

Exotic Materials, Native Artifacts.

Exploring Objects in the Encounter Between Amerindian Peoples and Old World Animals¹

Materiais exóticos, artefatos nativos. Explorando objetos no encontro entre povos ameríndios e animais do Velho Mundo

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Abstract: The presence of exotic animals of European or African origin in the New World is a classic topic of research, and the introduction, acclimatization, and use of these species among the indigenous peoples in lowland South America have been investigated from several different historical, anthropological and zoological perspectives. Yet no studies thoroughly address the material dimension of encounters between native peoples of the Americas and adventitious animals, specifically representations of exotic animals in native artifacts, objects made from raw materials derived from these exotic animals' bodies, and technologies used in relations with these beings (such as control and use). This article introduces some possibilities in investigating artifacts of this nature in European museum collections, and presents some initial impressions from a research agenda which is underway.

Keywords: native artifacts; adventitious animals; European museum collections; lowland South America.

Resumo: A presença de animais exóticos de origem europeia ou Africana no Novo Mundo é um tema clássico de pesquisas, e a introdução, aclimação e uso dessas espécies entre os povos indígenas nas terras baixas da América do Sul vem sendo investigadas de várias distintas perspectivas. Faltam, entretanto, estudos que abordem a dimensão material dos encontros entre povos nativos das Américas e animais adventícios: ou seja, pesquisas que abordem representações de animais exóticos em artefatos nativos, objetos fabricados a partir de matérias-primas obtidas dos corpos desses animais exóticos e tecnologias empregadas nas relações com estes seres, em seu controle e uso. Esta comunicação introduz algumas possibilidades de investigação de acervos materiais desta natureza em coleções europeias, avançando algumas primeiras impressões sobre uma agenda de pesquisa em andamento.

Palavras-chave: artefatos nativos; animais adventícios; coleções de museus europeus; terras baixas da América do Sul.

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Introduction

In his contribution to the monumental *Dictionnaire raisonnée de l'Occident médiéval*, Robert Delort (2002, 57-67, Brazilian edition) suggests that an entirely new field of research on the history of animals is uncovered when the researcher, while analyzing documentary sources in archives, transcends the textual information to look at the very substrates of writing: words engraved on hides, fur, or parchments, and even the erasures and damage caused by rodents or insects, which can tell us much about the fauna and its use in past times. Along these lines, literate Guarani missionaries in the sixteenth and eighteenth centuries were known to write letters and documents using ox hides as supports on occasion (Neumann 2015). What conclusions can we draw about cattle and the relations between a South American indigenous group and these introduced animals from this peculiar use of an exotic animal material?

This article intends to briefly discuss the potential of research related to objects produced by indigenous populations in lowland South America which are present in European and Brazilian museum collections and have some relation to non-native animals in the New World. By non-native, exotic, introduced, alien or adventitious (sometimes invasive) animals,² I mean the species that were brought to the southern portion of the Americas with the arrival of the Europeans, starting at the end of the fifteenth century. These are mainly domesticated animals of African or European origin (including oxen, horses, buffaloes, donkeys, dogs, cats, pigs, rabbits, chicken, guinea fowl, peacocks, bees, and certain fish such as African cichlids), but some wild or commensal species were also accidentally or intentionally introduced, such as wild boars, pigeons, and herons (Gilmore 1997; Crosby 2003).

The categories of artifacts in this research include:

- 1) 'Representations' or 'images' of exotic animals on various material supports (sculpture, painting, engraving, fabric, basketwork, ceramics, masks);
- 2) Objects used in specific relations with exotic animals (riding equipment, collars, confinement structures, transport-adapted artifacts, etc.), which may or may not have been produced by Amerindian peoples;
- 3) Artifacts made with raw materials from exogenous animals (hides and skins, feathers, horns and antlers, hair, manes and tails, teeth, claws, hooves, bones, tendons, nerves and other internal organs).³

² These terms do not necessarily mean the same things in biological studies (see Hall 2017).

³ We could suggest other categories of objects of the same nature, namely elements of the material indigenous culture that express or indicate relationships between the Amerindian peoples and the animals introduced during the conquest. One such category would be artifacts made in Europe using materials from exotic (from an indigenous point of view) animals which were appropriated by South American native peoples; here I include beaver hats (Françoze 2014, 113-114), or hats incorporating

We know that museums in Europe and Brazil keep many objects of this nature in their collections, but they have certainly never been viewed in this way; no category aggregates these pieces in museological databases, and it is not easy to find them. Furthermore, identifying the species represented or used in these artifacts is complex: how to distinguish between a horse and a deer? How do you know if an ornament or necklace was worn by a dog or a small monkey? And precise identification of the raw materials presents another challenge, as in the case of leather:

When leather is preserved, its contact with the preservation environment often means it has undergone chemical and physical transformations. These changes may hinder the identification of the animal species from which skins originate, and make it difficult to determine the method by which the animal skin was processed. Species identification by microscopic techniques depends on the preservation of morphological features of the skin or hair, which may be seriously degraded (Harris 2014, 11).

I am, therefore, aware of the technical difficulties inherent in this type of research, but maintain that a significant body of knowledge awaits us through analysis of these pieces and their reading in parallel with museological, historical and ethnographic information (Brohan 2011). In this article I offer three examples, one of each type presented above; the exploratory analysis was done during technical visits to the Museum Volkenkunde (Leiden, the Netherlands) and the Weltmuseum Wien (Vienna, Austria) in November 2018, and to the Wereldmuseum (Rotterdam, the Netherlands) in December of the same year. This analysis conveys an idea of the type of artifact which interests me in inventorying and researching, as well as the wealth of information these pieces can convey and what they can tell us about the people who manufacture and use them (both now and in the past, at some time along their historical trajectories). My ultimate goal here is to understand what these objects can tell us about these exotic animal species brought to the Americas since the conquest, and the relationships which developed between them and various South American indigenous peoples, which have been my research themes for a number of years (Vander Velden 2012a).

feathers from birds that were not native to the region, or clothes or armor that included leather from bovines (see van de Logt 2018, chapter 4, for North America), the use of which was recorded among native groups in North America. Another category would include artifacts representing animals that the native people had never seen, which were known only by their images, but were incorporated into their material culture. A final potential category of these singular objects could include those made by the indigenous peoples for European or overseas tastes, although in most cases they utilized native raw materials, since the exoticism of the animals utilized was precisely what attracted the attention of far-off consumers (Schindler 2001). Regardless of how interesting the study of these categories might prove, none of these suggestions will be addressed here due to space limitations.

Representations or images of exotic animals – The Tukano paddle – Wereldmuseum (Rotterdam, the Netherlands)

I begin with ‘representations’ or ‘images’ of exotic animals in Amerindian artifacts. Here this is exemplified in a painted Tukano paddle collected in Colombia between 1880 and 1885 and currently housed in the Wereldmuseum in Rotterdam, the Netherlands. The text on the display (in 2019) reads as follows:

Paddle

This paddle belonged to a shaman of the Tukano Indians. The pictures tell the story of his spirit's journey to the land of the ancestors. The entrance to the ancestor world is a waterfall guarded by black dogs.

The Wereldmuseum website⁴ states that the paddle illustrates the trans-cosmic journey of a Tucano [sic] shaman to the edge of the world, where there is a waterfall guarded by two black dogs. The letters ‘D’ and ‘V’ painted directly below mean ‘Dios’ [god] and ‘Virgen’ [virgin], while there are floral motifs above the dogs (which are associated with the shamanic trance) and what appears to represent the sun.

Many geographical features in the upper Rio Negro region (Brazil/Colombia) – especially huge stones at waterfalls and mountains – are known to still be home to various types of people (*masa*), many associated with animals like the jaguar (IPHAN 2007, 56). Geraldo Andreello, a renowned expert on indigenous groups in the upper Rio Negro region, informed me during a conversation that some special places in that region constitute the houses of the ‘fish-people’ (*wai-masã*), the ancestors of humans who own these places, especially waterfalls, rapids, mountain ranges, stones, and rocky outcrops. When these sites are relatively far from the rivers (certain stones and ranges) they are protected by ranging jaguars, which are said to be ‘like dogs’, or more specifically, ‘what to us are jaguars to the owners of these places are their dogs’. A Tariano (an Arawak-speaking group in the region) elder told Geraldo that the place called Serra do Bem-te-vi, a rocky outcrop near the village of Iauaretê, was inhabited by one of these owners/ancestors who had these jaguars/guard dogs chained with collars and ropes that allowed them to circle around the site, protecting it and chasing off invaders and potential threats.

The identification between dogs and jaguars is widespread across lowland South America (Lévi-Strauss 2004, 83; Descola 1994, 84-86, 230; Villar 2005; Vander Velden 2012a), and the perspectivist notion that jaguars are the dogs of certain powerful figures who control access to forest and its inhabitants (prey) has not escaped many Amerindian peoples, with ‘owners’ or ‘masters’ of hunting or the animals (Fausto 2008).

4 <https://hdl.handle.net/20.500.11840/1113319> (13.10.2020).



Figure 1. Paddle, Tukano, Colombia, 1880, wood and paint; Collection Wereld museum Rotterdam, WM-3341 (copyright: National Museum of World Cultures, the Netherlands. Reproduced from the museum's online open database with permission: <https://hdl.handle.net/20.500.11840/1113319>).

Here we address the way in which the relationship between dogs and humans (as helpers, servants, or subordinates) mirrors the same relationship between these powerful beings of the forests and their subordinates, which they view as dogs while we humans see them as jaguars. The paddle in this case reveals something about how domestic dogs were understood on the upper Rio Negro: as guardians of houses, just like the jaguars for those who 'own' these places. It also reveals the viewpoint of the owner/ancestor himself, since this artifact does not feature the jaguars we normally see, but rather the black dogs seen by the ancestors/owners, who employ these beings to protect and defend their houses hidden in stones and waterfalls. According to Tukanoan groups, "a common jaguar is like a dog", a shaman's dog (Legast 1998, 152).

Many other objects fall into this category of artifacts that carry or convey representations of exotic, African or European, animals. Examples include dogs among the *bichinhos* (little animals) carved of light wood by the Guaraní-Mbyá groups throughout eastern and southern Brazil (Faraco 2015); Kadiwéu sculptures (including certain utilitarian objects such as combs) of oxen and horses in ceramic, wood, bone or even cattle horn, including some toys that depict humans riding zebu cattle;⁵ sculptures of cattle, chickens, and other animals in ceramic by the Terena in Mato Grosso do Sul and the Karajá in Bananal Island (both in Brazil); ceramic pieces decorated with innovative motifs (made since the 1980s), such as oxen and dogs, among the Wauja in the upper Xingu (Coelho 1995); Chiriguano-Chané masks (in northern Argentina) representing various animals, especially

5 See also, in the collection of the Museu do Índio (Rio de Janeiro), <https://museudoindio.tainacan.org/museu-do-indio/2400-2/> (13.10.2020).

chickens and roosters, bulls, and goats (Dragoski 2000); and some surprising pieces like the Guaraní-Kayowa *mbaraka* (shaking instrument) which features a very realistic image of a cow (representing the animal that drove the native people from their lands) recorded by Benites (2019, 13-14), along with many others that have yet to be inventoried and researched. Here, obviously, additional care is required with the ‘images’ of animals featured on artifacts, for two reasons. First, they are not images per se, or representations; it is known that in many cases in the Amazon other-than-human beings cannot be represented because presence and representation are confused, and representation means becoming present.⁶ Second, extending the previous point, identification of the species involved can be extremely problematic, beyond taxonomy; as Barcelos Neto asks (2011, 38), in the highly transformational worlds of the Amerindians, in which beings frequently have metamorphic bodies and multiple, ambiguous identities, can we really tell them apart on artistic objects?

Objects used in specific relations with exotic animals – The Kadiwéu saddlebag – Museum Volkenkunde (Leiden, the Netherlands)

The Kadiwéu, a Guaykurú-speaking group in the easternmost part of the Gran Chaco, adopted the horse when it appeared in the sixteenth century with such mastery that for a long time they were known as Índios *cavaleiros* or ‘horsemen Indians’ (Prado 1839; Bertelli 1987). It is true that all the paraphernalia needed to ride and utilize horses as draft and work animals was appropriated by or developed by the Kadiwéu, such as marking animals for identification (which appears to be clan-related, like tattoos on human persons; see Lévi-Strauss and Belmont 1963) and impressive saddlebags (or large pouches, called *alforges* in Portuguese) made of *caraguatá* or *gravatá* fiber (*Bromelia pinguin*) used for transport on the backs of horses and cattle, as defined below:

Saddlebag (*Alforge*): Double bag closed at the ends and open in the middle, forming two sacks that fill evenly, with the load carried on horseback or over a person’s shoulder (Motta 2006, 33, translation: Felipe Vander Velden).

This beautiful piece made of woven knotwork (Figure 2) comes from the major Kadiwéu collection originally gathered by the Italian artist, photographer, and ethnologist Guido Boggiani in the late nineteenth and early twentieth century (Boggiani 1975 [1892]), which today is mostly housed in the Museo Nazionale Preistorico Etnografico Luigi Pigorini in Rome. The Museu do Índio in Rio de Janeiro also houses a significant collection of at least five similar pieces, most collected by the Brazilian anthropologist Darcy Ribeiro in the 1940s (D. Ribeiro 1980).

6 Among the Karitiana, for example, a jaguar cannot be ‘represented’ by painting (black spots against a light background), even on a sheet of paper: doing so would allow the animal to appear immediately, jumping from the painted surface onto the unfortunate (and careless) artist. If the ‘jaguar painting’ (*obaky ejep*) is done on skin, the painted individual immediately would transform into a jaguar.



Figure 2. Kadiwéu saddlebag, Brazil, before 1896, *caraguatá* fiber; Collection Museum Volkenkunde Leiden, RV-1118-15 (copyright: National Museum of World Cultures, the Netherlands. Photo by Leandro Cascon, reproduced with permission from the photographer and from the museum).

What other technical solutions did the Kadiwéu and other ‘horse nations’ (Mitchell 2015) in lowland South America invent or adapt to take advantage of the potential of these formidable beings? What can we learn about the relationships between humans and horses (as well as oxen and other herd animals) from objects created and manufactured or acquired (via plunder or trade) by the Kadiwéu to deal with introduced horses, cattle, goats and donkeys? Does the information that the saddlebag could be carried “over a person’s shoulder” indicate an adaptation of this saddlebag for use with horses? Or was it a real innovation resulting from encounters with beasts of burden?

Artifacts produced by the Kadiwéu have been analyzed to a significant extent, including pieces made from raw materials from exotic species introduced to their region of South America, especially painted hides and skulls and objects such as pipes, cups for drinking yerba mate tea, body ornaments, and a variety of containers made of cattle horn (Siqueira Jr. 1987; Herberts 1998). But even though oxen and horses have been a fundamental part of Kadiwéu social and economic structure and practices since the seventeenth century, to the best of my knowledge no research has explored the technical and technological adaptations developed by the Kadiwéu (or which they appropriated through looting, trade or barter) to handle and use these large adventitious herbivores, as also occurred among native peoples in other parts of the Americas like California in the United States (Panich 2017) and the Argentine pampa (Cooper 1946). With regard to the Kadiwéu, over four centuries several authors have recorded the techniques and technologies these people used to ride horses (Herberts 1998, 151-154). For example, Prado (1839, 34) reported the paraphernalia women used to ride:

[...] they ride on small bundles of straw which serve as a saddle, a square cloth five palms in size painted with beads and shells, which serves as saddle-cloth and the flap covering rigging straps [...].

Groupings such as these may comprise museum collections, but they have not yet been properly analyzed. By investigating them we can learn how the Kadiwéu understood, dealt with, and related to equines. In fact, we still poorly understand how domestication technologies were incorporated and adapted in lowland South American societies, especially material aspects: in manufacturing or importing (through stealing, exchanging, or trading) saddles, harnesses, lassos, bits, crops and switches, carts, yokes, chains, and other artifacts, how did Amerindian peoples compose technical assemblages (Ingold 2000) which allowed them to better relate to the introduced animals, control them, socialize them, and use them for hauling and transport? The study of objects such as this saddlebag, which surely altered Kadiwéu modes of mobility (by allowing them to transport much greater volumes than possible without draft animals) can help us understand the technical or technological component of introducing, adopting, and acclimatizing exotic species in South America.

Some of these artifacts wielded to use, control, or relate to introduced animals can sometimes be difficult to identify. However, I have included several examples which can be addressed in future research, such as dog collars adopted by some Amerindian groups which may appear in the documentation as ‘embellishments’ for these pets,⁷ but

⁷ Cypriano (2007, 125), regarding village groups along the Madeira and Tapajós Rivers in the eighteenth century, who adorned “their monkeys and dogs” with “religious icons, medals and images of saints”; also Leandro Cascon with regard to the Asuriní (personal communication, November, 2018).

may have also fulfilled other functions such as control,⁸ and may have been classified in museum collections as human (perhaps childlike) ornaments. Another example is the animal branding irons found among the Kadiwéu (Lévi-Strauss and Belmont 1963), and all the paraphernalia developed or acquired for riding among the native groups in the Gran Chaco, Pampa and Patagonia (Argentina, Uruguay, southern Brazil), and reported by many travelers and ethnographers (Cooper 1946), as well as equipment for using animals for draft or transport animals, such as those recorded among the Bakairi in central Brazil (Rondon 1953, 76), the Wayuu in the La Guajira Peninsula (Colombia-Venezuela) (Picon 1983) an Arawak-language group that became known as the shepherds of the New World (*Pasteurs du Nouveau Monde*), and again among the Kadiwéu in the western Chaco (Herberts 1998). Here we can also add the structures used to confine, capture, or acclimatize animals – what Anderson *et al.* (2017) include among what they call ‘architectures of domestication’ –, and which may require on-site analysis (when they are large-scale constructions or infrastructure) or may also be part of museum collections as smaller pieces such as cages, boxes, cords, leashes, tethers or traps. We know very little about this category of objects, which can instruct us a great deal about how people adapted to living alongside these new beings who became part of daily life in many South American indigenous villages starting from the beginning of the sixteenth century.

Artifacts made with raw materials from exogenous animals – The Southern Kayapó war trumpet – Weltmuseum (Vienna, Austria)

One of the highlights of the ethnographic collection formed by Johann Emanuel Pohl in the early nineteenth century and housed at the Weltmuseum in Vienna (Augustat 2013; Feest 2014; Schicklgruber 2017), this remarkable war trumpet made of a bull horn (Figure 3) is one of the rare relics of an indigenous people that no longer exists: the Southern Kayapó (Kayapó do Sul), who occupied much of the southern portion of central Brazil (western São Paulo, Mato Grosso do Sul, Triângulo Mineiro, and southern Goiás) until the early twentieth century (Giraldin 1997).⁹ This piece was acquired when Pohl passed through the village of São José de Mossamedes, Goiás in March 1820 (Augustat 2013, 108), during his visit to the provinces of Minas Gerais and Goiás between September 1818 and February 1821; it belongs to the Johan Natterer collection, which contains 31 objects “designated as Kayapó” (Feest 2014, 67).

8 Note that the Tariana narrative presented in the discussion of the previous item (the Tukano paddle) addresses dog/jaguars held captive with leashes and collars.

9 Today we know that the Panará (a Gê group that lives in southern Amazonia, between the states of Pará and Mato Grosso) are the descendants of the Southern Kayapó who migrated north during the eighteenth and twentieth centuries. The Southern Kayapó culture disappeared from its original region in the central-south region of Brazil around the 1940s (see Giraldin 1997). For more on the history of Native Peoples in Central Brazil during the seventeenth and nineteenth centuries, see Karasch (2016).

Pohl himself described the instrument (which he considered to have an unpleasant sound) and reported its ritual use in “specific dances, which they do at certain times, at night in the light of burning fires”, which seems similar to the famous ‘log races’ among the Macro-Gê peoples:

To this end [the ritual] they meet in a place about nine meters in diameter, their bodies painted with urucu [...] and with jenipapo [...] in disordered longitudinal stripes, they are adorned with knee-braces made of claws of animals tied by cords, which make a loud noise with each movement of the foot, and sing a peculiar, dissonant, howling song with the repeated exclamation: Ho! Ho! Ho!, which accompany, unpleasantly, *the echo of long curved gourds or wooden wind instruments, with ox-horn mouthpieces they make themselves* (Pohl 1976, 153, emphasis added, translation: Felipe Vander Velden).

Where did the Southern Kayapó get the horns to make these trumpets? Did they own oxen in the village, or hunt these large herbivores that slowly began to occupy the savannas of central Brazil in the eighteenth century? Pohl (1976, 153-154) stated that the few Southern Kayapó he met in Mossamedes had a few head of cattle and were great lovers of beef, even mentioning the immediate slaughter of bovines belonging to a recently deceased man. But the Austrian traveler also affirmed the natives’ taste for the hunt and for the native game still abundant in the surrounding woods, which would indicate other reasons for the presence of cattle in the village besides food.

This artifact is very similar to flutes and trumpets of other Gê-speaking groups, such as the Krahó and Apinayé (B. Ribeiro 1988, 201, 207), in which the bell section is or was traditionally made of a gourd. It appears that the Southern Kayapó adopted a new raw material for a traditional object. Berta Ribeiro (1988, 210) reports that “bull’s horn is used to make trumpet-like musical instruments.¹⁰ For this it is fitted with a small tube, with the horn acting as the bell [portion]”. There are other examples of the use of cattle horns to make musical instruments by Gê-Bororo-speaking peoples, such as among the Canela, the Krepinkateye, the Krikateye and the Apinayé in central Brazil (Izikowitz 1935, 233, fig. 114, 252, quoting Nimuendajú 1946) and the Bororo da Campanha (on the Paraguay River), who produced “clarinets with bells of cow horn” (Feest 2013, 86) or clarinets (*boali*) made of cattle horn and human hair that descend from clarinets made of gourds rather than horn (Feest 2013, 96) – pieces that are also part of the Weltmuseum Wien collection.

In a wide-ranging study on Amerindian musical instruments, Izikowitz (1935) mentions the presence of trumpets made from cow horns among various groups including the Guayaki (Paraguay) and the Chiriguano-Chané (Argentina-Bolivia) (Izikowitz 1935, 218-219), the Mutilon (Barí) in Venezuela (Izikowitz 1935, 235), the

10 We read in B. Ribeiro (1988, 206) about trumpet-like instruments: “instruments that produce sound by blowing through a relatively wide aperture, in which the performer places the lips against it and they vibrate”. In lowland South America these instruments produced only one sound and its harmonics.



Figure 3. War trumpet, Southern Kayapó, Rio Araguaia, Brazil, c. 1820. Wood, bamboo, palm leaves, palm leaf strips, quills, animal claws, bast cord and a horn (probably bovine). Weltmuseum Wien, VO-652 (copyright: KHM-Museumsverband, Weltmuseum Vienna. Reproduced with permission).

Guajajara of Maranhão (Izikowitz 1935, 251), and various *chaqueño* groups such as the Ashlulshlay and Mbaya (Izikowitz 1935, 256), suggesting that the manufacture of traditional instruments was adapted to incorporate new animal-derived raw materials:

Trumpets of cows' horns occur in several places in South America. There are both end- and side-blown forms. Since this material has existed only in post-Columbian times all these trumpets must necessarily be of post-Columbian origin. This does not imply, however, that those tribes which nowadays use trumpets of cows' horns were not familiar with the trumpet before the arrival of the Europeans. As we see from the table several of these tribes also have trumpets of other kinds side by side with the aforementioned. We have evidently here a case of change of material in post-Columbian times. On the other hand it is not easy to determine whether those tribes which now have only the cow-horn trumpet also knew about the trumpet in pre-Columbian times. The cow-horn trumpet has undoubtedly been introduced by whites as well as negroes. Most likely the latter have introduced the side-blown cow-horn trumpet.

Izikowitz (1935, 221, my italics) also indicates that the ceramic trumpets of the Jivaro and Quichua-Canelos (Ecuadorian Amazon) could be “an imitation of a gourd or a *cow’s horn*”. There are also records of trumpets or clarinets made from cowhorn in other parts of Brazil (Métraux 1946, 527).

Did these objects attest to the expansion of cattle throughout the indigenous territories in central Brazil during the eighteenth and nineteenth centuries? Were the Southern Kayapó reacting to the presence of the oxen as new and attractive prey (relatively docile and large enough to feed an entire village), as seems to have happened among other groups in the hinterlands, like the Krahó in what today is Tocantins (Melatti 1967)? Regardless, if horn offered a new technological solution for producing artifacts – replacing gourds, as suggested by Izikowitz (1935, 235), considering the similar shape – the use of this material may also communicate the growing presence of cattle in the life of these Gê-Bororo-speaking peoples in central Brazil: livestock that would gradually be responsible for the extinction or forced migration of various groups and the dramatic reduction of these peoples’ territories, along with conflicts with farmers and ranchers that drag on into the present day. In the history of Brazil, we always consider indigenous people and cattle as agents in completely opposite fields, in conflict as a rule (D. Ribeiro 1996). But artifacts such as these suggest an interaction between Indians and cattle that lasted for centuries in some regions of the country, and require further study so we can understand them, especially given the modern desire for cattle and other domesticated species expressed by many Amerindian groups (Vander Velden 2012a, 144-161). Consequently, the study of these Brazilian or South American collections in different museums around the world is of great importance both for historical and anthropological studies, as well as for contemporary indigenous peoples as will be discussed below.

This category of objects made from animal materials (bodies, body parts, products and substances from these introduced exotic species) may be large indeed, spanning a great number of pieces in museum collections. There are still difficulties with identification, as mentioned previously with regard to hides, but the same also applies to hair and fur, feathers, skins, and other products of organic origin: in many cases, only detailed (and expensive) laboratory tests can permit correct identification of these post-conquest artifacts, examples of adapting indigenous arts and techniques to newly available materials. Examples include feathers of domestic chickens (*Gallus gallus*) incorporated into the famous Tupinambá mantle made of red scarlet ibis feathers in the Nationalmuseum in Copenhagen, which was analyzed by Petersen and Sommer-Larsen (1979-1980). In fact, chicken feathers are used by many indigenous peoples today in various forms of art and crafts (such as the Karitiana), including ritual or ceremonial pieces, as is the case with many groups in northeast Brazil like the Xukuru of the Ororubá (see Vander Velden 2012b). The Bororo made ornaments of cow teeth and horsehair (which they also used to make long strings which protected their wrists from bowstrings); the latter are very

similar to other pieces made with human hair,¹¹ but differ in size: different wristguard cords made of horsehair measure between 40-42 cm and 50-55 cm, while the human-hair versions are 25-32 cm in size (Feest 2014, 73-74). Meanwhile, feathers from white roosters (and only white roosters) are used by the Wayana (far north of Brazil) to make the *olok* mask, where they iconically represent the teeth of the piranha, the ‘paradigmatic cannibal’, through associating roosters and the whites who introduced them, cannibal beings whose “characteristics are passed on to their possessions” (Van Velthem 2003, 211-212). Other examples among many include the powder horns made of cow horns by the Fulni-ô in Pernambuco (Pinto 1956, 97). Some of these objects (such as the Tupinambá mantle and the Wayana *olok* mask) are what I suggest naming ‘multi-species artifacts’, because they mix up materials (and maybe also distinct agencies therein) from different animals.

Discussion

What can we learn from these objects which feature the presence of exotic animals introduced after the conquest? What can the raw materials extracted from their bodies, their images in pottery, wood or fabric, or their ways of producing or facilitating socio-technical engagements between humans and other-than-humans tell us about the great Columbian exchange (Crosby 2003), the encounter between Old and New Worlds which has still not been explored in detail? What can we learn about the indigenous peoples in lowland South America from their material relations with the species introduced by the conquest and colonization of the continent? For some time, studies have investigated the symbolic, cosmological or intellectual dimensions of this encounter between Amerindian humans and imported other-than-human beings.¹² But this present research argues that many of these aspects may be elucidated by attention to the objects of these encounters, the tangible or material products of a new set of relationships established by the native societies of South America with a multitude of human and other-than-human beings who spread throughout the New World after 1492.

In so doing, this paper suggests an analytical encounter between the already classical works on the relationships between humans and other-than-humans (specially animals) in the South American lowlands – recently renewed by the innovative approaches of Descola (2013) and Viveiros de Castro (2016), among many others – and the most

11 Feest (2013, 87) tells us that pieces made of hair from the manes and tails of horses were seen only among the Bororo da Campanha, and were an adaptation of those made with human hair (which was plucked during funerals). Does this adaptation suggest that for the Bororo, the tails and manes were horsehair, or was there some association between these animals and the dead?

12 Nordenskiöld (1922); Gregson (1969); Picon (1983); Palermo (1988); MacDonald (1997); Villar (2005); Villagra Carrón (2010); Vander Velden (2012a; 2012b); Norton (2015); Mitchell (2015); among many others.

recent anthropological inquiries into objects and materials (Henare, Holbraad, and Wastell 2007), which have had an important impact on research about indigenous South America (Santos-Granero 2009; Goulard and Karadimas 2011; Schien and Halbmayer 2014; Rivera Andía 2018), even though focus has so far remained on 'traditional' artifacts (made of feathers and fur of native species), relegating artifacts made of chicken feathers and ox hide to the obscure categories of cultural loss and *kitsch* or tourist art (Grünewald 2001). For example, the articulation between new materialism and Amerindian animism/perspectivism has been advancing a critique of the 'artifact' category itself in lowland South America, where the opposition between animate (human/animal) and inanimate (object/raw material) is designed in unprecedented ways, in which *qua* living objects emerge, endowed with agency, desire and intentionality. In some cases, even the raw materials used by indigenous peoples – such as clay for Waujá ceramics (Barcelos Neto 2002) or the feathers for Tukano ritual ornaments in the Uaupés river (Ferreira 2014) – already share this agency which, in modern Western ontology, is exclusive of living beings. My intention here is therefore simply to historicize the entanglement of these beings – human/other-than-human, objects/subjects – so as to better grasp their genesis, their powers, and the trajectories of the human groups from which they emerged and with which they relate.

There are obvious and substantial difficulties in this research proposal, as I have mentioned. Some issues may be considered technical, related to identifying the materials used (leather from which mammal, and feathers from which birds?), the creatures represented (is it a dog, or a jaguar or other native feline?), or the intended use of specific artifacts (a dog collar or a human bracelet?). But there are also other theoretical difficulties, for example related to the outsider status or exoticism of these beings: from the viewpoint of indigenous historicities, can we consider these animals as effectively introduced? We know that among some groups (such as the Karitiana in Rondônia, among whom I have conducted research since 2003), the exotic origin of domesticated animals is clearly recognized (Vander Velden 2012a), but there are some peoples (such as the Mëbêngôkre-Kayapó, for example) who recognize the presence of domesticated dogs since their origin, since this animal is present in several myths chronicling ancient episodes, and they do not consider them to have been introduced with the arrival of settlers (Wilbert 1978, 318-324). As a result, the definition of animals as exotic or adventitious should be only provisional, and ethnographically investigated.

Even so, detailed investigation of these artifacts and collections can tell us much about the history and trajectories of these animals in lowland South America – for example, they can deconstruct the great narratives of conquest, such as 'pastoral expansion', which 'through oxen's hooves' inexorably destroyed the indigenous populations it encountered (Hemming 1978; D. Ribeiro 1996). Such objects can be very useful in understanding how these species were recognized and adopted (or not) by different

Amerindian peoples: how did they become part of their productive activities? How were they part of their artistic and ceremonial universes? How did they change everyday practices, food, family life, affections? How did they alter settlement patterns and territorial distribution? I believe that new light can be cast on several questions through studying how these societies were transformed by the presence of these beings, who despite their exogenous origins as goods from the whites (like weapons, beads, mirrors, metal tools, pots and pans) seem to have always constituted a singular set of relational links between Indians and non-Indians – perhaps because they are living, sentient beings, and in various contexts have become full members of social life in villages and in native dwellings and families (Vander Velden 2012a).

In her study of zoomorphic figures in Waujá (upper Xingu) art, Coelho (1995) found that the artists of this people have the freedom to innovate in terms of the choice of animals represented in their pieces, which led to the inclusion of dogs, chickens, and oxen (all introduced species) in the repertoire of shapes and decorations seen in pottery and other artifacts. Coelho (1995, 275) also states that these animals are always identified by certain “conspicuous traits” selected by the artisan: for cattle, their horns appear to be the outstanding feature, which may indicate one way forward in identifying beings represented by Amerindian art and artifacts. Even so, the difficulties remain, since as we have known since Lévi-Strauss (1997), the salient features of each entity in the natural world depend on highly arbitrary cultural selections, and can often go undetected without careful attention to indigenous zoological knowledge.

Moreover, the exact function of many objects is unknown. Yet in a survey of animals in Mesoamerican thought, Nicolás Careta offers an interesting suggestion for thinking about certain pieces that represent exotic animals or include adventitious materials: they can be considered “primitive encyclopedias”, artifacts that “store, transmit, and recall information from the natural world” (Nicolás Careta 2001, 66-67, translation mine). In this sense, representing animals introduced with the arrival of non-Indians, or employing them as raw materials (and even incorporating them through a variety of objects for their control) can be thought of as a way of assigning meaning to these foreign presences, integrating them into the set of everyday knowledge about other-than-human beings which is necessary to effectively relate to them. Finally, some artifacts can be difficult to classify, perhaps because they belong to more than one category, and their exact definition proves complicated. For example, how do we classify the cattle *guizos* (shaking instruments) (*mryti nhom kre dje*) used as adornments by the Mëbêngôkre-Kayapó people (Lea 2012, 377, 474), which were likely looted goods (*nekretx*) acquired during attacks on cattle ranchers who were invading their territories? Are these representations of the cattle? Or objects associated with relationships with these animals? Or something entirely different?

As one can imagine, the possibilities are myriad. I would like to conclude with a final suggestion about how analysis of these artifacts can fulfill a crucial political function. Many of these objects which were collected throughout the sixteenth, seventeenth, eighteenth, and nineteenth centuries demonstrate that Amerindian peoples have incorporated new materials into their art and technology for a long time (for example, the feathers of white chickens artificially colored red by the coastal Tupi). This long-standing situation does not make the Indians less Indian, but instead proves precisely the contrary: These pieces are present in the collections of great museums, witnesses to the history and the creativity of South American indigenous cultures which have been reinventing themselves for five centuries by incorporating new beings and new raw materials into their object systems as well as their artistic, mythological, ceremonial, and productive repertoires. As such, headdresses made of chicken feathers are not spurious or false artifacts registering the loss of native culture. Instead, they are examples of the vitality of indigenous cultures in their unique ability to re-read, incorporate, and reinvent their relationships with non-indigenous worlds, including those with other-than-human beings, on their own terms.

Concluding remarks

Since antiquity, animals and their body parts or products have been a part of various European collections:

Besides the collections and living animals that the princes possessed, there were stuffed animals, as well as parts of animals (furs, hides, hair, horsehair, bones, teeth, claws etc.) preserved among the lay and ecclesiastical treasures (Pastoreau 2015, 150, translation: Felipe Vander Velden).

In contemporary European museum collections, what interests me are these parts of animal bodies when they are part of indigenous cultural artifacts made with materials from European or African species, or representations of exogenous animals in indigenous objects, or techniques and technologies adopted to relate to these beings. The triangulation is always the same:

Exotic animal – Amerindian object – European collection.

We could suggest that we thus have doubly exotic objects: the materials utilized and the shapes and images reproduced are just as exotic to the Indians as the artifacts are exotic to the Europeans. Or perhaps they are triply exotic, since the Europeans expected objects made from animals native to the Americas (which are already exotic in their own right) but instead found, in the cases briefly discussed here, exotic pieces made with materials that were familiar to the Europeans.

I suggest calling such objects ‘multi-species’ or ‘multi-specific objects’, since they include one of the many aspects involved in relationships between humans and other-than-humans (in this case, animals): material proof of concrete and/or symbolic-semiotic encounters between these groups. In this sense, I hope to look at these pieces as more than just expressions of relations between human groups (in this case, indigenous and non-indigenous) – what we could call ‘multi-ethnic objects’. This involves introducing additional terms into a relationship which up to now has been considered only intra-human (although inter-ethnic). The question follows: how did these objects, made from the bodies and body parts of animals or representing exotic animals, combine humans and other-than-humans, express semiotic-symbolic knowledge and content about these beings, and shape relationships between them, and/or permit the analysis and understanding of these same relationships, which themselves are naturally non-human to a certain extent (see Santos-Granero 2009)?

What can these objects tell us about the history of inter-species relations? Can we see these objects as tangible proof of encounters and reciprocal contamination between two (or more) different worlds, of humans (and different types) and other-than-humans (also many different types)? Can these pieces be investigated as material expressions of the relationships between Indians and non-Indians in lowland South America?

Just as scrolls made from the skins of goats, ibexes, oxen, and sheep ensured the preservation of Judeo-Christian religious traditions (see Stone 2018, 21-23) while also granting us some knowledge of the fauna and the relationships between humans and animals in the ancient Middle East, the artifacts discussed above which are the target of this incipient investigation guarantee the survival of testimonies about the relations between Amerindian peoples and the animals introduced with the conquest and colonization of South America. I believe they could be very important for the study of human/non-human relations in the New World, including what they say about European and African animals as well as men and women of the same foreign origin. The purpose of this research is to narrate a history (or histories) of conquest and colonization, dealing with encounters or clashes between ‘cultures’ and between *biota*, through indigenous objects. As two of the most noteworthy scholars of indigenous art and culture from the South American lowlands have asserted (Ribeiro and van Velthem 1992, 107, translation: Felipe Vander Velden), ethnographic collections like the ones discussed here are “extremely important for ethnology and for Brazilian [and South American] indigenous history because they permit diachronic analyses that help understand the relationships of contact”. In other words, investigations of new dimensions of the trajectory of relations between natives and outsiders (whether human or other-than-human) can be expected through analysis of these pieces that mold these socio-historical relationships.

Again, I am aware of the dimensions and difficulties of such research. Preliminary survey of the collections’ potential clearly shows that some kind of selection process is

necessary, focusing on a certain category of objects or museum collection, a particular animal species, or particular indigenous group and/or historical period. As mentioned before, the possibilities are manifold: for anthropologists studying the forms of creativity and adaptability of indigenous cultures and practices, for historians interested in the history of the Americas and the expansion of the world system and the other-than-human beings who accompany it, and also for curators (in Brazil, Europe and in other parts). Such research may suggest new readings of certain objects in the collections they care for, by connecting artifacts and animals, historicizing each other and opening spaces for a more detailed understanding of the different ways of thinking about the relationship between culture (humanity/technology) and nature (animals other-than-humans/raw materials) beyond their crystallized opposition in modern Western thought. Nevertheless, my intention here is to present this challenge, which can teach us a great deal about this still relatively unknown material dimension of the relations between indigenous and non-indigenous humans and other-than-humans in lowland South America.

References cited

- Anderson, David, Jan Peter Looovers, Sara Schroer, and Robert Wishart
 2017 "Architectures of domestication: on emplacing human-animal relations in the North." *Journal of the Royal Anthropological Institute (N. S.)* 23: 398-418.
https://doi.org/10.1111/1467-9655.12613_1.
- Augustat, Claudia
 2013 "Extinct? Reflections on a concept." In *Beyond Brazil: Johann Natterer and the ethnographic collections from the Austrian expedition to Brazil (1817-1835)*, edited by Claudia Augustat, 105-109. Wien: Museum für Völkerkunde.
- Barcelos Neto, Aristóteles
 2002 *A arte dos sonhos: uma iconografia ameríndia*. Lisboa: Museu Nacional de Etnologia/Assírio & Alvim.
 2011 "Le réveil des grands masques du haut-Xingu: iconographie et transformation." In *Masques des hommes, visages des dieux*, edited by Jean-Pierre Goulard and Dimitri Karadimas, 27-52. Paris: CNRS Éditions.
- Benites, Disolaina
 2019 "Jeguaka artesanato em expressão da cultura Guarani Kayowá." Graduate dissertation, Universidade Estadual do Mato Grosso do Sul.
- Bertelli, Antonio de Pádua
 1987 *Os fatos e os acontecidos com a poderosa e soberana Nação dos Índios Cavaleiros Guaycurús no Pantanal do Mato Grosso, entre os anos de 1526 até o ano de 1986*. São Paulo: Uyrara.
- Boggiani, Guido
 1975 [1892] *Os Caduveos*. Belo Horizonte/São Paulo: Editora Itatiaia/Edusp.

- Brohan, Mickaël
 2011 "Le masque sans le rituel: essai 'd'archéologie' d'une pièce de musée du Nord-Ouest amazonien." In *Masques des hommes, visages des dieux*, edited by Jean-Pierre Goulard, and Dimitri Karadimas, 254-272. Paris: Centre national de la recherche scientifique (CNRS).
- Coelho, Vera Penteadó
 1995 "Figuras zoomorfas na arte Waura: anotações para o estudo de uma estética indígena." *Revista do Museu de Arqueologia e Etnologia – USP* 5: 267-281.
<https://doi.org/10.11606/issn.2448-1750.revmae.1995.109241>.
- Cooper, John
 1946 "The Patagonian and Pampean hunters." In *Handbook of South American Indians – volume 1: The marginal tribes*, edited by Julian Steward, 127-168. Washington, D.C.: Government Printing Office.
- Crosby, Alfred
 2003 *The Columbian exchange: biological and cultural consequences of 1492* (Contributions in American studies, 2). 30th anniversary edition. Westport: Praeger Publishers.
- Cypriano, Doris Cristina Castilhos de Araujo
 2007 "Almas, corpos e especiarias: a expansão colonial nos rios Tapajós e Madeira." *Pesquisas – Instituto Anchietano de Pesquisas*, Antropologia 65: 1-170.
<http://www.anchietano.unisinos.br/publicacoes/antropologia/antropologia65/antropologia65.pdf> (13.10.2020).
- Delort, Robert
 2002 "Animais." In *Dicionário temático do Ocidente Medieval - vol. I*, edited by Jacques Le Goff and Jean-Claude Schmitt, 57-67. Bauru: Edusc.
- Descola, Philippe
 1994 *In the society of nature: a native ecology in Amazonia*. Cambridge: Cambridge University Press.
 2013 *Beyond nature and culture*. Chicago: University of Chicago Press.
- Dragoski, Graciela
 2000 *Sobre máscaras y enmascarados en la celebración del carnaval chiriguano-chané*. Buenos Aires: Editorial Biblos.
- Faraco, Júlia
 2015 "Bichinhos Guarani: de artesanato a objeto." Graduate dissertation, Universidade Federal de Santa Catarina.
<https://repositorio.ufsc.br/xmlui/handle/123456789/161031> (13.10.2020).
- Fausto, Carlos
 2008 "Donos demais: maestria e domínio na Amazônia." *Mana* 14, no. 2: 329-366.
<https://doi.org/10.1590/S0104-93132008000200003>.
- Feest, Christian
 2013 "Bororo: 'crown jewel of Anthropology.'" In *Beyond Brazil: Johann Natterer and the ethnographic collections from the Austrian expedition to Brazil (1817-1835)*, edited by Claudia Augustat, 81-89. Vienna: Museum für Völkerkunde.
 2014 "The ethnographic collection of Johann Natterer and the other Austrian naturalists in Brazil." *Archiv Weltmuseum Wien* 63-64: 60-95.

- Ferreira, Tatiana Sanches do Amaral
2014 "Basá Busá: riqueza, cultura e política no alto rio Negro." Masters dissertation, Universidade Federal de São Carlos.
<https://repositorio.ufscar.br/handle/ufscar/236> (13.10.2020).
- Françoze, Mariana
2014 "Global connections: Johan Maurits of Nassau-Siegen's *Collection of Curiosities*." In *The legacy of Dutch Brazil*, edited by Michiel van Groesen, 105-123. Cambridge: Cambridge University Press.
- Gilmore, Raymond
1997 "Fauna e etnozoologia da América do Sul tropical." In *Suma Etnológica Brasileira. Volume I: Etnobiologia*, edited by Berta Ribeiro, 217-277. Belém: Editora Universitária da Universidade Federal do Pará (UFPA).
- Giraldin, Odair
1997 *Cayapó e Panará: luta e sobrevivência de um povo jê no Brasil central*. Campinas: Editora da Universidade Estadual de Campinas (Unicamp).
- Goulard, Jean-Pierre, and Dimitri Karadimas, eds.
2011 *Masques des hommes, visages des dieux: regards d'Amazonie*. Paris: Centre national de la recherche scientifique (CNRS).
- Gregson, Ronald
1969 "The influence of horse on Indian culture of lowland South America." *Ethnohistory* 16, no. 1: 33-50.
- Grünewald, Rodrigo
2001 *Os índios do descobrimento: tradição e turismo*, Rio de Janeiro: Contra Capa Livraria/ Universidade federal do Rio de Janeiro (LACED).
- Hall, Marcus
2017 "Invasives, aliens, and labels long forgotten: toward a semiotics of human-mediated species movement." In *Humans dispersals and species movement: from prehistory to the present*, edited by Nicole Boivin, Rémy Crassard, and Michael Petraglia, 430-453. Cambridge: Cambridge University Press.
- Harris, Susanna
2014 "Introduction. Leather in archaeology: between material properties, materiality and technological choices." In *Why leather? The material and cultural dimensions of leather*, edited by Susanna Harris and André Veldmeijer, 9-21. Leiden: Sidestone Press.
- Hemming, John
1978 *Red gold: The conquest of the Brazilian Indians*. Cambridge: Harvard University Press.
- Henare, Amiria, Martin Holbraad, and Sari Wastell, eds.
2007 *Thinking through things: theorizing artefacts ethnographically*. London: Routledge.
- Herberts, Ana Lucia
1998 "Os Mbayá-Guaicurú: área, assentamento, subsistência e cultura material." Masters dissertation, Universidade do Vale do Rio dos Sinos.
<http://www.anchietano.unisinos.br/publicacoes/textos/herberts1998/herberts1998.htm> (13.10.2020).

- Ingold, Tim
2000 *The perception of the environment: essays on livelihood, dwelling and skill*. London: Routledge.
- IPHAN
2007 *Cachoeira de Iauaretê*. Brasília: Instituto do Patrimônio Histórico e Artístico Nacional (IPHAN).
- Izikowitz, Karl-Gustav
1935 *Musical and other sound instruments of the South American Indians: A comparative ethnographical study*. (Göteborgs kungl. vetenskaps- och vitterhets-samhälles handlingar, Följd 5, Ser. A, Humanistiska skrifter, 5.1). Göteborg: Elanders Boktryckeri.
<http://www.etnolinguistica.org/biblio:izikowitz-1935-instruments> (13.10.2020).
- Karasch, Mary
2016 *Before Brasilia: Frontier life in Central Brazil*. Albuquerque: University of New Mexico Press.
- Lea, Vanessa
2012 *Riquezas intangíveis de pessoas partíveis: os Mëbêngôkre (Kayapó) do Brasil Central*. São Paulo: Edusp/Fapesp.
- Legast, Anne
1998 "Feline symbolism and material culture in prehistoric Colombia." In *Icons of power: feline symbolism in the Americas*, edited by Nicholas Saunders, 122-154. London: Routledge.
- Lévi-Strauss, Claude, and Nicole Belmont
1963 "Marques de propriété dans deux tribus sud-américaines." *L'Homme* 3, no. 3: 102-108.
<https://doi.org/10.3406/hom.1963.366583>.
- Lévi-Strauss, Claude
1997 *O pensamento selvagem*. 2. ed. Campinas: Papirus.
2004 *O cru e o cozido*. Translation by Beatriz Perrone-Moisés. São Paulo: Cosac Naify.
- MacDonald, Theodore
1997 *De cazadores a ganaderos*. Quito: Abya-Yala.
- Melatti, Júlio César
1967 *Índios e criadores: a situação dos Krahó na área pastoral do Tocantins* (Monografia do ICS., 3). Rio de Janeiro: Instituto de ciências Sociais da Universidade do Brasil (ICS)/Universidade Federal do Rio de Janeiro (UFRJ).
<https://acervo.socioambiental.org/acervo/documentos/indios-e-criadores-situacao-dos-kraho-na-area-pastoril-do-tocantins> (13.10.2020).
- Métraux, Alfred
1946 "The Purí-Coroado linguistic family." In *Handbook of South American Indians – volume I: The Marginal Tribes*, edited by Julian Steward, 523-530. Washington, D.C.: Smithsonian Institution. <http://www.etnolinguistica.org/hsai:vol1p523-530> (13.10.2020).
- Mitchell, Peter
2015 *Horse nations: The worldwide impact of the horse on Indigenous societies post-1492*. Oxford: Oxford University Press.
- Motta, Dilza Fonseca da
2006 *Tesouro da cultura material dos índios no Brasil*. Rio de Janeiro: Museu do Índio.

- Neumann, Eduardo
2015 *Letra de índios: cultura escrita, comunicação e memória indígena nas Reduções do Paraguai*. São Bernardo do Campo: Nhanduti Editora.
- Nicolás Caretta, Miguel A.
2001 *Fauna Mexica: naturaleza y simbolismo*. Leiden: CNWS Publications.
- Nimuendajú, Curt
1946 *The eastern Timbira* (University of California Publications in American Archaeology and Ethnology, 41). Berkeley: University of California Press.
- Nordenskiöld, Erland
1922 *Deductions suggested by the geographical distribution of some post-columbian words used by the Indians of South America* (Comparative Ethnographical Studies, 5). Göteborg: Elanders Boktryckeri. <https://archive.org/details/deductionsugge00nord> (13.10.2020).
- Norton, Marcy
2015 "The chicken or the *iegue*: Human-animal relationships and the Columbian exchange." *The American Historical Review* 120, no. 1: 28-60.
<https://doi.org/10.1093/ahr/120.1.28>.
- Palermo, Miguel A.
1988 "La innovación agropecuaria entre los indígenas Pampeano-Patagónicos: genesis y procesos." *Anuario del IEHS* 3: 43-90.
<http://anuarioiehs.unicen.edu.ar/1988.html> (13.10.2020).
- Panich, Lee
2017 "Indigenous vaqueros in colonial California: Labor, identity, and autonomy." In *Foreign objects: rethinking Indigenous consumption in American archaeology*, edited by Craig Cipolla, 187-203. Tucson: The University of Arizona Press.
- Pastoreau, Michel
2015 *Os animais célebres*. São Paulo: Martins Fontes.
- Petersen, Karen, and Anne Sommer-Larsen
1979-1980 "Techniques applied to some feather garments from the Tupinamba Indians, Brazil." *Folk* 21-22: 263-270.
- Picon, François-René
1983 *Pasteurs du Nouveau Monde: adoption de l'élevage chez les Guajiros*. Paris: Éditions de la Maison des Sciences de l'Homme.
- Pinto, Estevão
1956 *Etnologia brasileira: Fulniô – os últimos Tapuias*. São Paulo: Companhia Editora Nacional.
- Pohl, Johann Emanuel
1976 *Viagem ao interior do Brasil*. Belo Horizonte/São Paulo: Itatiaia/Edusp.
- Prado, Francisco Rodrigues do
1839 "História dos Índios Cavaleiros ou da Nação Guaycurú." *Revista do Instituto Histórico e Geográfico do Brasil* 1, no. 1: 21-44.
https://drive.google.com/file/d/0B_G9pg7CxKSsNnh2dFVNTkhxclU/view (13.10.2020).

- Ribeiro, Berta
1988 *Dicionário do artesanato indígena*. Belo Horizonte/São Paulo: Editora Itatiaia/Edusp.
- Ribeiro, Berta, and Lucia van Velthem
1992 “Coleções etnográficas: documentos materiais para a história indígena e a etnologia.” In *História dos índios no Brasil*, edited by Manuela Carneiro da Cunha, 103-112. São Paulo: Companhia das Letras.
- Ribeiro, Darcy
1980 *Kadiwêu: ensaios etnológicos sobre o saber, o azar e a beleza*. Petrópolis: Vozes.
1996 *Os índios e a civilização: a integração das populações indígenas no Brasil moderno*. 7. ed. São Paulo: Companhia das Letras.
- Rivera Andía, Juan Javier, ed.
2018 *Non-humans in Amerindian South America: Ethnographies of indigenous cosmologies, rituals and songs*. Oxford/New York: Berghahn Books.
- Rondon, Cândido Mariano da Silva
1953 *Índios do Brasil. Vol. 2: Das cabeceiras do Rio Xingú, Rio Araguaia e Oiapóque*. Rio de Janeiro: Conselho Nacional de Proteção aos Índios/Ministério da Agricultura.
- Santos-Granero, Fernando, ed.
2009 *The occult life of things: Native Amazonian theories of materiality and personhood*. Tucson: University of Arizona Press.
- Schien, Stefanie, and Ernst Halbmayer
2014 “The return of things to Amazonian anthropology: a review”. *Indiana* 31: 421-437.
<https://doi.org/10.18441/ind.v31i0.421-437>.
- Schicklgruber, Christian, ed.
2017 *Weltmuseum Wien*. Wien: KHM-Museumsverband.
- Schindler, Helmut
2001 “Plumas como enfeites da moda.” *História, Ciências, Saúde – Manguinhos* 8 (suplemento): 1089-1108. <https://doi.org/10.1590/S0104-59702001000500016>.
- Siqueira Jr., Jaime
1987 *Album de arte e técnicas Kadiwêu*. São Paulo: Secretaria Municipal de Cultura da Prefeitura da Cidade de São Paulo (SMC).
- Stone, Ken
2018 *Reading the Hebrew Bible with animal studies*. Stanford: Stanford University Press.
- Van de Logt, Mark
2018 *Monsters of contact: Historical trauma in Caddoan oral traditions*. Norman: University of Oklahoma Press.
- Vander Velden, Felipe
2012a *Inquietas companhias: sobre os animais de criação entre os Karitiana*. São Paulo: Alameda Casa Editorial.
2012b “As galinhas incontáveis: Tupis, europeus e aves domésticas na conquista do Brasil.” *Journal de la Société des Américanistes* 98: 97-140.
<https://doi.org/10.4000/jsa.12350>.

Van Velthem, Lúcia Hussak

2003 *O belo é a fera: a estética da produção e da predação entre os Wayana*. Lisboa: Museu Nacional de Etnologia/Assírio & Alvim.

Villagra Carrón, Rodrigo

2010 *The two shamans and the owner of cattle: Alterity, storytelling and shamanism amongst the Angaité of the Paraguayan Chaco*. Asunción: Centro de Estudios Antropológicos de la Universidad Católica (CEADUC).

Villar, Diego

2005 “Índios, blancos y perros.” *Anthropos* 100, no. 2: 495-506.

Viveiros de Castro, Eduardo

2016 *The relative native: Essays on indigenous conceptual worlds*. Chicago: HAU Books.

Wilbert, Johannes

1978 *Folk literature of the Gê Indians*. Los Angeles: UCLA Latin American Center Publications.