The (In)visibility of the Iberian Lynx From Vermin to Conservation Emblem

Margarida Lopes-Fernandes and Amélia Frazão-Moreira

ABSTRACT

Not much is known about how the cultural image of predators has been constructed in Western contexts and changed through time. This article reviews representations of lynx in Western Europe. A 'cultural map' of lynx in historical contexts is presented, and the 'social visibility' of the Iberian lynx in Portugal explored. Since prehistoric times the lynx has been an inspiration, an amulet, a creature gifted with extraordinary capacities but also a food item, and a 'vermin' to eliminate. Recently, the Iberian lynx has become a global conservation emblem; once a noxious predator, it is now a symbol of wilderness. Examples show how the species acquired visibility and has been appropriated in contemporary contexts such as logos, 'green' marketing, urban art or political campaigns. There is also evidence of a new identity construction in Portuguese rural areas where lynx is being reintroduced, exemplifying a process of objectification of nature.

KEYWORDS

animal representations, human-nonhuman relationship, lynx, nature objectification, predator perceptions

Ecosystems and species are both under the influence of cultural perceptions and values. Under the concept of biocultural memory, several dimensions such as the histories of humanity and of nature are integrated, so there is a possibility of understanding, evaluating and valuing the historical experience (Toledo and Barrera-Bassols 2008). The relationship between humans and nature has been a theme approached by anthropologists (e.g. Ingold 1988; Milton 2002); however, the specific cases of species under special conservation concern have not been much studied within anthropological frameworks. Frequently environmental processes are also targeted by the discipline, but often specifically about disputes over territories and the rights of government/local groups (e.g. Santamarina Campos and Ramiro 2013).

The cultural significance of nonhuman animals has been analysed, mostly from a historical perspective (e.g. Kalof and Pohl-Resl 2007), and also in terms of human and nonhuman animal relationships (e.g.



Mullin 1999), but with less emphasis on specific wild species. Saunders (1998) found that large felines ('big cats') are the species most commonly mentioned to evoke a diversity of cultural responses across the world and that among carnivores, felines have had a profound effect on human sensibilities since the beginning of recorded time. In fact, the oldest known sculpture made by human hands is a feline anthropomorphic figure (Wynn et al. 2013), denominated the 'lion-man' and carved from mammoth tusk in Ulm, Germany, more than forty thousand years ago (Dalton 2003). Its role as a religious or other object is still unclear, but the choice of the lion can be taken as evidence of a significant early link between humans and wild felids. The studies of Gallagher (1994) and Goldman and Walsh (1997) also report cultural aspects related to 'panthers' in American (puma, cougar) and African (leopard) contexts, probably reminiscent of strong bonds with native people there. However, the understanding of representations of certain species, namely, emblematic ones, and their significance and visibility within historical and contemporary frameworks has not been analysed. Such was the aim of the present article.

The Iberian and Eurasian lynx species (*Lynx pardinus* and *Lynx lynx*) are two of the last wild felines extant in Western European ecosystems. Lynxes are discrete and apparently less well-known than other large carnivores (Lescureux et al. 2011) that have often been seen as problematic species due to their economic impact on humans. The Iberian lynx is a species endemic to the Iberian Peninsula (Breitenmoser et al. 2015), with only two main populations living in the wild (Simon et al. 2012). Presently there are new occurrence areas due to reintroduction efforts in Portugal and Spain (Iberlince LIFE+ project), and therefore a new scenario of coexistence with people emerges. In Portugal there have been no resident populations of Iberian lynx since the end of the twentieth century (Pires and Fernandes 2002; Queiroz et al. 2005; Sarmento et al. 2009). Although much literature covers its ecology, population dynamics and genetics, the cultural dimension of this species through iconography, representations and other material evidence has not yet been studied. This article analyses those aspects from an anthropological point of view, in the sense that Godelier (1978) defines representations as interpretations from which human thought organises relationships among humans and with nature.

We review the visibility of the lynx in cultural terms, exploring representations from the past and human uses in Western Europe. Understanding representations of a wild species in the past, and appropriations in the present, contributes to a better comprehension of the

relationship between humans and wild predators. Knowing collective memories is important to contextualise the Portuguese case in the present and our exploration of the reintroduction of the Iberian lynx.

Methods

We gathered information on representations of lynx (*Lynx sp.*) in a European historical context, which mainly referred to the lynx species occurring in the respective territory – either *Lynx lynx* or *Lynx pardinus* – although this was not possible to discriminate. Although Eurasian lynx is, in scientific terms, after the twentieth century, a separate species from the Iberian lynx, the representations and symbolism around these felids were shared in Western European and Mediterranean culture, and there is no evidence that people differentiated them through time.

We considered past uses, material patrimony or descriptions of the species. We searched for representations of lynx from European contexts, namely, in the following sources: archaeological archives, bestiaries and classical works, natural history compendia, museum art collections and lynx representations publicly available through the Internet. It was not an exhaustive collection, but it comprises a time framework from prehistory onwards.

Through observation of monuments, heraldry, paintings, and contemporary items (e.g. logos), we explored the Portuguese case, also using the literary database "Atlas das paisagens literárias de Portugal continental" to look for references to the species in twentieth-century Portuguese fiction.

During ethnographic work that took place in rural southern Portugal between 2012 and 2014 in the lynx historical occurrence areas of Moura-Barrancos and Guadiana, ninety-four interviews were conducted. During that fieldwork we also enquired about local stories with lynx and looked for local representations of the species.

Results

Earlier Days: Food and Symbolism

'Nos Aper auditu, lynx visu, simia gustu, Vultur odoratu, precellit Aranea tactu' [They are superior: in the wild boar, the audition, in the lynx, the vision, in the simians, the taste, in vultures, the smell and in the spider, the touch

—B. Abreu, Portugal Médico

Table 1 summarises a review of known material evidence and lynx representations throughout history in Europe. This compilation refers to European lynx as well as Iberian lynx living in Europe, and it shows that people retain representations and beliefs of both species until modern times. In fact, a citation from 1855 says: 'The lynx from Europe is not found anywhere else but the Algarve, Portugal' (Toussenel, cited in Callou 2008: 20).

We did find some data from prehistory in Iberia and Central Europe (Figure 1 and Table 1). A lynx bone dating from 7500 BCE found in Portugal is one of the few pieces of material evidence concerning the contact between lynxes and humans (Figure 1, no. 1). It was found in the coastal area of Muge (Portugal) and shows cut marks and use of fire, indicating that the lynx fur was probably used and that the meat might have been consumed by humans (Cleia Detry and Simon Davis, pers. comm., 2012; Fernandes et al. 2012). The community of hunter-gatherers at this site was described as a wild rabbit consumer due to local rabbit abundance, and this is also the main prey of lynx in Iberia. Callou (2008) also refers to the earlier consumption of Iberian lynx in France during the Paleolithic era. People might have seen the lynx at this time as a competing predator and could already have held an attitude of dominance towards wildlife. Vigne (2011) categorises this phase of prehistory, when domestication occurred, as a period of intensification in the relationship between nonhuman animals and humans. The author argues that to start the process of nonhuman animal domestication implies that at some stage humans gave themselves permission to control nature. This suggests that to become a dominant species, humans had to radically change their 'horizontal' conception of the world into a 'vertical' one. Humans were beginning to see themselves within a hierarchical order dominated by divinities, placing themselves above nonhuman animals and plants, which in turn allowed them to dominate or even kill them. This aspect might have characterised the beginning of human-lynx relationships in Western Europe. Indeed, most examples of lynx presence in human culture contain a focus on human interests as central in their relationship with wild species. Lynx is often represented as either useful or not useful to humans, an expression of utilitarianism. Furthermore, there is the aspect of human dominion over wild species, as the lynx was a hunted species and often a trophy throughout Europe.

Table 1: Lynx representations through history in European context

	Theme	Era	Description	Reference	Comments
_	Archaeology	Paleolithic	Schematic image of a lynx in the cave of Parpalló (Valencia). It is the contour of a head of a lynx seen in profile.	Boule 1912	There are doubts about the identification of this image being a Jux. It was however later found, in the same cave, bone vestiges of the species, and therefore it was not unlikely that artists of Palacolithic represented it (Garcia Jaly, Almials chosen in artists or representations of new-bistory are not necessarily renroductions of the environment that surrenrided humans.
			Another figure from Iberian Peninsula but interrogated.	Breuil 1933	Otherwise absent from known Iberian cave paintings (Margueria Diaz, pers.com, 2012). Probably the only known lynxes in Paleolithic art.
			Engraving of lynx in Madeleine, Dordogne, France.		
				Tosello 2003	
2	Archaeology	Neolithic	Amulets of lynx teeth and claws in the old region of Jütland.	Kempf et al 1979	Amulets made from animal parts are objects used since pre-history and have the potential of indicating that the species are considered special. Parts of the animal, for their users, transform into the whole animal with all its special attributes and cultural meanings. Teeth of deer, wolf is but and a natitudar similicance in that saveet (Chooke 2010).
			Perforated lynx teeth in an cave in Portugal Cabeço da Arruda (Torres Vedras).	Ferreira and Trindade 1954	The use of Lynx amulets is mentioned much later in history (see Medicine).
	Greek Mythology	Classical Greece 4th-5th century BC	"Me evening, as [Pan] returns from the chase, he sowneds his note On his back he trears a spotted by repeted, and helighis in highliched songs in a sylt meader where crosses and sweetsmalling hyarints downed ar readom in the grass."	The Homeric Hymns and Homerica	Pan was a shepherd god, of the woods and pasture land, protector of shepherds and sheep flocks. He lived on <i>Igrams</i> Mountain, and he provided a good hunt of wild animals to hunters (Graves 1966). We suggest that the presence of the skin fur is a representation of the importance of the hunt of the "lycaeus", the conquest of the wild and the protection of humans.
4	Greek Mythology	Classical Greece 4th-5th century BC	Lynceus is a character in different myths, one of which he is one of the Argonauts and participates in the hunt of Cadedonian Boar. He is known to have an excellent vision, capable of seeing under the ground.	Ovid' metamorphoses Book 5: 642-678	This symbolism of extraordinary vision perseveres until nowadays popularized by the expression "to have lynx eyes".
			Lyncus was also a king who attacked Triptolomeus with jealousy and was turned into a lynx by Ceres. The scene is depicted in a painting by Dumont (18th century).	Dumont Le Romain, 1732 Musee du Louvre	A human transformed into a lynx by a divinity can signify a punishment, and it can also allude to the ferocity and predatory characteristic seen in the lynx.
5	Greek Mythology		Lynxes are mentioned as one of the species of beasts drawling the chariot of Dionysus.	Virgll, Georgics III, 264 in Toynbee (1973)	Dionysus or Bachus has other representations associated to felines and he can symbolize everything which escapes human reason, is dangerous and unexpected. The lymx here is chosen for being seen as an exotic wild species. Although there was not yet a systematic classification is identification as a felid is implicit and its closeness with parathers, figers or lions is recognized.

	Theme	Era	Description	Reference	Comments
6	Geography	5th century BC	Lyncestis a region of Macedonia, which means the land of the pix The tribes of this region were known as Lynkestai. An ancient Greek city was founded by Philip II after conquering the region – Heraclea Lyncestis. (Figure 1 image 8) Polish considered Lynx as their ancestor.	Strabo geography 7.7 Jarie 2010 Milenkovic 2008	Example of identity construction after the lynx for an ancient European tribe and a region where lynxes were presumably comnon.
7	Medicine and Alchemy	1st century AD 7th century AD	The hynx urine solidified was denominated hyntrins and described as a precious stone similar to amber. "The urine of lynxes solidifies into drops like carbumcles, coloured like fame, this subsame is called "hynxwate", (see also image II jugure I) whit is said that he flyny convert its urine in solid precious tones. It is proad that hynx urine, protect it may be a feature for and because of its judate nature, protect it in an infinite product in descript baces, in a way find any moder in descript by the start by the solid infinite product was known in all Europe and would have the propriety of curing bladder stones or to cure jaundice.	Pliny the Elder (Natural History, Book 8, 28) Isidore of Seville (Eymodogies, Book 12, 2:20) in Throop 2005 Kempf et al. 1979	Example of anthropomorphism. The naimal is represented with mysticism and nature was seen with centrality in humans, from the utilitarian point of view

	Theme	Era	Description	Reference	Comments
∞	Ornamentation	late 1st century BC	Drinking horn depicts the forepart of a desert have, clutching a covered in his paws. Iran or Central Asia, Silver win glding. The museum legend explains that M. Pfrommer pointed out the collar on the lynx suggests a tamed animal, possibly used for hunting, is depicted here. Pfrommer further indicated that, although the theme is based on an Achiementid concept, the style follows Greek standards. [Figure 1, image 9]	The Miho Museum Kyoto, Japan www.miho.or.jp/english/c ollect/collect.htm	
		Late 12th or early 13th century	Incense burner or pomander in the shape of a lynx Iran Copper alloy, cast, with engraved and openwork decoration. Height: 27 cm. (Figure 1, image 13)	Exhibited in "The Arts of Islam. Masterpieces from the Khalii Collection" @ Institut du Monde Arabe, Paris. ebegediart.canalblog.com/archives/2009/09/22/151 54803.html	Although the animal in Kyoto Museum is identified as a desert lynx (caracal) and the incense burner as a lynx. Than was part of the former mange for both bersaism lynx and Caracal (Stunquist and Sunquist 2002). The size of the tail in the incense burner would be more likely a caracal but it still is a lynx representation showing possible domestication (there are recent examples of caracals used to hunt) and possibly the appreciation of beauty and artitulness of the animal justifying the choice for the piece.
				Louvre museum exhibits a similar piece identified as a lion	The tradition of incense burners came from Asia and they were used for ritual, therapeutic or religious reasons. These objects were usually embelished with animals and mythical creatures and the braw was the chosen species in these cases of Middle East pieces.
6	Ornamentation	2nd century AD - Trajan	Roman statues of soldiers and emperors in which the armour has a lynx head in pterigia. (Figure 1, image 5)	Piece no. 1091, Guarda Museum, Portugal Piece no. 1848, Verona, Ardaeological Museum Cuirassade statue J. Paul Geity Museum	Symbolism of wild species for romans probably related to qualities such as astuteness, strength and beauty attributed also to fyrax.
10	Archaeology	8th century AD	Claw phalanx of a lynx found in inhumation burial of two decapitated sacrificial victims buried with an intact human. Lynx fur in graves.	Grave in Sweden, Viking period (Prehal 2011)	Lynx as a sacrificial animal like other cats which were buried as well with humans. Association to goddess Freya (Bates and Liddiard 2013). Jembert (2006) refers to the use of lynx fur in graves after Bronze Age and how some elements in Scandinavian mythology were a nerger of nature and culture.

	Theme	Era	Description	Reference	Comments
11	Natural History	13 th -14 th century	Illustrations in European Bestiaries showing the lynx emitting a stream of urine which is turning into stone (Figure 1, image 11)	Kongelige Bibliotek Gl. kgl. S. 1633 4°, Folio 6r	The real and imaginary lynx is portrayed here. Bestiaries were compilations not only on observation of animals but also of accumulated folklore, legend, pseudoscience (Flores 1996). The alchemy practices and precious stones importance of the epoch is probably why the
				Bibliothèque Nationale de France, lat. 6838B, Folio 4r	production of such material is the characteristic about the lynx which is repeatedly illustrated
				Bodleian Library, MS. Douce 88, Folio 8r	
			Illustration from hunting book describing the lynx as serval wolf and comparing it to a	http://bestiary.ca/beasts/b east135.htm	Description of Jux big as a wolf, feeding on chickens and livestock and therefore with a "bad
			leopard (rigure 1, image 14)	Livre de la chasse Gaston Phebus 1389 in Callou 2008	Dute (antinopocentric view). Association of tynx to other wild cast (axonomy), and exouc species such as the leopard
12	Religion	Middle Ages	It was known that the vision of a lynx had the power to see across opaque bodies. By that reason the lynx is referred as symbol of omniscience and viglance of Christ to whom nothing escapes	(Reau 1955)	The belief of the special vision of the lynx is appropriated by religion to symbolize a characteristic of Christianism
13	Natural History	16 th century	Symbol of Academia dai Lincei a science academy founded in 1033. The group of academy founded in 1033. The group of Scholuse adopted the philosophy of the work Magier naturalis which shows an illustration of the feld in cover and has the following preface ", and how like cys. camming linear things taken annifes themedres, so that haming observed them, he may sealously use them? (Figure il image 16)	(Della Porta 1597) (Clubb 1965)	An additional interpretation of the lynx vision. In this example the quality attributed to the animal is related with the scientist capacity, a methodology based on careful observation.
14	Astronomy	17 th century	There is a star constellation named after the lynx. Hevelius in 1690 explains that to observe the lynx constellation have to have "ynx eyes" as the stars which compose it are not very visible. (Figure 1, image 18)	(Olcott 1911)	Relation to nature, to ecological knowledge about lynx vision and to imagniative representation

	Theme	Era	Description	Reference	Comments
15	Natural history	17th century	A Spanish Physician, Hernandez, wrote up his studies of the plant hore of the Azters in Rerum Medicarum Novae Hispaniae. I includes the first European depiction of a tropical orchid, which he called the Tynx Hower (pig.260c) (modern name is Saminjae Armandein). The reference to the Lynx was probably based on the spotting of the flowers and their colour scheme, (Figure 1, image 15)	(Hernandez 1671)	Iberian lynx was a known species to scholars and the appreciation of its pelage inspired the inventory of new species. It is adopted a systematic type of classification of natural beings based on comparison and look alike morphology.
16	Medicine	17 th century	Medicinal use of lym fat (enxundita) and daws. "The Brackin is comment in work member () the Claus, specially from the right for place thought in after ring or gold in a weny that bouches, shi it is on amulif from qhilpsia and to shom?	(Schröder, 1644) (Abreu, 1726)	Belief in curative powers and amulets persisted through time. The lynx was seen as a species with special powers and relationship with fauna had a magical facet.
17	Art	16 th century	In Leonardo da Vinci painting the pelt that wraps John the Baptist's body is identifiable as that of a lynx	(Massetti and Veracini 2010)	Some historians believe that the animal skin was added at a later date by another painter during a process of re-identifying the work as Bacchus (Clark 1989). This might be related to portraits of Greek gods referred above
81	Art	18 th century	There is a lynx sculpture in Vatican museum. The display in the Hall of the museum, and a bunder Pope Pius VI with the aim of creating a 'stone zoo' (Figure 1, image 17)	http://mvvatican.va/3_E N/pages/MPC/MPC_Sala 03.html	This piece is quite a naturalistic representation and is not in interaction with other animals or with heroes of the ancient world as others. The choice of the works was to do with their relation with nature or hunting.
19	Natural History	19 th century	Naturalistic description and illustration of Decina Lyw by zologist. Berian Lyw Parologist. Berian Lyw Parologist. The the south of Europe de options by the profit of your (Lyw pordium). This is much smaller than tin now naturity restings much smaller than tin now naturity restings cousts, port to hop length reaches? I met at most. It is clistinguished by the shortners of its pelt, its relatinguished by the shortners of its pelt, its relatinguished by the shortners of its pelt, its madurities to one stedems and the long hair tasse to nit sears, and does by the story diplerent, more composite out pattern." (Figure 1 image 19)	Brehm (1864)	Concern with details and taxonomy differentiation. Naturalistic illustration with animal portrayed on tree – natural environment but with an aggressive posture which enhances ferocity of predators as they were seen

On the other hand, there is much symbolism associated with lynxes: these animals were used in Norse burials (Table 1, example 10), and they were believed to possess extraordinary capacities, acute vision and medicinal properties (Table 1, examples 7, 12, 13 and 16). Roman army indumenta used the lynx as a power icon, among other species such as the eagle, possibly related to beauty and strength (Figure 1, n°5). Lynx was also a symbol of omniscience in Christian religion (Table 1, example 12) and adopted by the Accademia dei lincei, a precursor of natural history academies.

In the case of the Accademia dei lincei (see Table 1, no. 14; Figure 1, no. 16), the lynx is a symbol of the new scientific method and can even be related to the creation of the telescope, an Accademia instrument. Lüthy (1996), on this subject, advances that the wish (of the Accademia) to look further refers to the 'interior eye of the intellect' from a metaphorical point of view, but is also related to the initial interest in the telescope and its invention. At the time, Giambattista Della Porta had supported the production of an instrument 'to see far and spectacles that could distinguish a man several miles away' (Lüthy 1996). This invention, originally inspired by the lynx's legendary vision, revolutionised science and the epoch.

Some of the representations, namely, during the Greco-Roman period (Figure 1, nos 3–6), also reveal a close connection of humans with nature. Until the twentieth century the lynx, along with other wild predators, was simultaneously a real and an imaginary creature for people.

In the Middle East (see Table 1, example 8), the lynx was chosen as an ornament for incense burners, an exquisite example of elegant representations of wild fauna (Figure 1 image 13). In another example, a lynx in a drinking horn, movement and details represent the agility and capacity of the predator capturing prey (Figure 1 image 9). This piece also reveals knowledge and close observation of the animal in the wild and its habits.

The knowledge about the real lynx together with mystical beliefs coexists in time until a more rational discourse in the nineteenth century is noted. In an example from a Portuguese book about nonhuman animals, a description deconstructs that the lynx that saw through walls and produced precious stones through its urine (for this see Table 1, no. 7) was a 'fabulous lynx, imaginary, which had nothing in common with the real lynx although it has a keen vision and is as clean as a domestic cat' (Travassos Lopes 1899: 38).

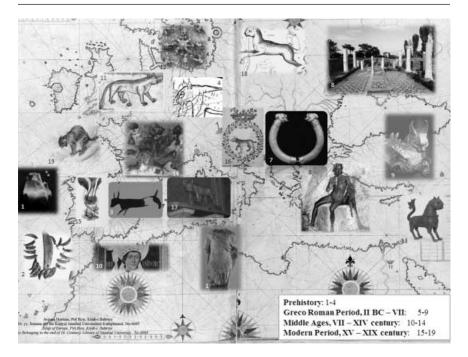


Figure 1*: Lynx in historical Europe

Overall, the compilation of lynx examples through time shows a discreet presence of lynx in different cultural thematic areas, from Greek mythology to medicine and Middle Eastern ornamentation.

The Historical Invisibility of the Iberian Lynx

The particular case of lynx in Iberia demonstrates the continual invisibility of a species that is not very well-known or represented until the twentieth century. Representations of Iberian lynx in constructed patrimony in Portugal are not known. Some monuments and palaces display the wolf and the bear but not the lynx (e.g. in the well-known palaces from the eighteenth and twentieth centuries, respectively: Ajuda National Palace in Lisbon and Regaleira Palace in Sintra). Representations of lynx in nature also seem to be absent from Portuguese painting. Azambuja (2009) refers to a possible lynx in a sixteenth-century painting entitled *Creation of Animals*. The painting portrays a naturalistic and harmonious scene (Sobral 1998) with several wild and domestic species. The figure whose head resembles a lynx seen from

behind is placed among the ungulates. A closer observation of the hindquarters shows a wide muscular structure not typical of carnivores. It also lacks the characteristic pelage pattern and the short tail with a black tip that would be expected in this type of naturalistic representation. In summary, without confirmation of this representation, the lynx seems to be absent in Portuguese art.

Furthermore, historical heraldry in Portugal, which often uses non-human animals as symbols, does not include this species. In Spain, the Lebrija town heraldic shield portrays two lynxes next to a castle (Alba 2007). According to Luengo (n.d.: 437), the original use of lynxes in the symbol from 1798 was meant to be related to the natural sagacity of the locals (*lebrijanos*) and to the qualities of being quick and having good sight. This was readopted in 1988, when the Iberian lynx was already publicly known; the nearby area of Doñana National Park was created in 1963, adopting lynx preservation as its *motto* and emblem.

Even the presence of the lynx in Portuguese literature was found to be quite scarce. We found only five references to lynx among works of fiction from the nineteenth century onwards. By comparison, there are more than two hundred references to wolves in the same literary sample (Fernandes et al. 2016). One of the literary excerpts mentioning lynx (Ribeiro [1924] 2003) describes the species in detail and already refers to its rarity in the woods due to human persecution. Although this example from literature reveals a particular concern about lynx preservation, wild predators in the beginning of the twentieth century were indeed persecuted in an undifferentiated way (Law 156 of 9 July 1913 allows the destruction of all 'noxious' animals to hunting and agriculture), as will be further explored.

The Vermin

In general, predators were seen by humans as competitors since immemorial times and therefore as 'vermin': useless creatures that brought damage and danger. The control of these vermin, or so-called predator control, seems to already have been known in ancient Zoroastrian Persia, where 'the saint . . . is obliged to beget children, to plant useful trees, to destroy noxious animals, to convey water to the dry lands of Persia, and to work out his salvation by pursuing all the labours of agriculture' (Gibbon [1776] 1998: 171, paraphrasing the Avesta¹).

In Portugal, this practice seems to date to the sixteenth century during the reign of Sebastian, when a hunting code established an order

of elimination of this type of animal in the wild, with a bounty per animal head presented: 'I the King make it known that from now on . . . in my hunting grounds . . . shall be killed eagles, crows, foxes, cats and mongooses. And for each eagle four hundred *reis* will be given, and for each crow twenty *vintens*, and for each cat, fox or mongoose two hundred *reis*' (Freitas Cruz 1945: 83–4).

Later, in the twentieth century, this practice continued, and extermination campaigns for vermin were organised and rewarded by the state, which killed thousands of specimens (Sacarrão 1959). Lynxes were among those considered 'vermin by law to agriculture, hunting and fishing' and classified in a comprehensive list of categories for hunting species - 'hunting piece of pelt type' (Galvão et al. 1943). While mentally represented as noxious animal, lynxes were hunted during battues most of the twentieth century, they were trophies and sometimes eaten (Figure 2). The categorisation of all predators as vermin and memory of their elimination has persisted until today, as we noted in current discourses: 'Alimaria [irrational beasts] are foxes, stone martens, mongooses . . . wolf as well but it is protected . . . and the lynx is also noxious because it hunts but it is very protected' (informal conversation with hunter, 2013). This influenced representations of the lynx and the relationship established between humans and carnivores in general (see example of ferocious lynx, image 19, Figure 1). The use of the term 'vermin' as well as 'animal problem' and 'pest' already suggests that the wild animal is defined in anthropocentric and utilitarian terms (Knight 2000).

The first texts defending the need for lynx protection in Portugal are from the middle of the twentieth century. They contend that certain species, even if they are noxious for game, should be protected (Freitas Cruz 1945). Some professionals started criticising the systematic practice of predator control (Sacarrão 1959) and stressed that the lynx was threatened by extinction (Roque de Pinho 1959). It is likely that the beginning of an ethical pro-conservationist discourse accompanying the international tendency of valuing rare species influenced official policy, and as a result in 1967 the lynx was excluded from being free hunted (Law 189 of 14 August 1967: 1466). However, in practical terms, lynxes were killed after that date and at least until 1990 (Ceia et al. 1998).



Figure 2: Lynxes hunted during battue, 1954, Portugal, image courtesy of José Castro Lebre

The Rise of the Conservation Emblem

Table 2 summarises appropriations of Iberian lynx during the last decades in Portugal. Figures 3 to 6 are the respective examples of the new visibility of the species in urban social life. Table 2 shows the rise of a new visibility of the species and a constant presence in different areas of public social life, from sport to military organisation (examples 2-5, Table 2), marketing to political campaigns (examples 6-9, Table 2).

This conspicuousness of the species in Portugal might have started in the late 1970s, when a Portuguese nongovernmental organisation, Liga para a Protecção da Natureza (LPN), launched a national campaign for the protection of the lynx and of a specific area (Malcata Hills) threatened by forest exploitation by paper industry company interests (Palmeirim et al. 1980). The campaign reached most media and featured a poster with the face of the lynx, thereby turning the species into a popular and media-exposed species. The lynx was for

 $\textbf{Table 2:} \ Examples \ of \ contemporary \ appropriations \ of \ Iberian \ lynx \ in \ Portugal$

	Theme	Description	Date / Reference	Comments
		NGO campaign appealing to save the lynx and its habitat "Serra da Malcata"	Liga para Protecção da Natureza, 1979	One of the first campaigns choosing a particular wild species to gather public attention.
_	Envisonmental activiem		Palmeirim et al. 1980	
-			Image in iberia-selvagem.webnode.pt/album/iberia-	The message appeals to the responsibility of all ("we") to save the species and Malcata's hills.
			selvagem/salvemos-o-lince-jpg1	
		Emblem from military units in Guiné and Angola during	Collected by José Martins in ultramar.terraweb.bix	
		Foruguese Annean connect 1909/1970. Companina dos Cadadores no. 11 and Batalhão Caçadores 725 denominated themselves "the	Image in	
		lynses".	ultramar.terraweb.biz/SebastiaoManuelPinto_2012_11_25.htm	
		Unit from Portuguese Army Alfa/Dfor from 1998 with a seated Jynx and the motto "to guess danger and avoid it".		These emblems adopted by military soldiers had the symbolism of a thought, an aspiration or a norm to follow creating unity and morale Characteristics such as
			Alexandre (2009)	strength, resistance and good vision were probably the
2	Military emblems			inspiration for the enoice of the lynx.
	`	Airforce Squadron 504 denominate themselves "lynxes" and have a head of a lynx as symbol of the squadron founded in 1990		
			www.emfa.pt/www/esquadra-41	
			https://en.wikinedia.org/wiki/504_Sonadron (Portugal)	
		Emblem of National Guard for nature protection and environment – SEPNA.	2001	The GNR's choice of a lynx head "symbolizes the species to protect, their habitats and forests stimulating
69	Military Logo		Memorandum from Ministry of Defense and Lt. Col Amado, pers. com (Figure 3)	behaviours of respect for nature, the lynx with its look and its astuteness is also a reference to the psychological characteristics of the guards with a speciality in nature and environmental protection."
	-	Regional association for sport and culture, Associação Desportiva e Cultural de Vila do Bispo.	2010	
4	Regional Logo	-	Image online adeviladobispo.blogspot.pt	

	Theme	Description	Date/Reference	Comments
		National hockey team	2011	The logo is explained as based on "Lynx Force" from which the open mouth and wide eyes are symbols of will
			Image online: livredirectodes portoblogspot.pt //2011/10/lousadems-carla-santos-crianova.html (accessed 10. 2013).	and reach of the athletes.
rc	SportLogos	The Portuguese Basketball Federation chose the lynx as a mascot	2015	The choice of lynx was allegedly due to the "national identity of the Lynx" and had environmental education purposes due "to the care the species preservation must have".
			Image online: www.icnf.pt/portal/icnf/noticias/resource/lince-iberico/doc/blitz-basquetebol (accessed 20 July 2015).	
9	Environmental activism	A political party "Party for Animals and Nature" used a poster during the election campaign using the face of the lynx and the message "more value to natural partimony".	Lisbon, 2011 Figure 4 registered by M Lopes Femandes	The poster uses the public recognition of the species and its status lyax is not identified to advertise a position of pro-conservation and valuing of species. Iberian lyax is here again the symbol of volidness.
^	Marketing	Image of Lynx on reusable bag distributed to public with a national newspaper.	Lisbon, 2012 registered by M. Lopes Fernandes	Association of business companies with "green messages" in which the lynx is chosen as the face of the campaign as it is an iconic species.
∞	Marketing	Children's games named after the lynx."will you be the first one to find the images," and "tufas' (lynx character finds its mother). Wine with lynx name or lynx drawing.	2013. EDUCA and 2014, Modelo Continente Registered by M. Lopes Femandes and online Quinta do Alqueive, 2009 and Casa agricola Alexandre Relvas, www.hrd.ades.asmiguel.com/vinhos/8/112 www.agroportal.pt/x/agronoticias/2011/03/30b.htm	Reference to astuteness and vision of the byns. Appropriation of current lyns media attention to get publicity. Relatedness with species protection discourse and concern.
6	Touristification	Lynx magnets for sale among other Portuguese tourist icons Lynx ceramics hunched at a Seminar on Protected Areas	Lisbon, Tourist shop, 2012, Figure 5 image courtesy of Andreia Farrobo Duro Design, Lisbon, 2015 Photo in www.seminario-natural pt/p-pt/content/galeria-linha-de-cer%C3%A2mica-lino-eth/C3%A9rico	The lynx became a tourist object with other Portuguese from such as monuments, Lisbon trams, Fatima's Virgin Mary, etc. Association of lynx with Portugal's icons is an example of identity construction around the species.

	Theme	Description	Date / Reference	Comments
		Painted urban art panel with inscription "God save green" about environmental issues picture as female figure representing Earth and includes a lynx profile in green to symbolize threatened species.	Faculty of Sciences, Lisbon, Portugal, 2012 Registered by M Lopes Fernandes	The presence of the lynx in the panel, a unique and recognizable figure, as one of the few animal species (the other is a fingly symbolizes, once more, videness, protection of lerestrial vertebrates, maybe even part of the sacred Mother Earth.
10	Urban art	Large-scale 3D street sculpture with Iberian Lynx face. Lynx among other wild species chosen for a series of street sculptures in Portuguese cities	Figure 6 image courtesy of Inks Barroso Viseu, Portugal, 2016 by Bordalo II	Example of the modern high visibility of the lynx in urban space and for urban public
			(https://streetartnews.net/2016/03/lynx-installation-bordalo-it-viseu- portugal.html)	
		Lynx at the entrance of Penamacor village in the Malcata region, self-named "lands of the Lynx".	2012, Central Portugal, Figure 7 registered by M Lopes Fernandes Lisbon, Franciscan Cultural centre, 2013	Construction of territorial identity around the lynx. Penamacor entitled itself "lands of the lynx" and released regional products with that trademark.
=	Territorial Identity	A word map painted in the panel in the street includes several emblems of different regions. Lynx illustrates the Berian Peninsula.	Registered by M. Lopes Fernandes	Chosen as a symbol of territorial differentiation from the rest of the world. Allusion to its uniqueness and choice as a symbol which characterizes Iberia.
		Products with lynx image or name (I'shirt, biscuits, jewellery) locally produced.	Mettola 2015, Southem Portugal Figure 8 registered by M Lopes Fernandes	After release of animals in the Guadiana area (Metrola council) local initiatives took yax timage for product commercialization. That could also be part of a new identity construction for the reintroduction area
12	Rural appropriations	Lynx illustration on a secondary school corridor and on poster for a professional school for hunting fishing and biodiversity.	Barrancos and Moura respectively, Southern Portugal, 2012 and 2014 Figure 9 registered by M Lopes Fernandes	Lynx imagery locally reflects influences of conservation projects, environmented detaction – the adoption of a global discourse valuing nature conservation It also shows the reliving of lynx occurrence and expectations towards its future presence.
13	Local patrimony	A local artist made a lynx sculpture apropos of the potential appeared to the process in the area. His wife was photographed as a child with a caught lynx (1950s) and expressed fascination with the species. That inspired the creation of a new work which the artist describes as "rough and pretty".	Antonio Acabado, Vila Verde de Ficalho, Southern Portugal Honorable Mention in Vidiguera's Art Biennale 2012 Figure 10 registered by M. Lopes Fernandes, image courtesy of Vidigueira's Council	This example of local representation mixes the memory of the presence of the species with modern art representation. It might be considered a reinvention of a memory which exists in local community.

the first time used as a symbol of environmental activism and became an emblem of conservation success (example 1 from Table 2). This also created a strong territorial identification of the Malcata region with the lynx, and in the last years, long after the disappearance of the species from the area, this image is seen in a diversity of events, shops and local emblems (example 11 from Table 2 and Figure 7, a poster at the entrance of the village of Penamacor, central Portugal, announcing the 'lands of the lynx'). Altogether the examples of appropriation of the lynx image in Table 2 demonstrate how the species became visible in a variety of contexts, becoming what Handler (1988) denominates 'culturally objectified'.

Internationally, the Iberian lynx has also assumed the status of what is named by Noss (1990) as a flagship species, following continuous announcements of its critical threat status. In 1996, the International Union for Conservation of Nature (IUCN) announced that the Iberian lynx was the most threatened felid in the world, incurring a higher risk of extinction than the well-known tiger. Subsequently, the Iberian lynx has become more and more of an emblem for the conservation of wild species in general. For instance, its image was on the cover of the Red List of Threatened Mammals (Temple and Cuttelod 2009), media constantly choose the lynx for discussions of nature conservation issues (e.g. Monbiot 2015) and international environmental campaigns such as cork oak protection use the association of the species to the cork oak forest (WWF Global n.d.; Dr Vino 2010; Core 2011). There are allusions to pride and heritage value associated with the Iberian lynx. The species has become the symbol of 'wildness'. In 2009 a breeding centre was opened in Portugal, and since then more news and attention have been promoted by the media.

Related to the new image of the species and its sudden public visibility, a myriad of commercial brands have taken advantage of this for marketing (Table 2, nos 7–8). Emblematic species are sometimes used as a 'green' image promoted by large business companies that want to show public support for nature causes, which has also been the case for the Iberian lynx in Portugal (Table 2, no. 7). In parallel, emblems and logotypes with lynx faces have become more common (Table 2, nos 3–7; Figure 3), being associated with a positive symbolism and construction around wild predators based on fascination, special powers (such as the renowned acute vision) and strength. The association of the lynx with values like force, tenacity and speed, particularly in the case of sports, can be an example of what Knight (2000) calls the conversion of the predator as fear object into a remedy against fear or adversity (in

the case of a game). Beardsworth and Bryman (2001: 85) refer also to the use of wild animals in symbols for sports teams and political parties as pseudototemic. The wild animal is, according to these authors, an embodiment of otherness and both outside human society and inside human culture. In Figure 4 and example 6 (Table 2) we describe the use of the lynx for a new political party during a national campaign in 2011. Describing the example of wolf iconography in the United States, Van Horn (2012) also refers to 'political animals' and wolves' images as potent icons of resistance and radical environmental ideas.



Figure 3: Emblem of SEPNA, Portugal, National Guard for Nature Protection and Environment, image courtesy of Lt.Col. Amado

Comparison between Tables 1 and 2 not only shows the multiple representations of the lynx through time but also exemplifies changes in values and practices towards wilderness in European society. It has been described how environment and the same landscape have been viewed differently over the course of time by Europeans (e.g. Tuan 2013). Changes in attitudes can include not only a sensibility and rationality of discourse towards the natural world, beginning in the sixteenth century (e.g. Thomas 1991), but also towards predators, resulting in different practices from extermination to conservation during the nineteenth century and onwards (C. Schwartz et al. 2003).

The way the Iberian lynx has been represented through time indicates how people establish a personal or impersonal relationship with the species. The examples of contemporary appropriations characterise the modern experience humans have of predators – somehow these species are better

known by the public, so they seem closer even if mostly in a virtual way, not a live experience. As Beardsworth and Bryman (2001: 86) contend, nowadays 'the mode of engagement with the wild is through highly processed electronically mediated representations of real or virtual animals . . . and wildlife documentary effectively replace and supplants the encounter'. We observe closeness in modern lynx representations but in discourses and practices in the rural context, we note a growing tendency to relate to the wild via less direct experiences.



Figure 4: The political party "Party for Animals and Nature" used a poster during the election campaign using the face of the lynx and the message "more value to natural patrimony" authors' image from 2011

In a phenomenon of touristification, the lynx has even become a souvenir object (Table 2, no. 9, Figure 5) associated with Portuguese identity. Within the same framework, the lynx has become a symbol of heritage and of some geographical areas in Iberia (see Figure 6 for an example of recent street art offering the public a large scale representation of the lynx using recycled materials; also Figure 7 from the Malcata area) despite its local extinction in most areas of its former distribution. The choice of a wild species not present in reality that is then transformed into a cultural item of everyday life – what Theodore Schwartz (1975; cited in Cohen 1993) calls 'ethnognomony' – might represent a new facet of the identity of local populations in rural areas as environmentalists or as modern nonhuman animal lovers.



Figure 5: Lynx magnets for sale among other Portuguese tourist icons 2012, image courtesy of Andreia Farrobo



Figure 6: Large-scale 3D street sculpture with Iberian Lynx face, Viseu, Portugal, 2016 by Bordalo II, image courtesy of Inês Barroso



Figure 7: Outdoors at the entrance of the village of Penamacor, Central Portugal, announcing 'lands of the lynx', authors' image from 2010

Rural Identity Construction

From interview data analysis and ethnographic research in the Iberian lynx historical occurrence area and reintroduction site, we observed that the species, although seen as a predator and even a 'beast', is apparently no longer a vermin in discourses, and has become a contemporary cultural object. There is a dominant materialistic interest around reintroduction, but rural residents are also using the lynx as a symbol of territorial distinctiveness.

The Iberian lynx as a global media species was mainly an urban construction that had an impact in rural areas. There the coexistence with the species only in some cases is also a collective memory (Nazarea 2006). In rural areas nowadays, most people know the lynx through images and external discourses. Some informants, though, retained memory of the species. A local artist, Mr. Acabado, our informant, created a lynx sculpture apropos of the past presence of the species in the region, and it won a prize in a regional art event (the Biennial Vidigueira in 2012). His wife was photographed as a child with a captured lynx (1950s) and expressed fascination with the species, from which arose, according to him, the idea of making a wood sculpture using old pieces from agriculture tools. The artist described this representation of the lynx, which he had not seen live, as 'rough and pretty' (see Figure 10). The informant thought of the specific morphological characteristics of the species: 'the hind parts have to be wider than the front, he is prepared to jump, these are the eyes. It is all inset holm oak' (A. Acabado, pers. com., 2014). This original representation of the lynx mixes the memory of the species with modern art. It is an example of reinvention of a local memory from that rural community.

Moreover, Figures 7 to 9 are examples of incorporation of lynx as a conservation emblem into local identity of rural contexts under the influence of a global mediatization. The representation of a lynx in a secondary school is already a result of environmental education programs (Figure 9).

Among these rural appropriations listed in Table 2, we registered some examples of new merchandising: T-shirts, biscuits, logos and marketing names. Examples (Figure 8) were collected in the reintroduction area for the lynx in Portugal – Guadiana – during 2015, after the first releases of lynxes into the wild. Furthermore, during carnival one of the villages chose the lynx as a theme for the parade (corso). In the display the lynx was portrayed in a familiar mood, with people

dressed up as hunters, prey and predators all together. Despite its playful character, this display also represented a *contra discourse*, as some local stakeholders had been raising apprehensions and several objections to reintroduction.

Residents from Guadiana were present alongside politicians during the release of the lynxes. The events deserved media attention and had a local impact. This might transform the lynx into a natural object that people get to know personally, and in time might turn it into a regional icon. Buller (2004) describes how fauna icons of rural areas are evolving with alternative conceptions of the countryside, and argues that the classic dichotomy between wild and domestic is being reconstructed. As Milton (2002: 33) argues, this influences discourses about nonhuman animals, nature and earth, and 'we need to understand the knowledge, we need to ask how and why people come to know nature and natural objects as personal or impersonal'.



Figure 8: Products with lynx image or name (biscuits) produced in the lynx reintroduction area Mértola authors' image from 2015

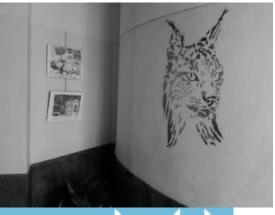


Figure 9: Lynx illustration in Barrancos secondary school, authors' image from 2013

Currently, the image of the lynx is also used to sell ceramic miniatures and ornamental bijouterie. The global influence of the environmental discourse and its imagery are changing rural perceptions about certain species. These results bring a new perspective to the general opposition of rural residents described in processes of carnivore reintroductions (Wilson 2004). The appropriations indicate local peoples' expectations with the lynx reintroduction, namely, turning it into a touristic icon that brings financial return. This also follows a global mainstream discourse (e.g. Navarro and Pereira 2015). Tremblay (2002) contends that the choice of wildlife icon in tourism depends on the attractiveness of specific species or on their relevance to the environment they represent. In fact, the Iberian lynx, considered beautiful and secretive since time immemorial, might combine the condition of having an attractive image with the fact that it represents the survival of the Mediterranean habitats (see e.g. Morrison 2008) threatened by progressive anthropogenic transformations.



Figure 10: A local artist made a lynx sculpture apropos of the potential presence of the species in the area of Moura Barrancos (António Acabado, Vila Verde de Ficalho, Southern Portugal), image from Vidigueira Council

Concluding Remarks

The characteristics that made the lynx a ferocious predator and a vermin in the past might be the same ones that make it fascinating and admirable nowadays. Before positivism, the relationship of humans with nature in Western contexts contained a mystical aspect. Nowadays, the relationship with nature tends to be more based on technical knowledge. Current environmental crises might have created perceptions of a fragile 'dying earth' and threatened species who need protection from humans. For all these reasons, we believe the Iberian lynx became an icon of Western European culture, incorporating the symbolism of nature conservation and the need to get back to 'pure' and wild scenarios. A final example of Iberian lynx as a wide symbol is its representation in the Salamanca Cathedral (UNESCO World Heritage Site in Spain). In a bas-relief not originally from the construction of the building but added during a modern restoration of the side portico in the last decades, the artist chose the lynx as a figure to include as well as an astronaut figure among the original figures. We interpreted this as symbols of two contemporary concerns: (1) wild species extinction and (2) modern human thought and advances in humanity. Therefore, the Iberian lynx is a conservation emblem used in contemporary discourses about the Anthropocene and about the impact of humans on the environment and a flagship species, with associated values in which representations since historical times had a role.

On the other hand, it holds a new constructed image as a benign victim. These 'ecologically famous species and thus worthy of protection' (Ogden 2008) are suddenly portrayed as victims and fragile creatures. The image of the predator as a nuisance and a vermin, an historical inheritance and still present for some people, is hidden publicly. The public image of the Iberian lynx might be an example of what Latour (2004) calls a 'smooth object', as Ogden (2008) refers to regarding the Everglades National Park. The new lynx as a conservation emblem can no longer be a vermin, and therefore his social visibility was 'polished smooth, removing discordances' (Ogden 2008), in our case a 'smooth' conflict over his high protection status or reintroduction.

The lynx case study in Europe and in particular in Portugal exemplifies the type of relationship humans have with emblematic threatened species in Western societies. It is a contribution to how understanding the past, contextualising the relationships with the natural world and the knowledge of collective memories is an important

part of understanding the present and the meaning of discourses about emblematic wildlife and, in general, nonhuman animals. It also provides a picture of the wildlife significance in both contemporary urban and rural contexts, which are interconnected. Conservation actions are human behaviours, and it is vital to understand how social factors shape such human interactions.

Margarida Lopes-Fernandes, Centro em Rede de Investigação em Antropologia (CRIA), UNL, Lisbon, and Instituto da Conservação da Natureza e Florestas (ICNF), Lisbon (margaridafernandes@icnf.pt)

Amélia Frazão-Moreira, Centro em Rede de Investigação em Antropologia (CRIA), UNL, Lisbon (amoreira@fcsh.unl.pt)

Acknowledgements

Margarida Lopes-Fernandes was funded by Fundação Ciência Tecnologia (SFRH/BD/75769/2011). We acknowledge the LITESCAPE project and all its collaborators for providing a Portuguese literature database for research. For collaborations with image collection and data details, we thank all informants: AI Queiroz, Tenente Coronel Jorge Amado, Jorge Simões, the Vidigueira council, Miho Museum, Archaeological Museum at the Roman Theatre of Verona, Guarda Museum, *Galileo* Museum, M. Pinho de Almeida, I. Barroso, A. Farrobo and L. A. Clarke. For bibliographic references, thanks to Helena Ceia, Luis Castro, António Caeiro, Bruno Pinto, Simon Davis, Margarita Diaz and Sónia Azambuja. Luka Clarke translated from original texts in Portuguese and revised the text of the manuscript. We also acknowledge A. I. Queiroz and an anonymous referee for comments on an earlier version of the manuscript.

Notes

- * Lynx in historical Europe. Background map from Piri Reis, Kitab-I Bahriye, Library of Istanbul University nº6605. Individual images as follows:
 - (1). Lynx humerus, Portugal (image by Cleia Detry and Simon Davis)
 - (2). Lynx teeth as amulet, Portugal (image in Ferreira and Trindade 1954)
 - (3). Lynx cave painting, Spain (image in Breuil 1933)
 - (4). Lynx engraving France (image from Tosello 2003 in http://tout-sur-le-lynx-boreal.wifeo.com/images/Prehistoire_Plaquette_Lynx_graves_de_la_Madeine-TOSELLObis.jpg)
 - (5). Roman statue with lynx head in pterigia, Italy (Image from Verona, Archaeological Museum at the Roman Theatre, photograph of Gianluca Stradiotto)
 - (6). God Pan with lynx pelt. Greco-Roman fresco from Pompeii C1st A.D., Naples National Archaeological Museum, image in http://www.theoi.com/ image/F22.1Pan.jpg
 - (7). Bracelet with lynx heads Greek period 2nd century BC (© 2016 by Benaki Museum Athens)
 - (8). Heraclea Lyncetis Macedonia (Image under Creative Commons © in https://upload.wikimedia.org/wikipedia/commons/6/6a/Ancientbitola.jpg)
 - (9). Drinking horn with lynx, Iran (image from Miho Museum Rhyton with the Protome of a Desert Lynx Catching a Fowl (SS1058) in http://www.miho.or.jp/english/collect/main/image/d.jpg)
 - (10). Isidore of Seville who described *lyncurius* (image PHAS via Getty images https://contagions.wordpress.com/2015/01/10/contagion-and-pestilence-in-isidore-of-sevilles-etymologies/)
 - (11). Bestiary illustration, England from Kongelige Bibliotek 1633 4, folio 6r, image in www.kb.dk under Creative Commons license)
 - (12). Viking brooch with humans and cats, Sweden (image in Prehal 2011 from British Museum after Wilson and Klindt-Jensen 1980:PL.XXXIa)
 - (13). Incense burner, Iran. Masterpieces from the Khalili Collection @ Institut du Monde Arabe, Paris. © Nour Foundation. Courtesy of the Khalili Family Trust (image in http://p3.storage.canalblog.com/33/46/577050/44234873_p.jpg)
 - (14). Illustration from hunting book, France (image in Livre de la chasse Gaston Phebus 1389 in Callou 2008)
 - (15). Hernandez illustration of lynx flower Spain from Hernandez 1671 (image in http://www.godel.net/garden/articles/VanillaRerumNaturaeCoatzonte_ Coxohitl.gif)
 - (16). Symbol of *Accademia dei Lincei* Italy in Della Porta 1597 (image recorded in Blblioteca Galileo, Firenzi)
 - (17). Lynx sculpture at Vatican Museum, Italy (image courtesy of M. Pinho de Almeida)
 - (18). Illustration of lynx star constellation by Hevelius, Firmamentum, 1690 (image in https://upload.wikimedia.org/wikipedia/commons/e/e9/Johannes_ Hevelius_-_Prodromus_Astronomia_-_Volume_III_%22Firmamentum_ Sobiescianum%2C_sive_uranographia%22_-_Tavola_Y_-_Lynx.jpg)
 - (19). Illustration of Iberian lynx by zoologist in Brehm (1864)

1. Avesta is the name the Mazdean (Mazdayasnian) religious tradition gives to the collection of its sacred texts. This religion, also known as Zoroastrianism, enters recorded history in the fifth century BCE. The surviving texts of the Avesta, as they exist today, derive from a single master copy produced by Sasanian Empire–era (224–651 CE) collation and recension. The corpus, which Western scholarship has reconstituted, is found in manuscripts that all date from this millennium; the most ancient (K 7a) dates from 1288 CE (*Enciclopaedia Iranica*, Columbia University).

References

- Abreu, B. (1726), Portugal médico (Coimba: Officina de Joam Antunes).
- Alba, V. (2007), 'Apuntes históricos sobre el lince ibérico en Andalucía', *Galemys* 19, no. 2: 33–52.
- Alexandre, P. J. M. (2009), A Heráldica do Exército na República Portuguesa no Século XX. PhD Thesis, History of Art, (Coimbra: Faculdade de Letras da Universidade de Coimbra)
- Anónimo (1914), The Homeric Hymns and Homerica with an English Translation by Hugh G. Evelyn-White (Cambridge, MA: Harvard University Press).
- Assis Esperança, A. (1964), Pão Incerto (Lisbon: Portugulia).
- Atlas das paisagens literárias de Portugal continental <paisagensliterarias.ielt.fcsh. unl.pt> (accessed 1 August 2015).
- Azambuja, S. (2009), A linguagem simbólica da natureza: A flora e a fauna na pintura seiscentista portuguesa (Lisbon: Nova Vega).
- Bates, D. and R. Liddiard (eds) (2013), East Anglia and Its North Sea World in the Middle Ages (Woodbridge, U.K.: Boydell).
- Beardsworth, A. and A. Bryman (2001), 'The Wild Animal in Late Modernity: The Case of the Disneyization of Zoos', *Tourist Studies* 1, no. 1: 83–104.
- Boule, M. (1912), 'Review of "Proceedings of the Prehistoric Society of East Anglia. Vol. 1. Part 1", L'Anthropologie 23: 426–9.
- Breitenmoser, U., C. Breitenmoser-Würsten, T. Lanz, M. von Arx, A. Antonevich, W. Bao and B. Avgan (2015), 'Lynx Lynx: The IUCN Red List of Threatened Species 2015' <dx.doi.org/10.2305/IUCN.UK.2015-2.RLTS.T12519A50655266.en> (accessed 14 April 2016).
- Breuil, H. (1933), Les peintures schématiques de la Péninsule ibérique, 4 vols (Paris: De Lagny).
- Buller, H. (2004), 'Where the Wild Things Are: The Evolving Iconography of Rural Fauna', *Journal of Rural Studies* 20, no. 2: 131–41.
- Callou, C. (2008), 'Le lynx en France: Apport des données archéologiques et historiques', in R. Rosoux, M. de Bellefroid, J. Baillon and A. Moreau (eds), *Lynx le grand retour: Actes du symposium international* (Orléans: Publication Scientifiques du Museum), 17–21.
- Castelo Branco, C. (1882), 'O Alma negra', in A Brasileira de Prazins: Obras escolhidas de Camilo Castelo Branco, vol. 22 (Lisbon: Círculo de Leitores), 178–84.
- Ceia, H., L. Castro, M. Fernandes and P. Abreu (1998), 'Lince-ibérico em Portugal: Bases para a sua conservação', in *Relatório final do Projecto 'Conservação do lince-ibérico'*. ICNF, unpublished report.

- Choyke, A. (2010). 'The bone is the beast: animal amulets and ornaments in power and magic', in D. Campana, P. Crabtree, S. deFrance, J. Lev-Tov and A. Choyke (eds), *Anthropological Approaches to Zooarchaeology: Complexity, Colonialism, and Animal Transformations* (Oxford: Oxbow), 197-209.
- Clark, K. (1939), Leonardo Da Vinci: An Account of His Development as An Artist (New York: Macmillan).
- Clubb, L. (1965), Giambattista Della Porta Dramatist (Princeton, NJ: Princeton University Press).
- Cohen, A. (1993), 'Culture as Identity: An Anthropologist's View', *New Literary History* 24, no. 1: 195–209.
- Core, J. (2011), 'Men in Trees: A Look at the Annual Portuguese Cork Harvest' www.core77.com/posts/20839/men-in-trees-a-look-at-the-annual-portuguese-cork-harvest-20839 (accessed 1 August 2015).
- Dalton, R. (2003), Lion man takes pride of place as oldest statue. *Nature* 425 (6953): 7-7.
- Della Porta, G. (1597), Magiae naturalis libri viginti, in quibus scientiarum naturalium divitiae, and deliciae demostrantur, C. Marnium and I. Aubrium (eds) (Francofurti: Andreae Wecheli).
- Dr Vino (2010), 'Every Time You Open a Screwcap, a Kitten Dies!' <www.drvino.com/2010/07/21/screwcap-wine-lynx-cork-wildlife> (accessed 1 August 2015).
- Fernandes, M., M. Casas, C. Detry, S. Davis, A. Frazão-Moreira and J. Godoy (2012) 'Lynx and Man: importance of historical reasearch for the future of a threatened species.' In C. Detry and R. Dias (eds) *I Congresso Internacional de zooarqueologia. Book of abstracts.* (Faculty of Letters, University of Lisbon), 11-12.
- Fernandes, M., F. Soares, A. Queiroz and A. Frazão-Moreira (2016), 'Living with the Beast: Wolves and Humans through Portuguese Literature', *Anthrozoos* 29, no. 1: 5–20.
- Ferreira, O. da Veiga and L. Trindade (1954), 'A necrópole do "Cabeço da Arruda", *Anais da Faculdade de Sciências do Porto* 38: 193–212.
- Flores, N. (ed.) (1996), Animals in the Middle Ages (New York: Routledge).
- Freitas Cruz, J. A. (1945), O problema venatório português (Lisbon: Colecção Venator).
- Gallagher, P. (1994), "Coo-wha-chobee": The Cultural Significance of the Florida Panther to Native Americans', in D. Jordan (ed.), *Proceedings of the Florida Panther Conference*. (Atlanta: U.S. Fish and Wildlife Service), 6–12.
- Galvão, H., A. Montês and J. Freitas Cruz (1943), A caça no império português (Porto: Primeiro de Janeiro).
- Garcia, L.P. (1942), *La cueva del Parpallo (Gandia)*. Consejo Superior de Investigaciones Científicas Instituto Diego Velasquez, Barcelona.
- Gibbon, E. ([1776] 1998), The History of the Decline and Fall of the Roman Empire (Ware, U.K.: Wordsworth).
- Godelier, M. (1978), La part ideelle du reel: essai sur l'ideologique. L'homme, 155-188.
- Goldman, H. and M. Walsh (1997), 'A Leopard in Jeopardy: An Anthropological Survey of Practices and Beliefs Which Threaten the Survival of the Zanzibar Leopard (*Panthera pardus adersi*)', *Zanzibar Forestry Technical Paper* 63.
- Graves, R. (1966), Larousse Encyclopedia of Mythology (London: Hamlyn).
- Handler, R. (1988), *Nationalism and the Politics of Culture in Quebec* (Madison: Wisconsin University Press).

- Hernandez, F. (1651), Rerum medicarum Novae Hispaniae thesaurus, seu, Plantarum animalium mineralium Mexicanorum historia (Rome: Vitalis Mascardi).
- Hurn, S. (2012), Humans and Other Animals: Cross-cultural Perspectives on Human-Animal Interactions (London: Pluto).
- Ingold, T. (1988), What is an Animal? (London: Routledge)
- Jaric, J. (2010), 'The Barbarian Incursions on Macedonia in the Early Middle Ages: Defining Chronology, Geography and Factors', Macedonian Historical Review 1, no. 1: 5–25.
- Jennbert, K. (2006), 'The Heroized Dead: People, Animals, and Materiality in Scandinavian Death Rituals, AD 200–1000', in A. Andrén, K. Jennbert and C. Raudvere (eds), Old Norse Religion in Long-term Perspectives: Origins, Changes, and Interactions An International Conference in Lund, Sweden, June 3–7, 2004 (Lund: Nordic Academic Press), 135–40.
- Kalof, L. and B. Pohl-Resl (2007), Cultural History of Animals (Oxford: Berg).
- Kempf, C., A. Balestreri, U. Wotschikowsky and M. Fernex (1979), Chez nous le lynx? Mythes et realité (Paris: Les guides Gesta).
- Knight, J. (2000), Natural Enemies: People-Wildlife Conflicts in Anthropological Perspective. (London: Routledge).
- Latour, B. (2004), Politics of Nature: How to Bring Sciences into Democracy (Cambridge, MA: Harvard University Press).
- Lescureux, N., J. Linnell, S. Mustafa, D. Melovski, A. Stojanov, G. Ivanov, V. Avukatov, M. von Arx and U. Breitenmoser (2011), 'Fear of the unknown: local knowledge and perceptions of the Eurasian lynx *Lynx lynx* in western Macedonia', *Oryx* 45(04): 600-607.
- Luengo, J. (n.d.), Heráldica oficial de la provincia de Sevilla (Seville: Facediciones)

 books.google.pt/books?id=nc8QefhIIz8C&printsec=frontcover&hl=pt-PT& source=gbs_ge_summary_r&cad=0#v=onepage&q&f=false> (accessed 20 May 2016).
- Lüthy, C. (1996), 'Atomism, Lynceus, and the Fate of Seventeenth-century Microscopy', *Early Science and Medicine* 1, no. 1: 1–27.
- Manso, F. (1959), Caçadas aos Javalis pelo Dr. Framar (Guarda: Casa Véritas).
- Masseti, M. and C. Veracini (2009), 'John the Baptist's Spotted Felid Skin', in V. Merlini and D. Storti (eds), *Leonardo in Milan: Saint John the Baptist* (Milan: Skira), 119–22.
- Milenkovic, M. (2008), 'Large Carnivores as Added Value: Economic, Biological and Cultural Aspects', in R. Potts and K. Hecker (eds), Coexistence of Large Carnivores and Humans; Threat or Benefit? Proceedings of the International Symposium Preciding the 54th CIC General Assembly (1 May 2007, Belgrade, Serbia, CIC International Council for Game and Wildlife Conservation).
- Milton, K. (2002), Loving Nature: Towards an Ecology of Emotion (London: Routledge). Monbiot, G. (2015), '15 Species That Should Be Brought Back to Rewild Britain', The Guardian, 15 July www.theguardian.com/environment/2015/jul/15/rewilding-britain-launches-with-the-aim-of-restoring-uks-lost-wildlife-and-habitats (accessed 1 August 2015).
- Morrison, P. (2008), 'Save This Amazing Forest . . . Uncork a Bottle of Wine', *Daily Mail*, 29 November <www.dailymail.co.uk/news/article-1090462/Save-amazing-forest—uncork-bottle-wine.htm> (accessed 1 August 2015).
- Mullin, M. (1999), Mirrors and windows: sociocultural studies of human-animal relationships. *Annual review of anthropology*, 201-224.

- Navarro, L. and H. Pereira (2015), 'Rewilding Abandoned Landscapes in Europe', in H. Pereira and L. Navarro (eds), *Rewilding European Landscapes* (New York: Springer), 3–23.
- Nazarea, V. (2006), 'Local Knowledge and Memory in Biodiversity Conservation', Annual Review of Anthropology 35: 317–35.
- Noss, R. (1990), 'Indicators for Monitoring Biodiversity: A Hierarchical Approach', *Conservation Biology* 4, no. 4: 355–64.
- Ogden, L. (2008), 'Searching for Paradise in the Florida Everglades', Cultural Geographies 15, no. 2: 207–29.
- Olcott, W. (1911), Star Lore of All Ages: A Collection of Myths, Legends, and Facts Concerning the Constellations of the Northern Hemisphere (New York: Putnam).
- Palmeirim, J., L. Palma, F. Catarino and C. Almaça (1980), 'Salvemos o lince e a serra da Malcata: Campanha nacional', Bios 21: 1–11.
- Pires, A. and Fernandes, M. (2003), Last lynxes in Portugal? Molecular approaches in a pre-extinction scenario. *Conservation Genetics* 4: 525-532.
- Prehal, B. (2011), 'Freyja's Cats: Perspectives on Recent Viking Age Finds in Egjandadalur North Iceland', master's thesis (Hunter College of the City University of New York).
- Queiroz, A. (Coord.), P. Alves, I. Barroso, P. Beja, M. Fernandes, L. Freitas, M. Mathias, A. Mira, J. Palmeirim, R. Prieto, A. Rainho, L. Rodrigues, M. Santos-Reis, and M. Sequeira (2005), 'Fichas de caracterização Mamíferos' in M. Cabral, J. Almeida, P. Almeida, T. Dellinger, N. Ferrand de Almeida, M. Oliveira, M. Palmeirim, A. Queiroz, L. Rogado, and M. Santos-Reis (eds), Livro Vermelho dos Vertebrados de Portugal (Lisboa: Instituto da Conservação da Natureza), 429–532.
- Reau, L. (1955), *Iconographie de L'art chretien* (Paris: Presses Universitaires de France). Ribeiro, A. ([1924] 2003), *O Romance da Raposa* (Lisboa: Bertrand).
- Roque de Pinho, J. (1959), 'Situation du lynx au Portugal', in *Conseil International de la Chasse: VIIIeme Assemblée Generale*, Vienna, 20-25 May, 131-2.
- Sacarrão, G. (1959), 'O conceito de nocivo', Protecção da Natureza 2: 5-8.
- Santamarina Campos, B. and J. Ramiro (2013), 'Lugares rurales versus espacios naturalizados', *Revista de antropología iberoamericana* 8, no. 1: 112–38.
- Sarmento, P., J. Cruz, P. Monterroso, P. Tarroso, C. Ferreira, N. Negrões and C. Eira (2009), 'Status Survey of the Critically Endangered Iberian Lynx *Lynx pardinus* in Portugal', *European Journal of Wildlife Research* 55, no. 3: 247–53.
- Saunders, N. J. (1998), Icons of power: feline symbolism in the Americas. (London: Routledge).
- Schröder, J. (1644), *Pharmacopoeia Medico-Chymica*, book V, chapter I, 'De animalibus', XXVI <books.google.pt/books?hl=pt-PT&lr=&id=Kd4UAAAAQAAJ&oi=fnd&pg=PA1&dq=Schr%C3%B6der,+J.+(1644).+Pharmacopoeia+Medico-Chymica&ots=kvb1M5BscQ&sig=XXFvO7PN1OEe5Rh2w-jo7X5SIZs&redir_esc=y#v=onepage&q&f=false> (accessed 20 June 2016).
- Schwartz, C., J. Swenson and S. Miller (2003), 'Large Carnivores, Moose and Humans: A Changing Paradigm of Predator Management in the 21st Century', *Alces* 39: 41–63.
- Schwartz, T. (1975), 'Cultural Totemism: Ethnic Identity Primitive and Modern', in G. De Vos and L. Romanucci-Ross (eds), Ethnic Identity: Cultural Continuities and Change (Palo Alto, CA: Mayfield), 106–31.

- Simon, M., J. Gil-Sanchéz, G. Ruiz, G. Garrote, E. Mccain, L. Fernandez and G. Lopez (2012), 'Reverse of the Decline of the Endangered Iberian Lynx', Conservation Biology 26, no. 4: 731–6.
- Sobral, L. (1998), *Bento Coelho e a cultura do seu tempo: 1620–1708* (Lisbon: Instituto Português do Património Arquitectónico).
- Strabo, G. (1924), 'Chapter 7 Book 7', in H. L. Jones (ed.), *The Geography of Strabo* (Cambridge, MA: Harvard University Press) <www.perseus.tufts.edu/hopper/text? doc=Perseus:text:1999.01.0198:book=7:chapter=7> (accessed 2 August 2016).
- Sunquist, M. and F. Sunquist (2002). *Wild cats of the world*. (Chicago, London: University of Chicago Press).
- Temple, H. and A. Cuttelod (2009), *The Status and distribution of Mediterranean Mammals* (Cambridge: IUCN).
- Thomas, K. (1991), Man and the Natural World: Changing Attitudes in England 1500–1800 (Harmondsworth: Penguin).
- Throop, P. (2005), Isidore of Seville's Etymologies: Complete English Translation. (Charlotte, VT: Medieval MS).
- Toledo, V. and N. Barrera-Bassols (2008), La memoria biocultural: La importancia ecológica de las sabidurías tradicionales, vol. 3 (Barcelona: Icari).
- Tosello, G. (2003), Pierres gravées du Périgord magdalénien: Art, symboles, territoires (Paris: CNRS).
- Toynbee, J. (1973), Animals in Roman Life and Art (Ithaca, NY: Cornell University Press).
- Travassos Lopes, J. (1899), Histórias de Animaes, vol. 3 (Lisbon: Livraria).
- Tremblay, P. (2002), 'Tourism Wildlife Icons: Attractions or Marketing Symbols?', in *CAUTHE 2002: Tourism and Hospitality on the Edge Proceedings of the 2002 CAUTHE Conference* (Lismore, Australia: Edith Cowan University Press), 624–38.
- Tuan, Y. (2013), Topophilia: A Study of Environmental Perceptions, Attitudes, and Values (New York: Columbia University Press).
- Van Horn, G. (2012), 'The Making of a Wilderness Icon: Green Fire, Charismatic Species, and the Changing Status of Wolves in the United States', in A. Ross and A. Vallely (eds), *Animals and the Human Imagination: A Companion to Animal Studies* (New York: Columbia University Press), 203–37.
- Vigne, J. (2011), 'The Origins of Animal Domestication and Husbandry: A Major Change in the History of Humanity and the Biosphere', Comptes Rendus Biologies 334, no. 3: 171–81.
- Wilson, C. (2004), 'Could We Live with Reintroduced Large Carnivores in the UK?', *Mammal Review* 34, no. 3: 211–32.
- WWF Global (n.d.), 'Cork Oak' <wwf.panda.org/what_we_do/endangered_species/cork_oak> (accessed 1 August 2015).
- Wynn, T., F. Coolidge, K. Overmann and M. Bright (2013), 'The Lion-Man and the Evolution of the Human Mind', in Ulmer Museum, *The Return of the Lion Man: History, Myth, Magic* (Ulm: Ulmer Museum), 148–9.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

