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Universidad Autónoma de Madrid  
Cantoblanco 28049. Madrid. España

Editor: Eufrasia Roselló Izquierdo

Editor Adjunto / Assitant Editor: Laura Llorente Rodríguez

Faculty of Archaeology, Universiteit Leiden, The Netherlands. l.llorente.rodriguez@arch.leidenuniv.nl



LAZ

Diseño y maquetación:

Ismael Sánchez Castro

Tel.: 670 763 012

ismasan76@gmail.com

Imprime:

Impresores Digitales S.L.

FRONTISPIECE: The animals from miniature no. 5 of the *Cantiga 29, fol 44r. Códice Rico. Biblioteca del Real Monasterio de San Lorenzo de El Escorial.*





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Depósito Legal: M. 30872-1992

Diseño y maquetación:  
Ismael Sánchez Castro  
Tel.: 670 763 012  
ismasan76@gmail.com

Imprime:  
Impresores Digitales S.L.

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# Gift of the Mamelukes: Animal embassades as vectors of exotic fauna introductions in the Spanish Middle Ages

## El regalo de los mamelucos: Las embajadas animales como vectores de introducciones de fauna exótica en la Edad Media española

DOLORES CARMEN MORALES-MUÑIZ & ARTURO MORALES-MUÑIZ\*

Laboratorio de Arqueozoología. Depto. Biología.  
Universidad Autónoma de Madrid. E-28049 Madrid. Spain  
lolina.c@telefonica.net  
arturo.morales@uam.es  
\*corresponding author

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**ABSTRACT:** The number of exotic animal species that were introduced in Iberia during the Middle Ages constitute a defectively documented area of research, mostly addressed through historiographic methods. In this paper we evidence that even in the case of large, exotic animals exchanged as gifts among dignitaries the documentary data can be painfully incomplete. This is the case of the animal embassy that the Mamluk sultan *Baybars al Bunduqdari* sent in 1261 to the Castilian king Alfonso X. Although the written sources do not specify the complete list of species nor the reasons for mentioning some but not others, documentary and iconographic data suggest that, in addition to an elephant, a giraffe and a zebra, this lot included, in a decreasing order of probability, a lion, a dromedary, an ostrich, and a Nile crocodile. If such conspicuous beasts could pass unnoticed in a royal chronicle, one may contend that even in the most thoroughly documented cases, written sources may refer but a minimal fraction of the animals translocated into Iberia during the Medieval period. Such information vacuum stresses the difficulties of granting “indigenous” status to species traditionally assumed to constitute elements of the Iberian fauna when their historical contingencies are defectively known, a matter of concern for the current rewinding debate in Spain.

**KEYWORDS:** ANIMAL GIFTS, INTRODUCED EXOTIC FAUNA, PRESTIGE SYMBOLOLOGY, MEDIEVAL SPAIN, ALPHONSE X “THE WISE”

**RESUMEN:** El número de especies animales exóticas que se introdujeron en la Península Ibérica durante la Edad Media constituye un área de investigación deficientemente documentada y abordada mayoritariamente a través de métodos historiográficos. En este artículo evidenciamos que incluso en el caso de animales grandes intercambiados como obsequios entre dignatarios, los datos documentales pueden ser notoriamente incompletos. Es el caso de la embajada de animales que el sultán mameluco *Baybars al Bunduqdari* envió en 1261 al rey castellano Alfonso X. Aunque las crónicas no especifican la lista completa de especies ni los motivos para mencionar unas pero no otras, las fuentes documentales e iconográficas sugieren que, además de los mencionados elefante, jirafa y cebra, el lote incluía, en orden de probabilidad decreciente, un león, un dromedario, un avestruz y un cocodrilo. Si animales tan llamativos pudieron pasar desapercibidos en una crónica real, podemos pensar que incluso en los casos mejor documentados, las fuentes escritas pueden referir sólo fracciones mínimas de los animales trasladados a Iberia en este período.

Tal vacío de información enfatiza las dificultades de otorgar estatus “autóctono” a especies que tradicionalmente constan como elementos de la fauna ibérica, un tema capital en el contexto del debate sobre reintroducciones de fauna en España.

**PALABRAS CLAVE:** REGALOS DE ANIMALES, FAUNA EXÓTICA INTRODUCIDA, PRESTIGE SYMBOLOGÍA ANIMAL DEL PRESTIGIO, ESPAÑA MEDIEVAL SPAIN, ALFONSO X “EL SABIO”

## INTRODUCTION

Under the conceptual frame of the current conservation debate, invasive species are generally considered to represent major threats to biodiversity (Palau, 2020; but see Sha, 2020). However, as research concerning rewilding testifies, “invasive” may turn out to be a debatable status (Pascal *et al.*, 2006; Thompson, 2014; Flannery, 2018; Jepson & Blythe, 2021). Although natural causes, both extrinsic and intrinsic, determine the “invasive capabilities” of species, in human-mediated translocations it is often cultural reasons what determine which species will prevail (Bedini, 1997; Belozerskaya, 2008). Humans are presently recognized as one major translocation agent, yet we mostly remain ignorant of developments associated with that kind of activity in the past. Slowly we are coming to realize that substantial numbers of translocation events were carried out inadvertently so that no evidence of them exists (Thompson, 2014). Even when dealing with conscious translocations, the evidence may be scarce or nil when these took place in the deep past, in the absence of material records, or when written sources are lost (Gardeisen, 2002). Given that conservation policies require reliable data on which to base actions, defective historical evidence constitutes a serious drawback when trying to decide what is indigenous or not (Taylor, 2005; Pereira & Navarro, 2015; Palau, 2020).

Medieval Iberia was a particularly fertile ground for animal translocations given its geographic location and historical contingencies (Morales-Muñoz, 2017). Amongst the latter, the Early medieval invasions from the north (Visigoths, Vandals, Alans, Swabians), East (Byzantines), and South (Muslims) brought with them animals that written sources rarely report and archaeozoology rarely discovers (Morales, 1994; Morales *et al.*, 1995; Riquelme *et al.*, 1997; Morales-Muñoz, 2000, 2012,

2015, 2017; Morales & Rofes, 2008; Padilla Sánchez *et al.*, 2022). During the Late Middle Ages, in turn, it was the marine expansion of the peninsular kingdoms what became one major driver of animal imports into the peninsula, a much better documented phenomenon of which the Canary (*Serinus canarius*, L. 1758) stands out as the paradigm (Walker Vadillo, 2013).

In between both events, two well documented venues for translocated animals in medieval Iberia were the menageries (i.e., primeval zoological gardens) of sovereigns and noblemen and the “animal Embassies” which were diplomatic exchanges of beasts taking place amongst dignitaries (Zalba, 1946; Adroer i Tasis, 1989; Blasco Martínez, 1996; Domenech, 1996; Borja, 2002; Bover i Pujol & Roselló Vaquer, 2004; Kiser, 2007; Gschwend, 2009; Buquet, 2013a, b). Originated in pharaonic Egypt, animal gifts became common practice in the Near East since Sassanid times and later in Greece and Rome (Williams, 2012). By the 8<sup>th</sup> c. AD animal Embassies spread throughout the Islamic world and neighboring lands, reaching western Europe in the following century (Toynbee, 1996; Limet, 1998; Buquet, 2013a, b). The number of species and individuals involved in this protracted translocation process is impossible to assess yet, given its millennial scale, the extent of the Arab conquests, and the involvement of the northern lands of Eurasia in the process, it must have surpassed the translocations that took place during Roman times (Toynbee, 1996). Of relevance for the purposes of our paper is the fact that animal Embassies were outstanding events, often restricted to the elites, and generally detailed by the chronicles of their time. For those reasons, one would at least expect to find in those documents the identities of the animals translocated as gifts (Walker-Meikle, 2012). How precise in their detail these descriptions were, is the issue that a well-known case study from Spain allows us now to explore.

## THE 1261 ANIMAL EMBASSY OF SULTAN BAYBARS

The consensus on the date of the embassy that the Egyptian Sultan *Baybars al Bunduqdari* (AD 1260-1277) (referred to as Alvandexanver in the Castilian sources) sent to the Castilian king Alfonso X “the Wise” (AD 1252-1284) is May 1261. As of this writing, no document from the reign of Alfonso X survives that mentions the event. The oldest reference is found in the *Crónica de Alfonso X* (CAX hereafter) compiled during the reign of Alfonso XI, 1344-1350 (i.e., some 90 years after the event took place). Unfortunately, the reference to the animals in that chronicle seems laconic at best (González Jiménez, 1998; Biblioteca del Palacio Real de Madrid):

“...et truxiéronle un marfil e una alimanna que decía azorafa, e una asna que era viada, que tenía la una banda blanca y la otra prieta. Et truxiéronle otras bestias e animalias de muchas maneras. El Rey recibió muy bien estos mandaderos, e fizoles mucha onra e embiólos dende muy pagados.”

(Lit. “...and they brought him an elephant, and an animal which they called giraffe, and a striped she-ass with alternating black and white stripes. And they brought him other beasts and many other kinds of animals. And the King received these messengers gladly and honored them much and sent them back deeply satisfied”).

Recounting the event almost a century after it took place, one can assume that this chronicler only mentioned those species that the original, nowadays lost document, referred to or else those he, for some reason, deemed relevant. In either case, on what grounds did the choice of criteria rest? Certainly, elephants (i.e., the African *Loxodonta africana* [L. 1758], and the Indian *Elephas maximus* [Cuvier 1798]), along with the giraffe (*Giraffa camelopardalis*, L. 1758), and the Indian rhinoceros (*Rhinoceros unicornis* L, 1758), were the most prestigious animals a Muslim dignitary could offer (Bouquet, 2013b); thus, prestige was probably one reason why the elephant and the giraffe are mentioned in the chronicle, but was prestige the sole reason or other alternatives existed? In this case, the reference to the “striped she-ass” is noteworthy for this is the first and only time that this equid is mentioned by the European medieval sources (Bouquet, 2013b). Indeed, lack of a vernacular name for it stresses its singularity, and this is reinforced by

the fact that the only other documented case of zebras being exchanged as gifts was those that Sultan Baybars sent to Khan Birkai (AD 1257-1269) in 1263 (Buquet, 2021: table 8.1). If singularity and prestige were the reasons for the CAX mentioning these beasts, does one assume that those (*sic.*) “... other beasts and many kinds of animals” refer to less prestigious species or simply to animals people were already acquainted with? To explore this, one needs to probe further into the identities of those anonymous animals.

## RESULTS AND DISCUSSION: TRACKING THE ANIMALS OF THE MAMLUK EMBASSY THROUGH ALFONSINE SOURCES

We studied post-1261 texts from the reign of Alfonso X to explore the identities of species not mentioned by the CAX chronicle. The most important source here are the *Cantigas de Santa María* (CSM hereafter). Completed in 1265, this is a lavishly illustrated compilation of lyric Galaico-Portuguese songs detailing developments in the monarch’s life (Gregori, 2007; Carvalho Mendes, 2016; Fidalgo Francisco, 2017, 2018). Miniature no.5 of CSM 29 (*códice Rico* [T], fol. 44r) represents a worship scene whose text summons all animals to venerate the Virgin Mary (Keller, 1972) (Figure 1). There, one easily recognizes the elephant and the giraffe mentioned by the CAX chronicle, as well as a zebra that would confirm the identity of the referred “striped ass”. Noteworthy here, as this constitutes a second line of evidence, is the striking realism with which these three beasts have been depicted, a realism not seen in most of the remaining species. In this way, the coat pattern of the zebra reveals it to specifically represent a Burchell zebra (*Equus quagga burchelli*, Gray 1824), the *E. burchelli antiquorum* that Kinkade and Keller mention being now an invalid synonym for this subspecies (Kinkade & Keller, 1999). In the case of the giraffe, what one needs to settle is whether its neck blotches fit better the coat pattern of Rothchild’s giraffe (*G.c.rothchildi*) than that of the West African giraffe (*G.c.peralta*), that nowadays represents the northernmost subspecies of the giraffe in Africa (i.e., the one closest to the domains of the Egyptian rulers; Williams [2010]). The large ears and concave dorsal profile of the elephant, in turn, fully conform with the African species. This realism is also seen in the correct de-



FIGURE 1

The animals from miniature no. 5 of the *Cantiga 29, fol. 44r. Códice Rico. Biblioteca del Real Monasterio de San Lorenzo de El Escorial.*

picture of the way in which elephants bend their front legs and is taken as the earliest evidence debunking the medieval myth of the elephant's legs being like columns, unable to bend (Wylie, 2008). Such realism evidences that the artist was drawing from live models. This contrasts with the ritualistic, traditionally medieval, style with which most of the remaining animals, including local (Iberian) species, such as the wild boar and bear are depicted. Indeed, it is this combination of realistically and ritualistically depicted animals in the same scene what is remarkable for a medieval picture and drew our attention to the two remaining exotics on CSM29.5 not mentioned by the *CAX* chronicle: the lion (*Panthera leo*, L. 1758) and the dromedary (*Camelus dromedarius*, L. 1758). In the latter case, the illustrator not only depicted the correct looks of the dromedary but also the way in which this beast bends its front legs when kneeling, keeping its neck and head upright. In the case of the lion, not only are the front legs correctly depicted bending forwards as in all carnivores, but so are its head and mane, in a clear departure from all medieval conventions (Figure 1). Again, these details suggest that the artist was drawing from live models. If one turns to singularity, the question would be if

in 1261 local Iberians could have had first-hand acquaintance with lions and dromedaries. In the case of the camelid the answer must be a rotund yes for the moors regularly used dromedaries as beasts of burden, as testified by the retrieval of their bones on archaeological sites (Morales *et al.*, 1995; Riquelme *et al.*, 1997). The lion, in turn, was kept and bred in several of the 13<sup>th</sup> c. AD Iberian menageries (Adroer i Tasis, 1989, 1994). Failure of the *CAX* chronicler to mention the lion and the dromedary could thus be argued on grounds that both species were not unknown to Iberians of the time. Lack of prestige, however, cannot be invoked in the case of the lion, a paradigmatic symbol of royal power in western Europe who had been chosen by Alfonso X for his coat of arms (García García, 2008; García Cardiel, 2012). If the dromedary and lion made part of the Mamluk Embassy, the number of exotics would raise to five.

In the ritualistic depictions of birds from *CSM* 29.5, the largest specimen was originally identified as a flamingo (*Phoenicopterus ruber* L. 1758) (Keller, 1972; Kinkade & Keller, 1999). However, neither the U-shaped bending of the neck nor the short, blunt beak with its slightly inflated tip match that species (Figure 1). Another compelling argument

to decide its identity is the semilunar notch placed behind the eye, that fits the location and shape of the avian tympanum (Figure 1). The tympanum in birds is only visible on plucked animals or those whose heads are sparsely feathered. This combination of features is only seen in the ostrich (*Struthio camelus*, L. 1758), indicating that this bird was also depicted with realism on *CSM* 29.5 (Figure 2). Interestingly, a second ostrich appears in the fourth volume of the Alfonsine encyclopedia of Natural History called the *Lapidarium* (B.O.E., 2021). In this case, the brownish plumage, barely hinted at on the specimen from *CSM* 29.5, corresponds to a female. The stretched neck and legs of this second illustration suggest that the bird was dead when drawn, which may also explain the lower realism seen in this illustration notwithstanding the correct depiction of the two toes on each leg (Figure 3). Reinforcing the idea that an ostrich made part of the 1261 embassy, one must note that the first edition of the *Lapidarium*, completed in 1250 (i.e., before Alfonso X became king), does not incorporate this animal which appears in the updated, 1276-1279, second edition where Alfonso is systematically referred to as *the king*. The range of dates also allow us to place the far more realistic depiction of the presumably live ostrich from *CSM* 29.5, 11-18 years before that

of the presumably dead specimen from the *Lapidarium* (i.e., representing 20-30% of the 60 years that an ostrich can live) (Williams, 2012).

It is difficult to assess if people in 13<sup>th</sup> c. AD Iberia were acquainted with ostriches. Certainly, ostriches were present throughout northern Africa and the Near east since ancient times, and relict populations persisted in Morocco until the mid-20<sup>th</sup> c. AD (Toynbee, 1996; Williams, 2012; Padilla *et al.*, 2022). From this one may surmise that people in the medieval Maghreb must have been acquainted with the bird. In Iberia, we only find ostrich remains in Byzantine sites (5-6<sup>th</sup> c. AD) from southeastern and southern Spain, but no later references, osteological or historiographical, until we reach the Alfonsine texts (Padilla *et al.*, 2022). One thus remains uncertain whether ostriches were known in 1261 Iberia, and nothing can be said when it comes to them representing prestige items. Indeed, though outside Europe the ostrich served a variety of utilitarian tasks, in the subcontinent, the members of the royalty or the nobility that owned these birds, kept them for non-utilitarian purposes (Tilander, 1958; Williams, 2012). Though compelling, the iconographic evidence for the ostrich being a sixth species of the Mamluk embassy, is far from decisive.



FIGURE 2

Detail of an Ostrich head where the tympanum can be seen <https://www.publicdomainpictures.net/en/viewimage.php?image=60835&picture=ostrich>



FIGURE 3

The Ostrich from the 1276-1279 *Lapidario de Alfonso X el Sabio* (Ms. h1.15. fol.61. 2v. Biblioteca del Real Monasterio de El Escorial, Madrid).

A seventh species the *CAX* chronicle may have failed to mention is the Nile crocodile (*Crocodylus niloticus* Laurenti, 1768). We learn from this animal being part of this embassy on a chronicle by Diego Ortiz de Zuñiga (DOZ hereafter), written some 500 years after the event took place. In it, DOZ described the parading of these exotics through the streets of Seville as well as their demise and ensuing developments in the following terms:

*“Los animales exquisitos, que presto murieron con la mudanza del clima, mandó el rey que sus*

*pieles llenas de paja se pusiesen en el claustro de la santa iglesia, que por uno que duró más y era lagarto disforme (o cocodrilo egipcio) se llamó nave del Lagarto. Este esqueleto dura allí todavía, y es mucha duración, si es verdad este principio, aunque en papeles de la iglesia hallo aquella llamada nave del Lagarto, como así llama, antes del año de 1400”* (Ortiz de Zuñiga, 1795-1796: 233-234).

(Lit. *“These extraordinary animals which died soon after the weather changed, the King ordered their skins, stuffed with straw, to be placed in a cloister of the holy church [i.e., the cathedral of Seville] which, because the longest-lasting naturalized specimen was the malformed Lizard (or Egyptian crocodile), became known as the Lizard’s nave. This skeleton lasts to this day, and, to prove this truth, for this is far too long a time to last, I have found documents from this church that refer to this Lizard’s nave, dating prior to the year 1400”*).

Two statements in this text merit comment. First comes the claim that all exotics died due to a change in the climate. This is somewhat surprising since the climate of Seville is not that different from that of Cairo or Alexandria, the cities where the animals were presumably kept and from where the embassy presumably departed. Indeed, the mild winters of Seville should pose no “climatic” threat for an endotherm (i.e., a warm-blooded animal). This leads us to think that those deaths could be attributed to alternative problems having to do with unhealthy conditions, inadequate food, etc. Secondly, how can one decide how long a time is meant by “soon after arrival”? We learn that Alfonso X ordered enclosures to be built for the animals in the quarters of the cathedral for people to enjoy them. This must have been the time when the artist(s) had the beasts available as live models. But building enclosures, taking the decision to make the drawing, finding the artist(s) and actually doing the illustrations is not done overnight. We reckon that this must have taken weeks, if not months after May 1261.

Such contingencies notwithstanding, the reference to the crocodile constitutes the most noteworthy element in DOZ’s account. In a society used to stories about dragons, this beast could not have possibly passed unnoticed. The failure of the *CAX* to mention the crocodile may thus mean that either the chronicler did not see the animal or, more likely, that for some reason he decided not to mention it. Still, the elephant tusk that apparently belonged to the animal that arrived with the embassy



FIGURE 4

The wooden crocodile covered by a crocodile skin on display at the nave del lagarto in the cathedral of Seville. Below it hangs the tusk of an African elephant. (<https://merimeviviresunaaventuracadadia.blogspot.com/2013/11/sevillamora-y-cristiana.html>).

and now hangs below the famous crocodile mummy in Seville cathedral adds another hint of causal connection between the two species and the 1261 event (Figure 4).

A third causal connection of the crocodile with not only the elephant but also the giraffe is found in a third historical source. This is the *Libro de Axedrex, dados e tablas*, a compilation of table games that Alfonso X wrote between 1270 and 1283 (Fernández Fernández, 2010). Here, the crocodile appears as part of the *Grande Acedrex* chess game whose major pieces constitute a most peculiar collection of exotics. It is here that we find the word crocodile (“*cocatriz*”) assigned to one of the pieces, the remaining ones being the elephant, unicorn, lion, giraffe (“*zarafa*”), and the tower (“*roque*”) that refers to the roc, a legendary bird of prey of Persian lore (Fernández Fernández, 2010; Buquet, 2013b). Although in the miniature that illustrates this *Grande Acedrex* (*Libro de los juegos*, [fol.82v]), the picture of the crocodile is far too coarse to ascertain taxonomic status, the combination of the name with the illustration seems compelling (Figure 5). The replacement of the main pieces of the classical chess game with animals, itself remarkable, is more so when one

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realizes that at least two of these pieces represent species we know beyond question were items of the 1261 embassy. Indeed, it is this choice of animals what reinforces DOZ’s statement that the crocodile, an animal never previously documented in Europe and only vaguely referred to in the medieval bestiaries, was brought as a gift to the Castilian king. The inclusion of that animal in that chess game makes far more sense only if one accepts that Alfonso X had first-hand acquaintance with the crocodile when he wrote this book. This same causal connection may apply to the lion, whereas the inclusion of the crocodile as an item of the animal Embassy would raise the number of species the *CAX* chronicle mentions up to 7.

More problematic is to infer the identity of the *roque* or *roc* bird. However, if size was the criterion chosen to assign the main pieces to a given species of this chess game and the roc was a giant bird, couldn’t an ostrich also qualify as “giant” to people unacquainted with the animal? If this was the case, one would have also ground to argue that in 13<sup>th</sup> c. AD Iberia ostriches were unknown beasts.

The feeblest case in this list of potential “members” of the Mamluk embassy appears to be the rhinoceros. Only the Table games book mentions

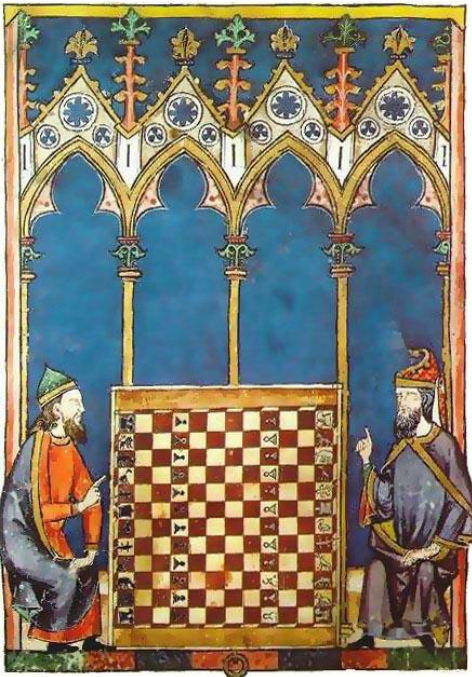


FIGURE 5

Chess players on the *Grande Acedrex* chessboard whose main pieces are depicted as exotic animals, namely the elephant, giraffe, crocodile, lion, roc bird and unicorn (rhinoceros) from the *Libro de los Juegos* fol.82. v.1; Biblioteca del Real Monasterio de El Escorial, Madrid)(<https://commons.wikimedia.org/wiki/File:Grande-acedrex.jpg>)

the “unicorn”, yet one remains unsure whether this could refer to a real animal, not a mythological creature as appears to be the case (Fernández Fernández, 2010). No references to rhinos have been found

on written or iconographic sources of medieval Iberia (Table 1). Indeed, aside from a gift that Sultan Baybars received from an unspecified, though obviously non-European, “foreign delegation”, no references to rhinos being exchanged as gifts among medieval dignitaries exist (Kruuk, 2008: 572, citing al-Nuwayrī, *Nihāyat al-‘arab fi funūn al adab*, vol XXX, p.221).

The donation, import and mentions to exotic animals in medieval documents do not follow the criteria of choice we nowadays apply to translocated animals. As has been repeatedly evidenced, animal characters in Medieval Europe are deeply embedded with symbolism and moral values (Bedini, 1997; Bacot *et al.*, 2003; Buquet, 2013a, 2021). These criteria one needs to understand first to arrive at a correct interpretation of behaviors, events, and characters (Morales Muñiz, 2000, 2012). Criteria such as size and color are readily understandable by modern standards, but even these, as the importance of animals originating on distant lands, are relevant in contexts one may not imagine. If distance was one such criteria, for example, this may not have been because of rarity or even prestige but because this represented a way to evidence that the owner of the animals extended his power into faraway lands (Bacot *et al.*, 2003; Belozerskaya, 2008; Buquet, 2013a: 114). These contrasting hierarchies of values stress the need to learn about the context in which each animal Embassy took place, as well as the moral nature of that animal and its position in the prestige hierarchy of a given society and/or culture.

The two elephants and the giraffe rated at the

SOURCES	WRITTEN RECORDS			ICONOGRAPHY	
	Chronicle 1344-1350	Chronicle 1795-1796	Chessbook 1270-1284	Cantiga 29 1265	Chessbook 1270-1284
Elephant	+		+	+	+
Giraffe	+		+	+	+
Zebra	+				
Crocodile		+	+		+
Lion			+	+	+
“Roc bird”			+	+	+
Dromedary				+	
Rhinoceros			+		+

TABLE 1

A compilation of evidence for exotic species which may have been part of the 1261 animal ambassade of Sultan Baybars. Material/physical evidence is not included because the “crocodile” from the *nave del lagarto* in the cathedral of Seville is a wooden model whose provenience cannot be ascertained precisely at this point (see text for further details).



top of the Muslim prestige ladder, and this is one reason why these species featured amongst those most frequently raised in the Egyptian menageries (Shehada, 2013). Equally crucial may be the fact that Muslim embassies with Christian dignitaries started in the 8<sup>th</sup> c. AD with Byzantium, for it was at the end of this century when Charlemagne (AD 768-814) requested an elephant to have him, and his western Holy Roman Empire (HRE hereafter) compete in prestige with the byzantine emperors (Buquet, 2013a). That elephant he finally received from Sultan *Harum Al-Rachid* (AD 786-809) in AD 798 (i.e., two years before being crowned emperor). This gift started the tradition of exotic beast exchanges among the western European rulers, notably HRE emperors, in which the elephant, and later the giraffe, ranked as the two most prestigious icons of royal power. This was the case of emperor Frederic II Hohestaufen (1198-1250) who, in 1228, received an elephant and a giraffe from the Egyptian Sultan *Al-Kamil* (AD 1218-1238). These animals he exhibited in public events of various kinds, the elephant eventually parading through the streets of Palermo decked out as a war elephant to celebrate his victory at the battle of Cortenuova (Buquet, 2013a). Later, Frederic II ordered the beast to be carved on an ivory coffer he offered to the Palatine Chapel at Palermo where it remains to this day (Buquet, 2013a: 113, fig.12).

Provided with such historical background, one may now attempt to understand why the elephant and the giraffe were mentioned in the *CAX* chronicle whereas other fearsome or prestigious (by previous European standards) Beasts such as the crocodile and the lion were left out. By virtue of Alfonso X's mother being Beatrice of Swabia, Alfonso was candidate as heir to inherit the HRE throne when Frederic II died in 1250, and later, in 1268, after the death of Conradin. Both candidacies were duly rejected by the Pope Gregorius X on account of his profound disliking of the Hohenstaufens. Set within that context, the mention to the elephant and the giraffe in the *CAX* chronicle could mean that, after that first rejection of his candidacy, in 1268 Alfonso wanted to stress his credentials more forcefully as heir to the HRE throne. For all we know, in contrast with other peninsular monarchs, Alfonso X never had an animal menagerie and only in 1261 he finally got hold of those two most prestigious icons of imperial power.

If this line of reasoning is correct, one can

also understand why all remaining animals of the Mamluk embassy, except for one, were dispatched with that laconic (lit.) "...*other beasts and many other kinds of animals*". That exception was the zebra. The only reason why the chronicler took care to mention an animal for which not even a name existed, is that he somehow learned about the relevance and singularity of a mammal never sent to Christian dignitaries. If credentials of prestige were the main or sole reason for mentioning some beasts but not others, then the zebra might be taken to represent a "quality bonus" that reinforced the legitimacy of Alfonso X's aspirations in 1268 as heir to the HRE throne.

In addition to the large mammals that presumably accompanied that prestigious trio, what can one add about those (lit.): "*many other kinds of animals*"? without data to back up proposals, the most one can safely assume is that these included a substantial number of smaller-sized, not too relevant, species.

These "invisible" animals join the long list of those translocated into Medieval Iberia on which the sources remain mute to this day. That these animals must have been a quite diversified lot one can infer from the data that are slowly emerging from the archaeozoological record. Included here we find the North African hedgehog (*Atelerix algirus* Lereboullet, 1842), the Egyptian mongoose (*Herpestes ichneumon* L., 1758), Genet (*Genetta genetta* L., 1758), Barbary ape (*Macacca sylvana* L., 1758) and the previously mentioned dromedaries and ostriches (Morales, 1994; Morales *et al.*, 1995; Riquelme *et al.*, 1997; Morales & Rofes, 2008; Padilla Sánchez *et al.*, 2022). These translocated animals fall generally under three categories: game, hunting aids and pets. Amongst the hunting aids, the Iberian documentary sources mention three species of non-iberian falcons (Gyrfalcon, *Falco rusticolus* L., 1758, sacre *F. cherrug* Gray, 1834, and lanner *F. biarmicus* Temminck, 1825) and, in the case of the Muslims, the cheetah (*Acinonyx jubatus* Schreber 1775) (Morales Muñiz, 2000). Interestingly, this cat was bred in the menageries of Frederic II, and sent as gift to European dignitaries but never those from Iberia. The reason is that in these Christian kingdoms, the animal was banned for being considered a symbol of Muslim culture (Morales Muñiz, 2012). Amongst the gamebirds, Guinea fowl (*Numida meleagris* L., 1758) and the pheasant (*Phasianus colchicus* L., 1758) were probably first introduced in Iberia by the Romans,

but the Black Francoline (*Francolinus francolinus* Linnaeus, 1766) was introduced in the lands of the crown of Aragon in 15<sup>th</sup>c. AD (Massetti, 2009; Jiménez Pérez, 2013). Still, the best documented category is that of pets where small carnivores such as the Genet and Egyptian mongoose, monkeys, and a variety of birds, in particular parrots and songbirds, appear on both written records and illustrations (Morales Muñoz, 2012, 2015, 2017; Walker Vadillo, 2012). And it is precisely one parrot species that allows us to return to the documentary evidence of Alfonso X one last time.

The Rose-ringed parakeet (*Psittacula krameri*, Scopoli 1769), also known as the Senegal long-tailed parakeet and the ringneck parrot, is a small-sized (90g-140g) psittaciform whose original distribution included the Sahel savannah belt in Africa and the Indian subcontinent in southern Asia (Strubbe & Matthysen, 2009). This adaptable species, able to thrive in deforested and sparsely forested land but also on urbanized environments, has become a successful invader whose distribution now reaches to most of the Old World's

temperate zones, from South Africa to northern Germany and from Australia to Japan (Strubbe & Matthysen, 2009). Since medieval times, *P. krameri* became an item of exchange among members of the nobility who fancied the bird as pet (Carter, 2006; Rockefeller, 2012). As such, the Rose-ringed parakeet is depicted in several medieval texts, although, except for a few such as the Aberdeen bestiary, not always faithfully. For this reason, one final outstanding find in the Alfonsine *Lapidarium* that may link with the animals we have discussed in this paper are the two Rose-ringed parakeets facing each other as marginal illustrations on Ms. h1.15 fol.1. v.2 (Figure 6). Such realism allows us to identify the birds as males. As was the case with the ostrich from the *Lapidarium*, these animals did not appear in the 1250 edition but only in the second one (1276-1279), reinforcing the idea that they might have made part of the lot the CAX chronicler placed under that laconic “many other kinds of animals”. Be it as it may, these parakeets represent the first evidence in Iberia of what eventually turned to be one of the most successful bird invaders on the peninsular lands.



FIGURE 6

Male and female Rose-ringed parakeets (*Psittacula krameri*) and detail of the two males depicted on the marginal decoration of Ms. h1.15. fol.1v from the 1276-1279 *Lapidarium* of Alfonso X. Biblioteca del Real Monasterio de El Escorial, Madrid) (Photographs: Francisco Gutiérrez Marcos).

## CONCLUSIONS

Because of the wealth of historical sources, Iberian Medievalists have mostly relied upon written and iconographic evidence to document translocations of exotics during this period. However, as the data from the Mamluk animal Embassy discussed in this paper make clear, even those presumably best documented cases can be painfully imprecise even when specifying what species were translocated. Not to mention biological attributes such as sex that often decide whether a translocation event will in the end prove successful or not. Indeed, even the reasons why documents mention certain species but not others often remain speculative, although one suspects that none had to do with aspects we nowadays consider crucial to assess the relevance and/or repercussions of translocations. In general, one detects in the work of these scholars a bias towards conspicuous, large, animals whose economic and/or symbolic relevance is rather straightforward to assess. These species, alas, turn out to be not too relevant in zoogeographical terms because they tend to be introduced on a one-by-one basis which leaves little room for establishing populations on new territories. From such standpoint, species of secondary interest, such as pets and hunting aids, stand higher chances as colonizers if only by virtue of they being translocated in pairs (i.e., male and female) or groups. But, as the Rose-ringed parakeets from Alfonso X's *Lapidarium* exemplified, these species are seldom mentioned in the documents so that one needs to turn to iconographic or other more obscure sources to learn about them.

If one pushes the criteria of size, prestige and/or economic relevance further, one will need to assume that it would be the smallest vertebrate exotics, such as rats, mice, and other vermin those that documents, illustrations and the literature would systematically fail to mention. This despite their crucial role as crop pests, parasites, and/or pathogens. Indeed, if one pushes those same criteria to the very end, it should be invertebrates the ones most often neglected by the medieval documentary and iconographic sources. And, as is today the case, invertebrates would not only have represented the lion's share of all translocation events in the Iberian Middle Ages, but also include the main culprits of ecological, economic, and sanitary disturbance attributed to invasive species (O'Connor & Sykes, 2010). Likewise, if numbers

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are all it takes for most species to establish viable populations, invertebrates, who can be translocated by the thousands in a flour bucket or a flower bouquet, should have represented a far larger threat than vertebrates exchanged as gifts or imported on a one-by-one basis.

One should nevertheless conclude remarking that, despite all the alarm, most translocations do not lead to disaster. Indeed, we know that substantial numbers of translocates become integrated in their new environments without causing any harm (Davies, 2010; Kenward & Whitehouse, 2010). In the end, time will determine what we label indigenous or invasive. In Iberia, for example, one still debates whether well-known species, including some presumably translocated in the Middle Ages, as are the cases of the Greek tortoise (*Testudo graeca* L, 1758), the Common chameleon (*Chamaeleo chamaeleon* L, 1758), or the Barbary ape (*Macacca sylvanus* L, 1758), qualify as indigenous or invasive. A serious problem when choosing labels leads to policies that imply protection or extirpation. And deciding what status to grant is next to impossible when the biological and cultural histories of species are defectively known. In this context, one needs to stress that historical information can be as inconclusive as any other, so that alternative datasets need to be combined to arrive at more reliable conclusions when addressing complex issues with historical roots.

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