

# People, Manatees and the Aquatic Environment in Early Modern Americas: Confluence and Divergence in the Historical Relationships Between Humans and Animals

*Pessoas, manatins e o ambiente aquático na América moderna: confluência e divergência nas interações históricas entre humanos e animais*

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English version: We Value, Lda.

## RESUMO

Com uma distribuição geográfica histórica alargada em zonas costeiras, ambientes de transição e fluviais do Oceano Atlântico tropical, o manatim (manati das Índias Ocidentais, peixe-boi ou iguaragua do Brasil colonial) era bastante valorizado. As fontes documentais e iconográficas dos séculos XVI e XVII mostram-nos que era usado como alimento, para fins medicinais, para produzir utensílios ou como animal de estimação, mas seu valor económico e simbólico foi igualmente dominante. A sobre-exploração contínua conduziu ao desaparecimento de muitas populações de manatins, os quais hoje enfrentam o risco de extinção. Pretendemos explorar do ponto de vista da história ambiental marinha o significado pragmático e simbólico dos manatins numa ligação próxima aos valores atribuídos

## ABSTRACT

The manatee (*manati* of the West Indies, also called *manatim* or *iguaragua* in colonial Brazil) was highly valued and presented a broad historical geographic distribution in coastal, transitional and fluvial areas of the tropical Atlantic Ocean. Documental and iconographic sources of the 16<sup>th</sup> and 17<sup>th</sup> centuries show us that it was used as food and for medicinal purposes, to manufacture tools or even as a pet. Moreover, its economic and symbolic value was equally relevant. Continued overexploitation led to the disappearance of many populations of manatees, which are currently at the brink of extinction. We will explore, from the point of view of marine environmental history, the pragmatic and symbolic meaning of the manatee in close connection to the importance given to

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aos rios e cursos de água. Esperamos também contribuir para colocar manatins e o seu ecossistema no centro de uma discussão sobre contextos e interações ambientais e socioculturais das sociedades indígenas e coloniais nas Américas do período moderno.

Palavras-chave: história ambiental marinha; humanos e não humanos; ecossistemas fluviais; percepções na época moderna.

rivers and watercourses. We also expect to contribute to place manatees and their ecosystem at the center of the discussion about the environmental and sociocultural contexts and interactions of indigenous and colonial societies in the Americas of the modern period.

Keywords: marine environmental history; humans and non-humans; riverine ecosystems; early modern age perceptions.

*Rivers originate in one country, flow through others, and join the ocean. [...] Animals walk past, fish swim by, and birds fly over customs lines and immigration offices, military check points and border patrols. Nature's web defies containment. [...] "Saving nature" means taking a step away from ideologies of conquest. But it is all too easy to reproduce the patterns of the past. C.S. Lewis presciently wrote of how some men use nature as an instrument of power over other men. [...] Boundaries [do have] consequences for the lines between humans and the natural world. The histories we write have to face the challenges unfolding in the world we live in.*

(Rangarajan, 2011, pp. 27-30)

Rivers represent life and destruction. They are present in most landscapes and times of humanity, whether physically or spiritually, and exert an enormous influence on people and societies (Mauch; Zeller, 2008). Rivers defy boundaries and confinements, tracing their own path in human history and the one of its environments. But just in theory, as rivers are a natural environment very vulnerable to physical constraints, barriers and changes (Mauch; Zeller, 2008). Perhaps they are the most humanised of all natural systems. River systems present, in environmental terms, diverse geomorphological features and high associated biodiversity. River systems encompass several types of habitats, from their spring to running and standing waters; alluvial plains; riparian banks and vegetation; estuaries; marshes and mangroves; lagoons and a great diversity of coastal areas with different morphologies. In anthropogenic

terms, rivers are connected with a broad variety of engineering works for energy, agricultural and transportation purposes, such as dams, ducts, channels and locks, viaducts or bridges. Additionally, river beds are used as a means of transportation for people and goods. These human structures limit, transform and condition the riverbeds and their associated habitats, affecting directly and indirectly all river and coastal life forms (e.g. Coates, 2013). For instance, in given situations, dam construction – which inevitably leads to upstream sediment retention – and the extraction of sand for commercial purposes on several sections of a river may have a negative impact on the downstream coastal strip: erosion (e.g. National Research Council, 1990; Ferreira; Matias, 2013). As a consequence, these structures have an adverse effect in brackish and marine environments (e.g. Mangor, 2018).

Yet, rivers flow, move, are born and drain; they connect their springs and mouths, and also create physical barriers between natural and humanised territories. They are also systems linking different land areas – inland areas of continental or insular spaces – to coastal areas, flowing into seas and oceans. Rivers are likewise a source of life, water and food, for both people and animals. Many of their sections aggregate terrestrial fauna and constitute a natural habitat for numerous species of aquatic flora and fauna or amphibious animals. These riparian environments are often areas conducive to the aggregation of human communities that tend to prefer to settle, hunt, fish and trade there. Rivers provide many of the resources necessary for the survival of the human species (e.g. Coates, 2013, pp. 7-31). In many societies, rivers are not only a place where life is created, like the whole aquatic environment, but also a space of passage, transportation and continuity. Globally, great civilizations have settled and developed in the river basins or mouths of the main rivers of the planet. And these were also roads that opened the way to great achievements, like the development and distribution of technology and the transportation of people, goods, ideas and knowledge (McCully, 2001). Rivers symbolise the power of nature, but also the power and wealth of people, and all the possibilities of reverence, inspiration, and recreation (Coates, 2013, pp. 7-31).

Rivers are symbols. Its waters generate life and fertility and are also creators of myths and legends. The world's large hydrographic basins fertilise the lands and, since the dawn of history, the divinities that rule over these spaces flourish and grant abundance (Blackbourn, 2008a, 2008b). There are countless divinities, usually feminine, associated with rivers, from the smallest and simplest aquatic nymph to the most powerful mother of water. And they cross time and societies. It is not by chance that, in many parts of the world, rivers

are called “Mother” (McCully, 2001). For many cultures, rivers were also ritual and worship places, where male warriors celebrated their rites of passage and laid down their weapons in honour of the divinities that lived in the waters (Bradley, 1990). The symbolic duality is ever-present. As their waters move, they create a path, thus rivers often indicate the way to go, physically and geographically, as well as a spiritual and symbolic path between their beginning (the spring) and end (the mouth). This symbolism of the journey and different stages of life reflects the very rhythms of nature and seasons and, consequently, the rhythms of human life between birth and death.

Being a connecting element between natural and human realities, rivers are, in many world cultures, considered as living parts of a unique and integrated human-nature system. Several river animals, or animals related to the river environments and the transition between the river and the sea, bear their own symbolism and are part of myths, traditions and ritual and symbolic practices of many human cultures (Loveland, 1976). Thus, we find more and more researchers in environmental history and other humanities subjects studying the rivers in all their multiplicity. This is also due to the growing number of historians dealing with environmental issues (e.g. Worster, 1992; Blackbourn, 2008a; Mauch; Zeller, 2008). Rivers are currently central themes in many issues of environmental and cultural history, ethnology and anthropology. They allow addressing the socioeconomic aspects of the riverside communities, political issues of the territories they cross, environmental issues related to changes over time, uses and practices, human impacts, conservation of species and habitats, among many others, as well as mythological, symbolic and religious aspects. It is possible to write a river’s biography, just as the story of its (i)materiality (Blackbourn, 2008a), as well as the one of its various elements – including the human and non-human worlds and their intricate interactions.

In the present work, we intend to analyse the presence of rivers and aquatic animals in the life of colonial American societies. To this end, we will undulate in-between the confluences and divergences of human contact with the river and some of its living beings, using examples of the historical relationship, both real and symbolic, between people and manatees in Central and South America in modern age. Just as the rivers flow, and their waters meet and recede, so do people and these aquatic animals move closer and away, as we shall see from the following examples. Animals are, in fact, metaphors for the natural and social rhythms of order and disorder, just like the rivers. Many among them are symbolically related to the noisy and disruptive natural world. Yet, in several indigenous societies, others – like the manatee – are also related

to a cultural world full of calm, silence, social order and solidarity, and connected to water resources and a prosperous environment (e.g. Durand, 1950; Loveland, 1976). Thus, the manatee is an appropriate natural element and a good case study to discuss the multiple cultural and natural values typically associated with rivers and their animals. Using historical sources (documental and iconographic) for the Caribbean islands and riverine areas of Central and South America throughout the 16<sup>th</sup> and 17<sup>th</sup> centuries, it will be possible to discuss the value of the river as an element of the landscape and part of daily life. Additionally, we will be able to reposition the manatees in the environmental and historical-cultural context of the indigenous and colonial societies of that time.

## AMERICAS, RIVERS AND MANATEES

The Sea Ocean and its limiting lands, at the dawn of the modern period... At that time, whether in Europe, the Atlantic Islands, the West African coast or the coasts of the Americas, people, individually or as a group, reacted in very similar ways to certain marine or aquatic animals they encountered daily or occasionally. For instance, almost all human societies reacted – and still react – with fear to the proximity of great sharks. These large fish were typically considered dangerous, and people preferred to keep them at a distance.<sup>2</sup> But they were also commonly caught and consumed all over the world, and hunt just for fun or fear. However, people were unaware of how other societies of the world dealt with such animals. They had no way of knowing, since they were not aware of the existence of these other societies, even if the concept of different cultures was not a novelty in some parts of the world. Nor did they know of the existence of a wide range of endemic or typical animals of certain biogeographical regions that aroused different feelings and (re) actions in people.

Americas, from the late 15<sup>th</sup> century on ... This was one of the moments in human history when different societies came into contact with each other for the first time. A space and time in which people with various life forms, visions and knowledge of the world and divergent ways of contacting with the natural reality around them, met. When the first Europeans arrived there, coastal and inland aquatic ecosystems – like certain terrestrial ecosystems – were partially altered by the native land occupants, who were dependent on the exploitation of certain resources. This was a reality for both terrestrial and aquatic environments, flora and fauna. However, the arrival of the European explorers and settlers altered that scale dramatically and irreversibly, as well

as the intensity of the exploitation of those environments and natural resources. Many of the exploiting activities of aquatic resources had been sustained for years and centuries by the needs of local fishermen and hunters, explorers and merchants, but also by the biodiversity and natural productivity of the ecosystems. Like many other exploitation activities in colonial America, they were sustained, but were never sustainable (e.g. Cabral, 2015, pp. 92-93). Let us take the manatees as an example. Several authors who wrote about the natural and cultural history of manatees during the 20<sup>th</sup> century (e.g. Durand, 1950) reported that Christopher Columbus was the first European to describe these tropical animals. Durand (1950), in his “Ocaso de Sirenas”, describes the words of Columbus when, on the 9<sup>th</sup> January 1493, he encountered three brown-coloured forms, different from any other known fish, that emerged on the surface of the waters and which he recognised as the mermaids he would have previously encountered on the coasts of Guinea.<sup>3</sup> As their face was not as handsome as he expected, the Admiral assumed they were males. These “pompous amphibians” should, in fact, have been manatees (Durand, 1950, pp. 13-14). In fact, Europeans would already very likely have seen manatees on the western coasts of Africa, once a geographic region where they were abundant. Similarly, dugongs – *Dugong dugong* – which have only one distribution in the Indian Ocean and the Indo-Pacific, would also be known through contacts with Asia.

The three species of manatees inhabit tropical coastal and inland waters of Africa, Central and South America (Figure 1): African manatee (*Trichechus senegalensis*), West Indian manatee (*Trichechus manatus*) and Amazonian manatee (*Trichechus inunguis*). Displaying a similar appearance, they can only be distinguished by their geographical distribution.<sup>4</sup> They are historically known as womanfish or *mami-wata* in West Africa, *manati* in the Caribbean and ox-fish or *iguaragua* in South America. In all these regions they would have and, in some cases, still have an economic and symbolic value for local societies. As a result of excessive and continued exploitation, as well as of the decrease and degradation of the environmental quality of their habitats, the current geographic distribution of manatees is greatly reduced and fragmented, and all species of manatees are threatened with extinction.<sup>5</sup> Although manatees (and dugongs) – which are large animals with gregarious life – are the only herbivorous aquatic mammals and are often on the surface of water, they are also quite elusive and difficult to observe in nature. Linnaeus described the Sirenia Order for scientific purposes for the first time, at the end of the 18<sup>th</sup> century, including the manatees (Genus

Trichechus). But since early 16<sup>th</sup> century they are often to be found and described by Portuguese and Castilian authors in the Americas.



Figure 1 – Current and historical distribution of *T. manatus* and *T. inunguis*. The current distribution zones were obtained based on the shapefile of the species distribution in the website of IUCN (<http://www.iucnredlist.org/technical-documents/redlist-training/iucnspatialresources>) on a map by Zimmermann (1777). This map was georeferenced using ESRI ARCGIS 10.5.1 software, by defining common control points on the map on an orthorectified and georeferenced basis. The historical occurrence of manatees in the Americas indicates a macro view of the distribution of the species in the given period (16th-19th centuries), obtained from the reading of historical sources and not from a real geo-referenced position.

Descriptions of manatees are common, often similar – if not even copies between authors –, and their purpose over the centuries seems to remain the same: to disseminate the naturalistic and economic value of exotic and unknown animals in Europe.<sup>6</sup> Given the difficulty of taking the animal from its natural habitat – alive or as a preserved specimen –, words and illustrations served as a substitute and a showcase for the Renaissance public eager for news (e.g. Leite, 2014; Papavero; Teixeira, 2014; Brito, 2018).

There is a certain fish, which we call the sea ox, the Indians say iguaraguá, common in the Captaincy of the Holy Spirit and in other places to the North, where the cold is not so rigorous [...]; it feeds on herbs, according to the chewed grasses on the rocks bathed by the mangroves. It exceeds the ox in corpulence; is covered with a hard skin, resembling the colour of the elephant; next to the breasts it has something like two arms it uses to swim; and underneath them it has tits where their own children suck; its mouth is entirely like that of the ox. It is excellent for eating, you would not be able to tell whether it is meat or fish; from its fat, which is inside the skin and especially around the tail, when taken to the fire, is made a sauce, which may well be compared to butter and maybe it is even better; this oil is great to season all kinds of food: its whole body is full of solid and very hard bones, that may even replace ivory. (Anchieta, 1946, pp. 11-12)

Let us see yet another description, this one for the so-called Western Indies (Culcs-de-sac, Island of St. Bartholomew) already in the transition from the 17<sup>th</sup> to the 18<sup>th</sup> century:

I got there in time to see a female *Lamentin*, which these blacks had harpooned, being thrown to the shore. I had heard many things about the manatee, but had never seen any, as it became quite rare since the beach is inhabited. This fish searches for places with rivers because it comes to drink fresh water once or twice each day, after having eaten a certain herb that grows in the bottom of the sea [...] The Spaniards call it *Manate* or *Manati*, that is to say, a fish that has hands, while we call it *Lamentin*. We could, it seems to me, call it sea cow [...] Our buccaneers often have no other recourse to live on than fishing manatees, which assures me that neither they nor the Indians (of l'Ithme de Darien), which are the best fishermen in the world, have seen the manatee on land. [...] It was considered that this manatee weighed eight hundred pounds. I did not weigh it, but I think it is likely to be true. The fishermen had also taken its little one that was about a meter long; we had it for dinner. (Labat, 1722, pp. 200-203)

The necessity to explain and justify a natural world still little known increases the need for the empirical observation of the local fauna (Brito, 2018). Despite a clear vernacular interest, their entry into the annals of science was late, and only a few among encyclopaedist naturalists, such as Ulysses Aldrovandi, included them in their treatises (e.g. Papavero, Teixeira, 2014; Brito, 2018). Manatees kept being described even when, from the 18<sup>th</sup> century on, there are indications referring to their decrease.<sup>7</sup>



VALUABLE OX-FISH AND NOBLE MANATEE,  
OR THE TWO SIDES OF THE SAME ANIMAL

In every river and coastal area of Central and South America, manatees have historically been used as a valuable resource for indigenous populations. They resorted to different techniques, depending on the geographic region and the indigenous community, probably also according to the habitat and size of each individual. They used harpoons (Figure 2), nets, and even used less known methods such as remoras (e.g. Gudger, 1919, pp. 301-311; Durand, 1950, pp. 79-84). The arrival of the first Europeans to the islands and coasts of the Americas increased the impact of human populations on these animals. It also reinforced the European understanding of rivers as a birthplace of life, diversity and abundance even more so in these lands, where this abundance was apparently endless. This environment was available to anybody and, seemingly inexhaustible, could – and should – be continuously exploited. Rivers, watercourses and lagoons, besides being a way in and out of the territories to be explored, were quickly appropriated in all their valences.



Figure 2 – Fishing manatees in French Guiana (18th century), illustrated in the work of Barrere (1743). This illustration shows a hunting technique of manatees using a hand harpoon, which was used by indigenous people from different regions of the Americas.

Manatees are described, and occasionally illustrated, in treatises of natural and general history by the majority of authors writing about colonial America, both Portuguese and Castilian, as well as in missionaries' letters and accounts. Their general appearance and size, the fact of them being "fish" that actually breathed air and had (and breastfed) calves, their behaviour, their habitat, the ways of capturing them, of cooking them, of obtaining and consuming the stone of their brain to heal stone and kidneys maladies and many other aspects were repeated over and over again. Some writers wrote upon empirical observation, or accounts of those who saw them with their own eyes – whether Amerindian or European –, while others translated and copied earlier writings (e.g. Camenietzki; Zeron, 2000; Leite, 2014; Brito, 2018). Thus, information on animals and the environment built up gradually.

There is [in the Antilles] a fish called a manatee; is big and has a cow's head and face, and also in the flesh it looks a lot like it. [...] It is very tasty; it has stones on the head that are useful for the stone pain, and the female has tits in the breasts with which she creates the children who are born alive. (Galvão, [1573]1980, p. 41)

Carvajal (1504-1584) describes in his "Discovery of Amazônia" how the manatees were offered to Europeans who accepted them in exchange for other products. As their expedition progressed along the Maranhão River, "Indians came every day and brought food, such as manatees and turtles, as well as other kinds of fish [actual fish] in exchange for goods the Captain gave them"; in fact, "the whole territory provided sustenance, food consisting of manatins and fish ..." (Heaton, 1934, pp. 416-419). The European newcomers used and consumed manatee meat with more or less scruples,<sup>8</sup> but soon realised the value of this animal, and the settlers began to use it as a common food (Veríssimo, 1970, p. 138). Cristóvão Acunha, referring to fish and the oldest fisheries in the Amazon, also mentioned that the fishermen collected fish abundantly in this river and that there were all sorts of fish. He also told that it was part of the dietary habits of the Indians and that "it is the king of fish, populating the whole river from where it begins until it flows into the sea, and only in the name it is fish, as everyone who eats it, thinks it is seasoned meat" (Veríssimo, 1970, p. 131). The manatee became very easily a favourite food for Europeans in the Americas in the 16<sup>th</sup> and 17<sup>th</sup> centuries, given its abundance and ease of capture, as well as the observation and appropriation of local uses. Vasconcellos (1668, p. 36 and 280) referred, regarding colonial Brazil colonial, that "[it was] very special the innumerable quantity of ox-fish and turtles, so that the people

could make piles and piles with them” and that “ox-fish are very common: they are cooked like meat, with cabbage or rice and may cheat those who do not know, as it looks and tastes like beef”. Labat (1722, pp. 206-207) referred in his long and detailed description of the animal that “the manatee’s fat is very good; it turns easily into an oil that does not become rancid and may be used for several purposes”.

The animal was already part of the list of high quality food, whose products were used for various purposes, including medicinal purposes. It was also used for other purposes; the manatee skin was hard and of good quality and used to make shields that served the indigenous populations in times of war. Europeans quickly incorporated them as a common object and used them in the struggles against local people or against others coming from outside (Heaton, 1934, p. 190, 319; Veríssimo, 1970, p. 131).

The manatee was big, useful and valuable, but also magnificent. Gómara inscribes it in the annals of the story of Matto and his “owner”, the tribal chief Caramatexi, of the Taíno’s tribe.<sup>9</sup>

The manatee is a fish, which is not from our sea, but grows in the sea and rivers. [...] It is only captured, however, in the riverbanks or in the middle of the herbs: it is also caught with nets when small. Chief Caramatexi once captured a very small one, and raised him for twenty-six years in a lake called Guainabo, where he lived. This animal grew so sweet and friendly that we could take it for one of the dolphins the Ancients talked about. He came to the [lake] shore when people called it by the name Matto, which means in the Indian language Grand [or Noble]. He came out of the water to eat at home, stood by the shore with his young, and seemed to enjoy when it heard someone singing, let them climb [on his back] and carried people across the lake without letting them fall into the water. It was a great pastime for the Indians. A travelling Spaniard, wanting to know if its skin was as hard as it was said, called Matto, Matto and, when it approached, hit it, which did not feel good, even though it did not wound it, and that is why it did not come out of the water when he saw men bearded and clothed like the Christians, we could call it but it was in vain. (Gómara, 1605, p. 41, 41v, 42)

There is a poetic suggestion in this story, according to which Matto serves as a symbol for the history of an empire: “[it is] the most qualified witness who, as a representative of the marine fauna, observed and lived those decisive

events for humanity: the discovery and conquest of America” (Durand, 1950, pp. 40-41).

In Philoponus’s work (1621, pp. 59-60) there is an illustration of Gómara’s manatee and it is mentioned that the island’s King had a large fish, or Whale, called *Manatem*, which had an ox’s head, small eyes, was covered with leather and had few hairs. In the image, the imperialist power over tropical nature and its inhabitants is evident, as well as the duality usually present in people’s relationship with the animals in their surroundings. In this illustration (Figure 3) we see Matto in foreground transporting people on the lake. Yet, in the background we see another boat with two Indian hunters or fishermen hunting a turtle and another large sea animal – which we cannot clearly see; it may be a fish, a cetacean, or even another manatee. On the right bank, men in European outfits observe. Meanwhile, another person (possibly a young man) wields a bow and arrow in the direction of Matto; next to him stands an Indian man, also carrying a bow and arrow, but disarmed.

In this work, we consider that this manatee – whether it existed or not as described<sup>10</sup> – is symbolic of the history of a natural ecosystem and the relationships between people and animals. It highlights the paradoxical relation of both an aesthetic and emotional appreciation, and a utilitarian and commercial use which does not easily find a point of balance.



Figure 3 – Representation, in Philoponus’ work (1621), of Gómara’s story about the manatee, tamed by the Caramatexi chief, who carried members of the tribe between the two banks of the lagoon; on one of the banks, Europeans watch the scene.

## HISTORICAL RELATIONS BETWEEN HUMANS AND THE NON-HUMAN WORLD

*So it was that the Hatibonico River grew so much that it surpassed its banks and entered Lake Guainabo, which gave the good manatee Matto [an opportunity] to flee to the sea from where he had come, which left Caramatexi and his vassals very unhappy.*

(Gómara, 2008, p. 68)

Caramatexi, no matter how much he wished, could not keep his pet manatee forever in the pond under his control. Nature overcame the will of the tribal chief, and the manatee returned to its natural environment. As mentioned before, this story appears in the work of Gómara who, to describe some of the characteristics and virtues of the manatees, took inspiration from Oviedo. Several authors, namely Laet, later translated Gómara, although he did not include Matto's history, probably because he did not consider it to be trustworthy (Barrera-Osorio, 2012, pp. 326-327). In fact, only part of the information, observations and descriptions about manatees and other aquatic animals entered the European circles of modern natural history and philosophy (Brito, 2018), maybe due to a choice of the translator or the author, lack of access to some publications, or inconsistencies in the description, which was not considered to be truthful. Regardless of the reason, much remained untold and unknown about the aquatic tropical fauna of the Americas, and only recently some of this information started being recovered by most recent historiography on modern natural history or environmental history. (e.g. Brito, 2016). Matto re-emerged in Torquemada's "Jardín de Flores Curiosas", according to Durand (1950, pp. 28, 38-41), a historian particularly fond of the unlikely and the unusual.

Inconceivable to some authors, yet credible to others, the story of the domesticated manatee (Figure 4) indicates that the people of that tribe saw in the peaceful spirit of Matto the refined compliance with the best rules of conduct.<sup>11</sup> He becomes, like the dolphin that transported the Greek Arion, a figure worthy of entering human fables and epics (Durand, 1950, p. 30). It shows us the different interactions of people from diverse cultural backgrounds with the animal, confronting the indigenous with the European, and in part blaming the latter for the disappearance of the animal from the happy and peaceful "human-animal" community in which he lived.



Figure 4 – Illustration by Elvira Gascon, in the Durand's work (1950), represents the scene of the magnificent manatee transporting people from the chief Caramatexi tribe.

Yet, more than a romanticisation of the Amerindian and his relations with a pristine nature, this account seems to show us that the domestication of natural life is seldom, and never totally, attained. This human attempt to control is even more difficult with aquatic animals living in a three-dimensional environment, so different from land reality. These animals migrate, move, hide, become more elusive, alter their behaviours and may even change their occupation zone. As a consequence of these changes – often imposed by human presence – societies dependent on certain types of animals can move according to these more or less natural changes. Ecosystems are complex networks, which encompass all beings living and depending on them, as well as all the links between them. And this web of life knows no barriers. It even includes humans, who historically organise themselves by living standards limited by nation-states with all kinds of boundaries – physical, mental, and epistemological – imposed on them (Rangarajan, 2011, pp. 27-30).

Manatees kept their hybrid role – pragmatic and symbolic – in the rivers and coastal waters, which they inhabited, and a close relationship with humans. Thus, we find them suitable to be explored as a case study. The effect of the agency of nature, in this case, of the rivers' waters and the manatees, on life

and some human activities also becomes evident.<sup>12</sup> Knowing the rhythms of nature, it would be possible for people to adapt and use them to their advantage. Not knowing, or not understanding, natural events left no other possibility but to submit to them. In this case, the river took back what it had brought.

These fish [manatees] are mostly found in some rivers, or bays of this coast [Santa Cruz, Brazil], especially where some stream or brook gets into the salt water: because they put out the snout and pasture the herbs which grow in similar parts and also eat the leaves of some trees they call mangroves, which are abundant along the same rivers. The inhabitants of the land kill them with harpoons and some also in fisheries, because they come with the flood of the tide to such places and with the ebb they return to the sea where they came from. (Gândavo, [1550-1557]1980, cap. 8)

Seen as nourishment and a medicinal resource, feedstuff for tools, a religious or magical element, far beyond a friend or pet, the manatees kept their agency active throughout the entire history of their interaction with indigenous and colonial societies. Its presence has been incorporated into the life of Europeans both locally and in Europe, like that of all other nonhuman elements of this tropical world, which were common in the daily lives of the indigenous tribes of the Caribbean and South America. This was done through direct contact and empirical knowledge, or via transatlantic economic or scientific communications, which brought information to Europe. The development of human relationships, already existent or formed from the modern era on, with the nature of this region, was not based on a complete opposition, but on the contrary, on a close connection between people and other species (e.g. Cabral, 2015, pp. 104-105). In that context, the aquatic systems may unravel moments of protagonism of the native peoples (Almeida; Kater, 2017) in the Americas in pre-Columbian and modern times, as well as situations of protagonism of the animals themselves.

Rivers represent, physically and metaphorically, systems of confluence and interaction between different people, and between people and animals, or even, in a broader sense, people and nature. They are actual zones of aggregation – of people, animals, resources and possibilities. In addition, they are communication and travel routes and link diverse geographical areas, constituting a mode of transference and movement of people and natural elements. Yet, like in most situations of convergence of humans and the nonhuman world (e.g. Denning, 1980), situations of divergence between these ambivalent

realities tend to emerge. This story of contradiction in the way people relate to and use these varied and plural ecosystems is common to many ecological, human, oceanic, coastal, and river systems around the world. Rivers, as well as other monumental elements of natural landscapes – islands (e.g. Denning, 1980), waterfalls (e.g. Almeida; Kater, 2017), coastal zones, mountains and forests (e.g. Vadjunec et al., 2012) –, are spatial crossroads forming nodes of contact and zones of confluence of stories and of construction of history.

There is thus a story that is not only blue, but also brown (Gillis; Torma, 2015, pp. 1-3), as it encompasses the sea, rivers and transition zones. It is a marine environmental history that contributes to an integrated apprehension and understanding of ecological and human systems over time and throughout diverse historical and cultural contexts. Although this history did not leave enough written or material vestiges, it is possible to reconstruct it resorting to methodologies of different subjects of the humanities (Gillis; Torma, 2015). These same authors quote David Helvarg (2001, p. 245) at the end of their chapter (p. 11): “we love the ocean, we use the ocean, but we do not think enough about the ocean.” Similarly, we do not reflect enough on rivers, transitional waters, coastal areas, nor about manatees, turtles, sharks, and a myriad of fauna and flora that inhabit these ecosystems. They are ecosystems and living elements on which we depend and to which we have got used to. The process towards a sustainable human life on Earth is now inevitable, and the historical process of bringing these animals, active agents in the creation of our common past, to the water surface will be one of the pillars of our future life on this planet.

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## NOTES

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<sup>2</sup> For instance, an account referring to the ferocity of sharks and the relationship of people with them in the 18<sup>th</sup> century West Indies: “On the same day our sailors took a shark that for two or three days had not left our ship; it was difficult to put him on board, he was more than ten feet long; it is the same fish, which we called in La Rochelle a sea dog, but the ones I had seen were no longer than two feet ... it is armed with three rows of sharp, sharp, sharp teeth; is a voracious, daring and dangerous animal” (LABAT, 1722, pp. 45-46). Sharks, like manatees, are (re) signified in a similar way by different naturalists, humanists, and missionaries, even if there is plenty of time between their publications. Fear is a constant in the case of sharks. Naturalistic curiosity, utilitarian interest, and commercial value appear across the descriptive passages about manatees. The European look on these tropical animals seems to be similar

<sup>3</sup> Transcript of a Christopher Columbus’s passage, as it appears in the book of Joseph Durand (DURAND, 1950, p. 22): “Last day, when the Admiral was going to the Rio del Oro, he said that he saw three mermaids who came out of the deep sea, but they were not as beautiful as they say, they looked somehow had like a man in the face. He also said that other times he saw some in Guinea, on the coast of Manegueta”.

<sup>4</sup> Only in Brazil do the distribution areas of the species *T. manatus* and *T. inunguis* coincide; the first exists in the coastal environment, and can enter river embankments, mangroves and estuaries, and the second is exclusively found in inland waters, appearing in the Amazon River and possibly also in the Orinoco. In the past, in times of greater abundance of populations and individuals, it is very likely that there were areas of overlap in the distribution of both species in the transition zones between the rivers and the sea.

<sup>5</sup> The IUCN Red List of Threatened Species, Version 2017-3, <http://www.iucnredlist.org>, downloaded on 27 June 2018.

<sup>6</sup> Descriptions of manatees and other species of marine mammals and aquatic animals reveal much of the empirical knowledge on tropical nature and local wildlife. Yet, they were often confused or originated local beliefs; aquatic monsters, seamen, hybrid beings and diverse aquatic indigenous mythologies were born to them. The narratives of the chroniclers for Portuguese America are diverse (e.g. CAMENIETZKI and ZERON, 2000), and several authors have devoted themselves to the discussion of these themes from multiple perspectives (e.g. CAMENIETZKI; ZERON, 2000; LEITE, 2014; PAPAVERO; TEIXEIRA, 2014, BRITO, 2018).

<sup>7</sup> Several documents and sources account for a significant decrease in the number of manatees in colonial Brazil from the mid-18<sup>th</sup> century. See: VIEIRA; BRITO, 2017.

<sup>8</sup> Father José de Acosta stated he accepted, but had doubts, to consume manatee meat on

Fridays because this was a real animal that had calves and suckled them, although it lived in the water. It was normally consumed as fish in the islands of Cuba, Santo Domingo, Puerto Rico and Jamaica (HEATON, 1934, p. 329): “In the islands that call *Barlavento*... there is what they call manatee, a strange kind of fish, if it is possible consider fish an animal that gives birth to its offspring, and has teats, and feeds them with milk, and eats grass in the field; but in fact it lives usually in the water, and for that reason they eat it like fish, although in Santo Domingo when I ate it on a Friday, I was scrupulous, not so much for eating it but because it tasted and looked exactly like veal” (ACOSTA, 1590, p. 7).

<sup>9</sup> The Taíno – considered to be excellent fishermen – were, when the Europeans arrived to the Caribbean at the end of the 15<sup>th</sup> century, one of the indigenous peoples occupying several islands in that region. At the arrival of Christopher Columbus in 1492, there were in the island called Hispaniola five heads and Taíno territories, each one headed by a cacique (chief).

<sup>10</sup> Marília Lopes uses this same image to illustrate the concept of fantasy connected with European discoveries and explorations of the natural world of the Americas: “European scholars are happy to hear about the novelties of the recently found lands: animals, fish, birds, trees, plants and fruits never seen before. [...] [But] The graphic art also uses another language: that of fantasy. Following the reports of fantastic and extraordinary beings from the Books of Wonders, artists give way to strangeness and novelty by drawing, for instance, a fish or an amphibian of great dimensions capable of carrying five men on their back” (LOPES, 1998, pp. 74-75).

<sup>11</sup> The word used by the author in this context is “urbanidad”, referring to a group of people, or a city, coexisting in a common environment with mutual respect.

<sup>12</sup> The agency of the river (or the animal) operates here in a broader sense of the concept introduced by Peter Coates (COATES, 2013, pp. 7-31), where there is a nonreflective agency that emerges from the very capacity to produce or condition certain results. In this author’s view, which we take on board, the actors involved need not be rational, nor intelligent, just effective. Moreover, he says, if they enjoy will, logic and a sense of direction, these are essential attributes of agency. Thus, in this perspective, the rivers also qualify as active agents.



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