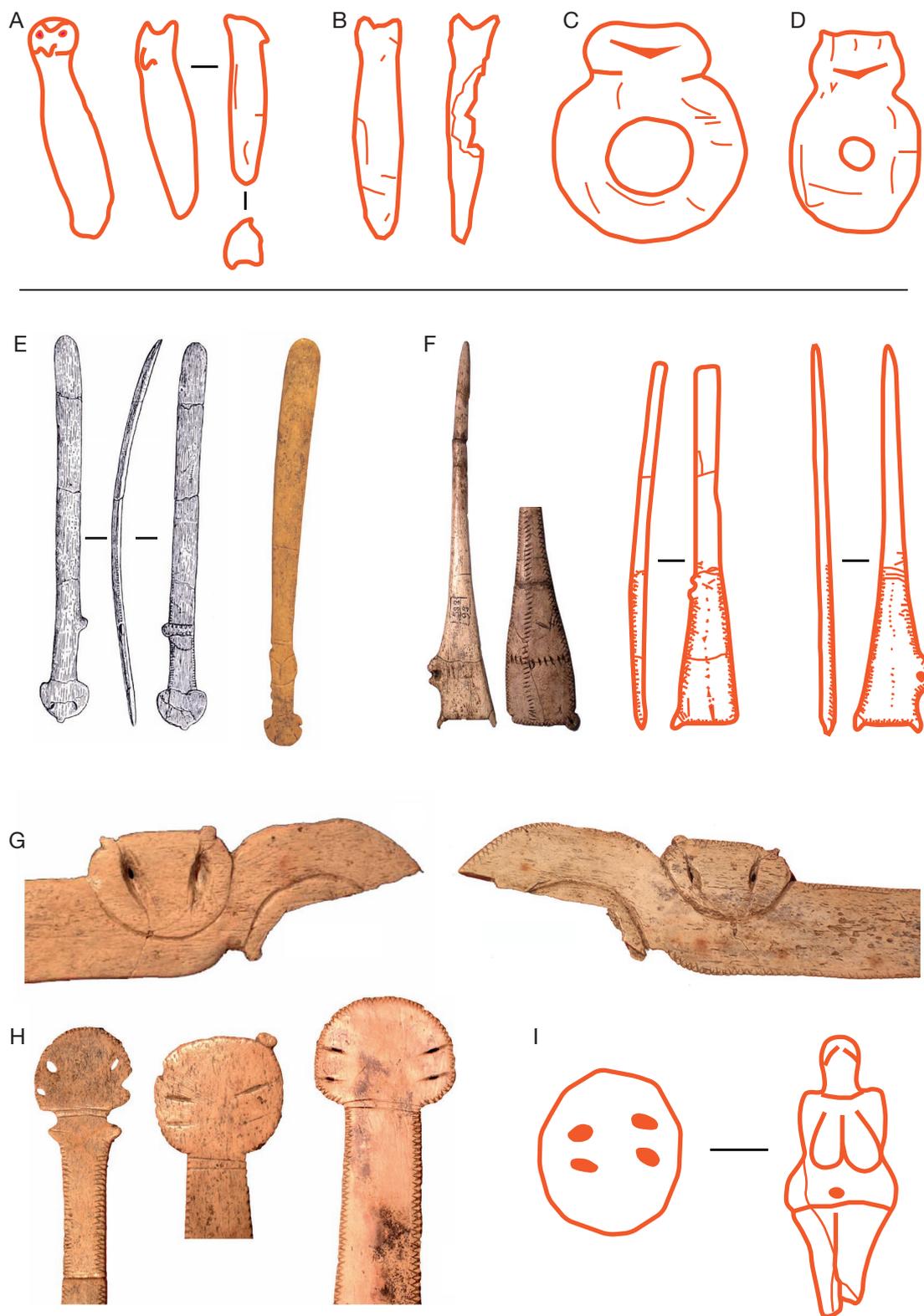


FIG. 6. — Middle Upper Palaeolithic owl-related material culture from East-Central and Eastern Europe. **A-D, I**, Pavlovian; **E-H**, Kostenkian/Eastern Gravettian. **A**, owl-shaped clay figurines from Dolní Věstonice 1 (redrawn after Oliva 2014: 233 after Absolon 1933: abb. 6, 7; Oliva 2015: 95); **B**, owl-like clay objects from Dolní Věstonice 1 (redrawn from Bougard 2011: fig. 18); **C**, owl-shaped ivory pendant from Pavlov 1 (redrawn from García Díez 2005: fig. 7); **D**, owl-shaped ivory pendant from Pavlov 1 (redrawn from Otte 1981: 381, fig. 179 after Klíma 1957: 110, Bild 17); **E**, spatulae from Avdeevo [left] and Kostienki 1/I [right] on mammoth ribs with proximal ends invoking the human-owl-lion spectrum (Goutas 2013: fig. 4.9, 4.10); **F**, organic subtriangular zoomorphic points from Avdeevo (Goutas 2013: fig. 5.4, 5.5; redrawn after Goutas 2013: fig. 5.6, 5.7); **G**, details of the distal zoomorphic end of a spatula from Avdeevo possibly evoking the head of an owl (Goutas 2013: fig. 4.11, 4.12); **H**, various examples of spatula handles with eye-like perforations from Avdeevo (Goutas 2013: fig. 4.13-4.15); **I**, female figurine from Dolní Věstonice 1 [right] (redrawn from Oliva 2014: 244) and magnification of perforated top of its head with eye-like perforations [left] (redrawn from Králik *et al.* 2002: fig. 13). No scale.

web of meaning-making, in which human-owl interfaces were permeable and had to be continuously re-negotiated through material, aesthetic and imaginative practices.

Similar to the Pavlovian of East-Central Europe, the Eastern Gravettian archaeological record indicates reduced levels of human mobility or seasonal land-use systems in which the punctuated and temporally extended aggregation of social groups at particular locales was integral to adaptation and sociocultural life (e.g., Soffer 1989; Hoffecker 2002b; Pryor *et al.* 2020). Although Eastern Gravettian sites tend to have accumulated slimmer occupational layers than their Pavlovian counterparts (cf. Soffer 1985: 41-114, especially table 2.3), they feature sophisticated mammoth bone dwellings, interior and exterior pits with culinary and raw material storage structures including frozen meat caches (Soffer 1989; Hoffecker 2002a; Goutas 2013), and often exhibit an extensive horizontal spread of domestic spaces, sometimes covering more than 5000 m² (estimated site coverage, even though debated, may even exceed 10 000 m²; cf. Soffer 1985: tables 2.3, 2.4). The for Upper Palaeolithic standards unusual investment in built structures and the domestic sphere of daily life is accompanied by evidence for fur processing, percussion/milling activities and the extensive decoration of household tools (Goutas 2013) as well as in the elongated “social life” of many of the partaking material objects (*sensu* Appadurai 1988; cf. Choyke 2006). In addition, Eastern Gravettian people seem to have spent considerable time collecting required and valued raw materials such as shed antlers and sub-fossil ivory (Poplin 1995; Khlopatchev 2006; Goutas 2009) from their surroundings, thereby fostering an intimate knowledge of the landscape and cultivating ties with the land and its animal inhabitants.

The presence of owls in the non-analogue steppe-tundra environments of the Eastern Gravettian (cf. Butzer 1971; Soffer 1985: 149-152; Velichko *et al.* 1997; Plumet 2006: 388; Svenning & Skov 2007; Holm & Svenning 2014) is well-attested (Potapova 2001), also in faunal assemblages from the central Russian Plain (Soffer 1985: table 2.8). Most archaeological sites attributed to the Eastern Gravettian complex are situated close to major riparian systems or floodplains, often on promontories or plateaus and adjacent or on top of palaeo-ravines (Soffer 1985; Hoffecker 2002b; Goutas 2013: 135). The complex mosaic environments of the late Valdai are known to have featured boreal pockets or small gallery forests and medium-to-tall grasses can be found in close vicinity to the archaeological sites in questions (cf. Soffer 1985: 185). Late Valdai environments, especially their tree-bearing component, thus likely provided suitable habitats for a notable population of nonsteppe-dwelling owls and Eastern Gravettian settlement would have spatially overlapped or at least significantly intersected with the presence of owls in the landscape, encouraging heightened ecocultural sympatry between humans and owls (cf. Futuyama 2009: 448). In total, it would hardly be surprising if owls contributed to the particular sense of place attached to some Eastern Gravettian settlement localities and became meaningful, on-par neighbours whose relationship to human worlds demanded ongoing material mediation.

CONCLUSION

The aim of this paper was to develop a first interpretive synthesis of human-strigiform relationships in the deep past. Even though the offered conclusions should be regarded as preliminary and the investigation of human-owl interactions in deep prehistory is still in its infancy, the available archaeological evidence points to two broader phases of human-owl relations characterized by different conditions, dynamics and logics of encounter, interaction and meaning-making. The first phase broadly coincides with the Lower and Middle Pleistocene and was characterized by a fragmented and mostly non-contiguous mode of landscape cohabitation, with elusive human-owl exposure and relaxed intersections. The indirect ties between hominins and strigiformes in this early phase were likely fostered by specific locales or landscape situations, especially rock cavities, attracting both agents and serving as incidental meeting places. This occasional overlap between hominins and owls certainly promoted a latent sense of interspecies affinity and perhaps complementarity and strigiformes slowly but surely emerged as a central pillar of the evolving human experience by signifying places and environments within the hominin range.

The second phase, which broadly parallels regionalization and socio-technical diversification processes precipitating in the Late Pleistocene, is marked by a profound diversification of human-owl relations in time and space. This phase is characterized by increasing interspecies intimacy and localized signatures of sharing the landscapes with strigiform others, provoking context-dependent material culture responses and requirements to negotiate the human-owl interface. Owls gradually emerge as significant co-dwellers and vibrant neighbours and human-owl intersections give rise to more stable, multifaceted and contiguous modes of landscape sharing. This is perhaps most clearly expressed in the consolidated European Upper Palaeolithic where human-strigiform relations become better defined and the archaeological record testifies to spatiotemporally confined, owl-directed human behaviours such as strigiform-invested visual culture or owl exploitation with ecocultural ramifications. The presently available archaeological evidence suggests that owl-centred “humavian” relationships (*sensu* Kost & Hussain 2019), in which strigiformes feature as culture-historical actors and begin to actively shape the material, cognitive and social worlds of their human co-dwellers, only develop in this evolved part of the Late Pleistocene.

The visual culture of the European Upper Palaeolithic illustrates how strigiformes were incorporated into “plurispecies communities” (*sensu* Bird-David 2018), helped to mediate human-nature relations and anchored cultural realities in ecological space. Examples such as the portable owl figurines and pendants of the Pavlovian or the conspicuous treatment of owls and their depiction in Magdalenian art indicates that human-strigiform landscape sharing was no longer an incidental issue. Owls emerged as focal cornerstones of human life in particular environments, and the entanglement of people, materials, landscapes and strigiformes became a consequential locus of meaning-making, creativity and technical production.

Human-owl relations appear to be particularly expressive where human-owl exposure and interaction is promoted by the behaviour of the human groups in question and the geography and ecology of owls in the same landscapes. In other words, owls seem to have left a mark in the material record of the human deep past especially when the presence and agency of these birds epitomized the experience of inhabiting particular landscapes or habitats and when their behaviour resonated with human settlement activities. The frequent site fidelity and philopatry of owls was arguably a key factor here and helped to elevate these predatory birds to important catalysts of human “place-making”. From this perspective, it is perhaps no surprise that human-owl cohabitation became a conducive factor for human life particularly in settings of heightened occupational intensity, stationarity and/or domesticity and when owls occupied transitional zones between human domestic spaces and the wider landscape.

The here presented synthetic reading of the pre-Holocene evidence for human-owl interaction suggests that owl others emanated as significant reference points for human life at least from the Late Pleistocene onwards. The archaeological record not only shows that strigiformes played an important role in the construction of human landscapes and the forging of a sense of place, their agency was a history-making force in its own right and they contributed to the making of humanity. The archaeo-ornithological perspective adopted here also cautions against simplified interpretations of Pleistocene human-owl relations and demonstrates the importance of recognizing the mutual involvement of humans and strigiformes in each other's affairs, defying traditional one-sided ecological, functional or symbolic accounts. Rather than continuously pitching these perspectives against each other, it seems imperative to examine their interrelationships and develop more integrated and context-dependent understandings of human-owl intersections in the deep past. This must not only involve the repudiation of overly human-centred perspectives, but also a fundamental sensibility for situational interpositions of humans, animals and environments and the changing conditions and possibilities of interspecies encounter, interaction and cohabitation. The role of owls in the human story can only be thrown into full relief if we sidestep the “eating” and “thinking” paradigm that continues to dominate the examination of human-animal relationships in the Pleistocene and begin to embrace the dynamics, trade-offs and potentialities of multispecies life in the past. Harnessing the paradigm of multispecies “living with” and “tangled becoming” enables to recognize owls as the co-makers of human spatial identities and the patrons of place-making. Owls helped to tether human societies to particular landscapes, locales and places, facilitating the development and cultivation of a new sense of (imagined) community (cf. Schneekloth & Shibley 1995; Beatley & Manning 1997), drawing together humans, animals and landscapes and thereby ultimately changing the dynamics of hominization. Owls then come into view as ingredients of the “animal condition” of human evolution (Shipman 2010) and their agency provides an important context for the becoming of our species.

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