In general terms, the Ethology is the biological study of animal behaviors. The development of ethology as a scientific discipline has undergone controversial interdisciplinary dialogues and crossings of epistemological borders. Because it is the behavior study, ethology necessarily raises questions and observations of the different perceptions and actions, points of view and life forms of the animals, involving beyond the biological-evolutionary dimension, the ecological, subjective, social and cultural dimensions of the animal worlds.

Some species, such as marine mammals, are difficult to observe and follow without a deep knowledge of the marine environment, requiring dialogue and collaboration with local populations ontologically connected to the sea or underwater monitoring technologies – important actors in this sociotechnical network for the knowledge production about marine animals.

Based on Science, Technology and Society Studies (STS) and on the social and cultural studies of sciences, covering emerging paradigms and postcolonial epistemologies, I intend to elucidate the controversies and historical, ontological and epistemological particularities in the development of the marine mammals behaviors, study histories, since they developed from dialogues and demolitions of borders between local and scientific knowledge. I also intend to raise reflections about the nonlinear dynamics of this sociotechnical network of scientific practices of marine mammal ethology, or rather, of the production of ontotologies (Buchanan, 2008) about the multiplicity of nonhuman actors that inhabit the marine universe, involving the dissolution of ontological and epistemological boundaries, and the agency between different human and non-human actors and actors in, in order to make explicit the multiple routes and scope lines of the History of Ethology.

The dialogue between fishermen, scientists, investors and environmentalists is fundamental to make feasible the studies of behavior of marine mammals, as well as for the animal-ethical awareness of the present hunters. This dialogue allowed whalers to become protectors, as well as local knowledge about the behavior, location and migratory pathways of marine animals to be incorporated into scientific practices, dismantled epistemological barriers.

Through new relational and non-anthropocentric perspectives, we can reconstruct the idea of the Sea as “Immensa Empty,” and rethink the seas as boundary, liminal landscapes that cross, translate, and dissolve physical and ontological boundaries, shared by a multiplicity of subjects and actors, human and non-human, in symmetrical relationships and affections.

History and maritime landscape was built through a network of connections between a multiplicity of agents (fishermen, whalers, traditional communities, sailors, fish, marine mammals, fantastic monsters, hybrids, naturalists, scientists, ethnologists, among others). In this way, we can see that human and nonhuman animals have an equivalent importance in the (re)construction of oceanic History. Intersubjective relationships between seafarers, fishermen, naturalists and current ethnologists with marine animals played an important role in reconfiguring their perspectives and practices within the marine universe.

Finally, we can reflect about the importance of exchanges and crossings of physical, epistemological and ontological boundaries, among seamen, ethnologists and marine animals, in the production of scientific knowledge, in the animal-human relations, as well as in the construction of a non-anthropocentric and non-eurocentric oceanic history.

REFERENCES CITED


NEW SCIENCE FROM OLD NEW: Sea monsters in the early modern Portuguese production and transfer of knowledge about the natural world. Ed. Escola de Mar e Ciência História. 2016.


These reflections are part of my doctoral research project titled: “An analysis of the dialogue and dissolution of boundaries between local and scientific knowledge for the development of marine mammal behavior studies”, with the following objectives:

Establish dialogues and conduct interviews with researchers at the Centro de História d’Aqueim e d’Além Mar (CHAM), Faculdade de Ciências Sociais e Humanas, Universidade Nova de Lisboa, in order to collect data and obtain information about the types of relationships or networks established between them and the seamen, fishermen or harbor population of the region in the development of scientific research about the marine mammals behavior. How do local and ethno-scientific knowledge contribute to the development and feasibility of marine mammal behavioral knowledge?

To investigate how sea voyage literature, logbooks and Portuguese nautical reports (from the 15th to the 19th century) were (and still are) used by scientists in their scientific practices in the marine mammals ethology. How did this information provide subsidies for current research on cetacean behavior?

To investigate how the intersubjective relations between the different human and nonhuman actors in the maritime landscape contributed to the changing perspectives on the marine world, and to the construction of a non-anthropocentric and non-European maritime environmental history.

Establish connections between the history of whaling and the history of knowledge about marine mammals, in Brazil and Portugal, with a focus on dialogue between whalers, scientists and protectors.

Cristina Brito and her team at CHAM currently study the long history of ecological and cultural interactions between humans and marine mammals, from the time they were considered as monsters or fantastic beings, to the slow transition when they were considered only animal species. Brito points out the historical connections between reports of travelers since the time of the great navigations and Portuguese discoveries with the first naturalistic knowledge about the physiology and behavior of marine species.

According to Brito (2016), some of these reports, such as that of the Italian naturalist Aldrovandi (1522-1605), in the early modern age, mix information about real and biological creatures with fabulous and monstrous species of Maritime imagery, as having real existence in nature. Such reports belong to a pre-modern age and to a peculiar context of transition and “confused situation”, where myth and reality, humans and nature, as well as science and local knowledge were still mixed.

Ethos intended Mechanica Philantropia and the “conventional cuts” of the Modern Age. Many reports and logbooks of travellers from the 15th to the 18th century present interesting descriptions of marine animal behavior. However, the earliest descriptions did not yet possess a naturalist or scientific bias, although they constituted a tenuous historical and epistemological line up to the first naturalistic studies of marine mammals.

Before the first naturalist voyages, seafarers, whalers and traditional fishing communities, were the holders of knowledge about marine life (the behavior, location, and migratory pathways of these animals). According to Gannier (2009), these seamen were a “third kind of people”, beside the living and the dead, because they were the only ones at that time to know the “sea monsters”. This “third kind of people” will become a crucial part of the network of knowledge production about marine mammals.

It is important to emphasize that some “escape lines” reconstruct this tenuous line of the history of knowledge about marine animals, since among reports of seafarers and whalers, there were almost naturalistic and romantic descriptions of behavior, or even among naturalistic notes, there were descriptions that revealed a deep ecological concern with the incorrect and destructive use of nature, the depletion of natural resources and the future of the next generations, such as the reports of José Bonifácio de Andrade e Silva, in the 18th century. These preoccupations will become relevant after the 19th century, with the recognition that natural resources were exhaustible.

In the 20th century, with the questioning of the Western dualist philosophical traditions that objectified and considered the nature of society, arose the need to change the relationship between humans, animals and nature, and to rethink the ontological statutes of living beings in the modern world. Such questioning has changed significantly the perceptions and ethical considerations with the marine ecological community.