The following handle holds various files of this Leiden University dissertation:
http://hdl.handle.net/1887/67914

Author: Mondt, M.M.
Title: De zee-eenhoorn in kaart gebracht. Zee-eenhoorns in woord en beeld in de middeleeuwen en vroeg moderne tijd
Issue Date: 2019-01-10
SUMMARY of the thesis

MAPPING THE SEA-UNICORN

SEA-UNICORNS IN WORD AND IMAGE IN THE MIDDLE AGES AND EARLY MODERN PERIOD

INTRODUCTION

During the Middle Ages and early modern period, the sea-unicorn, referred to as *Monoceros marinus* or ‘unicorn of the sea’, was described and depicted by natural historians, travellers, cartographers and artists who - for different reasons - recorded their findings in treatises, travelogues and nautical charts, and in paintings, sculptures and the applied arts. Almost no research has been done on the authors and artists of these descriptions and illustrations, their motivations, or the iconographic development of the way sea-unicorns were depicted. Although the land-unicorn has received plenty of attention in modern scientific literature, remarkably, almost nothing is known of the sea-unicorn and the significance it had in early modern times.

In the sixteenth century, medieval views of the world, of its human inhabitants and of its flora and fauna were gradually replaced by a new way of thinking based on empirical research, whereby the symbolism ascribed to animals and objects was gradually abandoned. The same applied to the religious symbolism associated with the land-unicorn, whose existence was increasingly called into question. What remained was a belief in the special properties of the horn, a belief that was maintained for medical and/or commercial reasons. The sea-unicorn, regarded as the marine equivalent of the land-unicorn, now became the new horn bearer, thereby safeguarding the commercial interests of the trade in horns.

RESEARCH QUESTIONS

The key research question concerns the role the sea-unicorn played in the thoughts and minds of early modern humans. Is this animal - like the land-unicorn - a product of human fantasy and a combination of a number of fascinations (physical strength, potency and fertility) combined in the horn of an imaginary beast? In addition to legitimizing the existence of the land-unicorn, was the animal also accorded a right to exist as an independent entity? What role did the animal's horn play here and was this related to the role of the land-unicorn's horn? How did this role develop and what relationships existed with the cognitive, religious and social developments that took place during this period?

A question directly related to this is: what position did this animal take in the animal kingdoms of the Middle Ages and early modern period? For instance, did it have the same significance in the Middle Ages as it did in the early modern period? Was it considered an extraordinary animal? How was it compared to the land-unicorn and to other animals, and how did it 'adapt' to the changing ideas about natural phenomena during the course of the 16th century?

The following research sub-questions are asked: Did early modern cartographers base their illustrations on pictures in natural history descriptions and travelogues? Did early modern natural historians derive the zoological information for their treatises from physicians’ experiments and travellers’ observations? What iconographic influence did the visual arts have on the illustrations accompanying these descriptions and on nautical charts? Can this be seen as a case of intermediality, and did this change in the course of the sixteenth century? Can other similar patterns of influence be found to explain the illustrations? How did these patterns develop? Were they synchronous with iconographic developments, and did they influence one another?

The answers to these questions give us an idea of how early modern researchers, cartographers, traders and artists approached the phenomenon of the sea-unicorn, and of the extent to which this approach was
shaped - and how it was shaped - by early modern ideas about the land-unicorn. The results of this research place the phenomenon of the sea-unicorn in a new perspective.

**RESEARCH MATERIAL AND RESEARCH METHOD**

**RESEARCH MATERIAL AND PERIOD**

To conduct this research, I tried to find descriptions and images of fish-like and equine horned sea animals in medieval and sixteenth and seventeenth century texts, nautical charts and works of art. To make the research material manageable, I started by ranking it both chronologically and by genre, after which I wrote each of the chapters about the various animals.

I found the research material in museums and churches, and through the websites of university and museum libraries and auction houses. I supplemented the information that I gathered with data from modern-day publications, atlases and websites on cartography. Although I tried to include as many descriptions and representations as possible, this collection of material in no way claims to be exhaustive. All sources are listed in the bibliography.

To arrive at a better understanding of the sea-unicorn phenomenon, I delved into the land-unicorn’s origins, exploring the complex - and at times contradictory - Christian and secular symbolism that was ascribed to the creature up until the sixteenth century, and which relates indirectly to the horn’s properties (Chapter I).

Seeing as the first representations of horned sea animals that I found in medieval texts dated back to the latter period of the thirteenth century, and the most recent early-modern images that I could find dated to the early eighteenth century, I chose to study the period between 1280 and 1720.

I describe the research terminology used in Chapter I.

**RESEARCH DESIGN**

In medieval and early modern representations of sea-unicorns in texts, nautical charts and works of art, we see that these creatures differed markedly in appearance, with the exception of the horn. As the nautical charts depict two different kinds of animal, this study classifies and names sea-unicorns according to these two types (see Chapter I):

1. **The equine sea-unicorn.** A sea creature with the body of a horse, the tail of a fish and a straight (spiralized) horn on the forehead in the shape of a narwhal tusk.

2. **The fish-like sea-unicorn.** A sea creature with the body of a fish or sea mammal and with a straight (spiralized) horn on the forehead, also in the shape of a narwhal tusk.

A separate category is that of the amphibious unicorn: a creature resembling a land-unicorn, but with flippers on its hind legs instead of hooves.

To make the research material manageable, I organized my study chronologically and divided it into three parts.

The first part describes the history of the medieval sea animal *Monoceros* (Chapter II). Medieval texts depict and describe various horned sea creatures, including the *Monoceros*. To distinguish it from the land-unicorn of same name, I describe this animal as the ‘sea animal *Monoceros*.’ A number of manuscripts are discussed, including the four major thirteenth-century encyclopaedia (Chapter II). I also looked at descriptions of other horned sea creatures, such as the *Aries marinus*, because the descriptions and illustrations of the sea animal *Monoceros* appear in some instances to have been derived from the appearance and characteristics of these other creatures.
Chapter III discusses the early-modern descendant of the sea animal *Monoceros*, the fish-like sea-unicorn. In sixteenth and seventeenth-century documents, natural historians depicted and described various horned sea creatures, including fish-like sea-unicorns. These works built on the medieval tradition. Several early modern texts are also discussed.

The Arctic seas - the habitat of the narwhal - were explored from the sixteenth century onwards, and findings of unicorn horns were reported in travelogues. All of these reports involved fish-like sea-unicorns. To my knowledge, there are no known reported observations of equine horned sea creatures. Chapter III looks at a number of travelogues, including some by Dutch authors.

Horned sea creatures feature in various sixteenth and seventeenth-century nautical charts. Chapter III discusses a number of these charts. Where possible, the cartographic images are compared with similar representations in early modern writings and travelogues.

Chapter IV discusses early-modern research into the amphibian unicorn, or *Camphurch*. This creature appears in tracts by natural historians, physicians and apothecaries from 1575 onwards.

The second part of this research focuses on medieval and early modern depictions of equine horned sea-animals and tries to discover the meaning behind the iconography of the equine sea-unicorn (Chapter V). The equine sea-unicorn is not described in medieval and early modern treatises, with the exception of the work of Francisci dating from 1668. The animal depicted in medieval manuscripts which most closely resembles the equine sea-unicorn is the *Equus maris*, which may have served as an iconographic model for depictions of equine sea-unicorns. A number of representations of equine sea animals are also discussed.

Horned sea creatures appear quite regularly in the visual and applied visual arts of the early modern period. There may have been an exchange of iconographic information between illustrations in natural history manuscripts and those in artworks. Chapter V therefore examines representations in illuminated manuscripts, frescos, paintings, prints, wall tiles, sculptures, reliefs and in the applied visual arts and heraldry.

The third part of this research is a case study in which the meaning behind the iconography of equine sea-animals is studied in terms of a specific sculpture (Chapter VI). The case study investigates the iconographic significance of four equine sea-unicorns that are part of a sculpture made by Artus Quellinus the Elder in 1657-1658 for the eastern pediment of the new Amsterdam town hall (now the Royal Palace of Amsterdam). Although the iconographic meaning of the sculpture as a whole is understood, the same could not be said of the role played by the four sea creatures. By determining the meaning behind the iconography in the formation of the animals and the decorations around their necks, it was possible to discover their significance in relation to the sculpture as a whole: the sea-unicorns were subsequently linked to burgomasters who were politically significant for the city.

CONCLUSIONS
To date, modern researchers have generally been unaware of the concept of sea-unicorns. This study has provided the sea-unicorn with a unique identity and reveals that this animal played a much more significant role in the early modern period than solely to legitimize the declining belief in the existence of the land-unicorn.

Herein lies the importance of my research: the history of the sea-unicorn is exemplary for the development of natural history research into fauna in the early modern period (including existing animals, animals people believed existed, and imaginary animals).

My findings also make clear that any future research into the sea-unicorn in the early modern period will need to take place from a new perspective that takes account of the ‘double’ identity of this creature (fish-like vs. equine sea-unicorns) and must not neglect its close relationship with the land-unicorn.