

Southern-Netherlandish Observations and Knowledge Production of *Naturalia* on the Seas: The Writings of Michael de Febure (1721)

WIM DE WINTER

Wim De Winter is a cultural and maritime historian employed at VLIZ (Flanders Marine Institute), where he is conducting the Southern-Netherlandish Prize Papers research project. He has published on gift exchange and travellers in early modern Japan, exoticism, and the Ostend Company's courtly travels. He is also preparing a doctoral dissertation at Ghent University on the comparative cultural interactions and performative exchanges of the Ostend Company in eighteenth-century Bengal and Canton.

Abstract

Just as was the case for other European sea voyages, maritime expeditions from the Southern-Netherlandish port of Ostend to Asia presented opportunities for the bringing of *naturalia* to Europe, and with it the production of knowledge on the natural world in the early eighteenth century. While this exchange took place alongside the more commercial aspect of these expeditions, and mostly comprised gift objects being brought back for the curiosity cabinets of Austrian-Netherlandish dignitaries, the journal of chaplain Michael de Febure – sailing in 1721 on the ship *Sint-Pieter* from the port of Ostend to the Indian Malabar coast – presents a different type of the production of natural historical knowledge. This source offers us a unique insight into the ways in which marine life and *naturalia* were approached from a shipboard perspective. This fits within an ecological perspective on the ways in which the sea and the shipboard formed a space for knowledge production on *naturalia* for Southern Netherlandish sailors and sea-going passengers.

Keywords: Ostend Company, maritime history, *naturalia*, shipboard knowledge, Michael de Febure

Southern-Netherlandish Observations and Knowledge Production of *Naturalia* on the Seas: The Writings of Michael de Febure (1721)

WIM DE WINTER

The opening of seaborne trade routes to Asia transformed the economic and cultural life of early modern Europe. There was an intense curiosity about the strange life forms that seemed to appear at every turn, while ships brought back specimens and collectors stocked cabinets of curiosities.¹ The early eighteenth-century maritime expeditions from the port of Ostend occasionally brought Asian fauna to Europe as luxury objects. For example, when lieutenant-general Jacques-André Cobbé was sent as an ambassador of the Ostend Company to the Nawab of Bengal in 1724, he shipped a porcupine, tiger skins, parrots, extraordinary penguins, and birds of paradise to Europe from India as presents for high dignitaries.² Florike Egmond has noted that the shipping of such exotic *naturalia* occurred throughout early modern Europe, as bezoar stones and animals such as parrots became highly valued luxury goods for aristocratic gift exchange.³ As the first point of contact for many European travellers and sailors with exotic *naturalia*, the seas were experienced from within a shared wooden world.⁴ Ships were rather more than mere conduits for transporting *naturalia* home: they became nodes of knowledge creation and exchange. Indeed, Natascha Adamowsky has noted that the early modern ocean at once presented an accursed empire of darkness, while concealing inconceivable treasures: pearls, corals, shells, and snails. European cabinets of curiosity frequently contained marine elements, which ‘represented the treasure house of a miraculous and exceptional world’.⁵

While there is a vast literature on the overseas transport of exotic *naturalia*, there is little scholarship that analyses how marine *naturalia* were observed and handled onboard the ship itself. The aim of this article, therefore, is to ask what forms of knowledge concerning *naturalia* were produced on board early modern ships, in what manner, and how they

1 Williams, *Naturalists at Sea*, 1-2.

2 Antwerp, Stadsarchief (hereafter SAA), Archief der Generale Indische Compagnie (hereafter GIC) 5772, Cobbé, Mémoire des pièces envoyez et joint a la lettre de Son Ex. le Marquis de Prié, 1723-1724.

3 Egmond, ‘Precious Nature’, 49.

4 Rediker, *Between the Devil and the Deep Blue Sea*, 155.

5 Adamowsky, *The Mysterious Science of the Sea*, 18.

were circulated on the seas.⁶ In order to achieve such an aim, we must avoid the terracentrism that assumes that history is made on land and that oceans are mere voids, deserts to be crossed to find real places.⁷ As Gelina Harlaftis has noted, ‘historians have too often neglected the sea due to a land-based bias’.⁸ In order to follow this critical approach – one that requires that we ask how shipboard interactions with marine *naturalia* occurred within the context of expeditions from the port of Ostend to Asia – this article will focus on a uniquely detailed source: the unpublished 1721 journal of the ship *Sint-Pieter*, kept by the ship’s chaplain Michael de Febure.⁹ At once both personal testimony and shipboard chronicle of the journey to and from the Malabar coast, De Febure’s hand-written journal stands out among early eighteenth century Southern-Netherlandish shipboard sources due to the nature of its descriptions and its level of geographical and environmental detail. De Febure produced an exceptional hybrid source, combining genre elements of the traditional ship’s logbook and the travelogue. His narrative descriptions contain elements which are missing in comparable logbooks, thus providing us with a unique testimony of shipboard knowledge production.

The many ways in which sailors and travellers interacted with marine *naturalia* can be understood by using Tim Ingold’s notion of ‘sentient ecology’: the ways in which humans relate to their environment is intimately bound up with their constructed understanding of this lifeworld. Moreover, theirs is not a formal, bookish understanding of the natural world, but one based on feeling, skills, and orientations that have developed through long experience from living in a particular environment.¹⁰ This is evident throughout De Febure’s logbook, as his descriptions of marine *naturalia* are often informed by what more experienced sailors taught him about the natural environment, as well as about navigational and foraging skills.¹¹ Florike Egmond has called this way of gathering information on marine *naturalia* a form of field work, in which practical personal observations may be distinguished from book learning.¹² This does not imply that bookish knowledge was entirely absent, but it does acknowledge the importance of an empirical component to De Febure’s observations in the handling of marine *naturalia*.

His encounter with marine fauna can also be situated within the field of human-animal studies, which explores how animal lives intersected with those of human societies.¹³ In her historical approach of human-animal studies, Gesine Krüger claims that animals also possessed their own agency (*Wirkungsmacht*), mutually influencing historical processes and shaping human culture. Early modern European expansion created a change

6 For a thorough and wide-ranging perspective on the role and importance of the sea for the development of the early modern world, see Buchet and Le Bouëdec (eds.), *The Sea in History*.

7 Rediker, *Outlaws of the Atlantic*, 2-3.

8 Harlaftis, ‘Maritime History’, 211-212.

9 Ghent, Universiteitsbibliotheek (hereafter UBG), hs 0929, Michael de Febure, Logboek van het schip Sint-Pieter, kapitein Jan Frans Janssens, op zijn reis van Oostende naar Oost-Indië en terug, 1721-1722 (hereafter Logboek).

10 Ingold, *Perception of the environment*, 9, 25-26.

11 Ingold, *Perception of the environment*, 37.

12 Egmond, ‘On Northern Shores’, 131.

13 DeMello, *Animals and Society*, 3.

in interactions with animals, especially within the microcosm of the ship at sea, where animals served as living food supply and as pastime for sailors.¹⁴ Aline Steinbrecher has likewise argued that animal agency concerns the ways in which animals influenced the world and their surroundings through their activities and presence for, or resistance to, humans co-shaping history. Instead of considering marine *naturalia* as mere context, use value, or food supply for human history, we should thus view animal presence as the opportunity for human activities such as hunting, fishing, or observation to take place. The human side to this history, Steinbrecher argues, is most often aimed at the control, observation, and subjugation of exotic animals, similar to the views of early modern European travellers towards indigenous populations, whom they often considered as ‘uncivilised people’.¹⁵

In order to analyse De Febure’s logbook, this article is divided into four sections. The first section introduces the author and his space, the ship *Sint-Pieter*. The next section details the fishes and birds he studied, while the third section deals with food sources that the sailors knew about and used, as a predatory form of human-animal interaction. The fourth section analyses the logbook as an unpublished early modern travelogue. In the conclusion I argue for a broader understanding of spaces of knowledge production.

Michael de Febure and the Sint-Pieter

In 1721, Michael de Febure was chaplain of the ship *Sint-Pieter* destined for the Indian Malabar Coast. For him, the ship served as a vantage point to observe and experience the natural environment. His observations were noted down in the form of a logbook, a specific shipboard document which served to record navigational data, but also functioned as a personal diary holding a detailed account of daily occurrences onboard the ship and at the ultimate destination. The logbook had multiple functions: it served to identify shipping routes, to transmit the accumulated experience of skilled officers, to provide documentary evidence on the ship’s management, and to protect its officers and owners from claims of loss or damage. Usually the ship’s logbook was kept by senior officers, such as captains, lieutenants, or navigators, and could serve as a basis for published travelogues.¹⁶ Onboard the *Sint-Pieter*, the task of keeping the logbook was given to the ship’s chaplain. This was an unusual and singular instance in the context of Ostend voyages to Asia, as the logbooks and ships’ journals for the private expeditions (1715-1722) as well as Ostend Company expeditions (from 1723 onwards) were normally kept by captains, sailors, or merchants.¹⁷ Perhaps De Febure’s role in keeping a journal can be explained by the conditions of his employment, which he relates in his personal notes: the Ghent merchant Jacobus Maelcamp, a shipwright and principal merchant for the *Sint-Pieter*,

¹⁴ Krüger, ‘Das koloniale Tier’, 74, 85.

¹⁵ Steinbrecher, ‘Zugriffe’, 7-9, 12-13.

¹⁶ García-Herrera et. al., ‘Description and General background to Ships’, 13-14; Davids, ‘Sources of knowledge’, 79-81.

¹⁷ Parmentier, *Oostende & Co.*, 45.

hired De Febure in order to replace another chaplain to whom he had initially promised the position. On 2 February 1721, Maelcamp asked De Febure whether he wanted to accept the duty of ship's chaplain or priest, which he assured him to be a respectable and profitable employment, especially due to the written notes De Febure would keep.¹⁸ This would imply that he wrote his journal on the orders of Maelcamp, in addition to his duties as a shipboard priest.¹⁹

In addition to this journal, De Febure kept some personal notes in the margin of a church calendar, under the title 'Story of a Journey to East-India'. This source does not provide much additional information on shipboard activities, but its designation as *verhaal* (story) may indicate an influence of early modern travelogues as a genre on De Febure's reporting.²⁰ As such, De Febure acknowledged the influence of the published early modern traveller Jean-Baptiste Tavernier on his work and interests.²¹ Not only do these two sources give us a closer look into De Febure's own process of maritime discovery, they also provide us with information on his relations to fellow sailors and to the surrounding environment. His own journal was never published nor printed, and was written in his own style and format.²²

Jan Parmentier has argued that De Febure kept his logbook according to navigational customs already followed by the Portuguese during the sixteenth century, in which navigators noted down their observations of fauna, flora, sea currents, and measurements of the seabed.²³ However, he also points out that De Febure kept his logbook differently compared to other sailors, because he included details they would have considered self-evident, especially concerning the natural environment.²⁴ In De Febure's writings, we find all the elements common to ships' logbooks: wind currents, positioning, and daily occurrences, with keywords mentioned in the margins. Yet if we compare his logbook to other journals produced during voyages undertaken from the port of Ostend to Bengal and China, his writings show a greater level of detail and observation beyond mere navigational and meteorological information.²⁵ Especially for the Ostend Company voyages, logbooks or ships' journals were usually written according to a specific format: a page contained three shipboard days, with each day divided into columns to note the time, course, winds, and weather. Occasionally, onboard occurrences were noted, as well as brief natural observations. For instance, in the journal of the Ostend Company frigate *Aertshertoginne*,

18 UBG, RES 1849, Michael de Febure, Verhaal van een reis naar Oost-Indië, gemaakt als aalmoezenier op het schip Sint-Pieter van de Oostendse Compagnie, 1721-1722 (hereafter Verhaal), fol. 2: 'volgens myne daer over gehaudene notitie schriftelyck'.

19 As indicated on the crew list in De Febure, Logboek. See also Van Wesemael, 'Benauwende wereldreis', 142-143.

20 UBG, RES 1849, De Febure, Verhaal.

21 De Febure most probably refers to the Dutch edition of Tavernier and Glazemaker, *De zes reizen*.

22 UBG, HS 0929, De Febure, Logboek, fol. 22.

23 Parmentier, *Oostende & Co.*, 45-46.

24 Parmentier, *Oostende & Co.*, 117.

25 For instance, Laurent Meynne's journal of his 1726 voyage to Bengal mentions peculiar weather conditions such as fog, but not how the crew dealt with them: UBG, BHS 1843, Laurent Meynne, Fragment van het scheeps-journaal van het schip Charles vi naar Bengalen (herafter Fragment), 1726-1728, fol. 1v.

captained by Michiel Cayphas on a return journey from Brazil to Europe in 1728, the only mentions of *naturalia* are sightings of duckweed as an indication of land proximity.²⁶

The uniqueness of De Febure's journal – with his personal observations of marine *naturalia* as well as local life on the Malabar-coast – may be explained by the fact that he had never served at sea before: De Febure was initially a land-based priest.²⁷ Indeed, sailors were well aware that their journals used a very different writing style. Isaac Sunderman, for example, a German soldier and ship surgeon in service of the *voet* from 1692 to 1710, mentioned writing his travelogue for 'land dwellers' ignorant of shipboard life.²⁸ He professed writing differently than captains or navigators who 'mostly write of winds, degrees, courses, and sea journeys'.²⁹ De Febure's journal was more akin in style to that of the later Dutch ship surgeon Joannes Veltkamp, sailing to the Mediterranean and the Caribbean for the Amsterdam admiralty between 1759 and 1764. Veltkamp's hand-written journal also contained vivid descriptions beyond the usual navigational data, probably because he was not a trained sailor either.³⁰

Although there are no direct indications that De Febure's shipboard journal was influenced by navigational sources, as he does not explicitly refer to them, part of Jan Huygen van Linschoten's *Itinerario* on Portuguese navigation contains similar descriptions of marine fauna and flora as navigational markers or signs.³¹ This similarity between De Febure and Linschoten's descriptions of *naturalia* could therefore point to a shared navigational practice, rather than a direct stylistic appropriation by De Febure of Linschoten's work. Although Linschoten must have implicitly used practical shipboard knowledge on recognising natural phenomena as navigational signs, De Febure explicitly mentions integrating sailors' concrete practices in handling *naturalia*.

Coupled to his observations of marine life, De Febure regularly noted down temperature measurements by using an experimental thermometer. This was not common practice among sailors at the time, since the journal of the *Sint-Pieter* seems to be the only logbook where such measurements were noted. Christian Koninckx has thus considered De Febure as a pioneering figure in the development of marine science, as he forms a unique case in the history of early temperature measurements at sea. Although Koninckx was unable to determine the scale of measurement used, the regularity of these measurements confirm De Febure's role as an observer of shipboard climatological data. This is remarkable, as Austrian Netherlandish temperature measurements were apparently conducted earlier at sea than on land, where these only happened from 1763 onwards.³² On the other hand, such a scientific interest was not unheard of for a cleric or ship's chaplain: for example, the Jesuits at the college of Toulon offered courses in hydrography and astronomy for guards

26 UBG, HS 1854, Michiel Cayphas, *Scheepsjournaal van het fregatschip De Artshertoghinne Marie Elisabeth*, 1728, fol. 2-4.

27 As is evident from the Masses he held prior to his voyage, mentioned throughout *Le Febure, Verhaal*.

28 Van Gelder, *Het Oost-Indisch avontuur*, 241, 263.

29 Sunderman, *De werken*, xv-xvi.

30 Baars, *Journaal van Joannes Veltkamp*, 10.

31 For instance, Linschoten mentions birds as signs of proximity to the Tristan da Cunha islands: Linschoten, *Reys-Gheschrift*, 14.

32 Koninckx, 'Temperatuurmetingen op zee', 31-33.

of the French navy.³³ By the mid-eighteenth century, the library of the Jesuit seminar at Brest also contained no fewer than 136 books dedicated to the arts and sciences.³⁴

Following Shapin and Schaffer on the situatedness of early modern experimental knowledge, De Febure's logbook testifies to the ship's role as a shared space for knowledge production and an experimental scientific instrument in its own right.³⁵ Shapin and Schaffer consider science as a practical activity undertaken in a social context, rather than a discourse, emphasising its performative conduct.³⁶ The components De Febure used for this practical activity consisted in materially handling an instrument he labelled as 'thermometrum', and systematically noting down his observations. Yet the component lacking to turn his work into a fully-fledged scientific pursuit was its absence from engaging with a 'scientific' community through literary and social conventions.³⁷ Both his journal and *verhaal* remained unprinted and unpublished, nor do the texts ever mention a scholarly debate or reveal how De Febure engaged in the pursuit of temperature measurements or observations. His experimental use of the thermometer as a measuring instrument suggests that he was aware of scholarly developments at the time, perhaps through learned religious circles. Apart from the ship, there is no extensive indication of the social environment De Febure otherwise frequented, and how this could have contributed to his writing.

To situate De Febure's practices of writing and knowledge gathering onboard the social context of the ship, we should not overlook his position and main duties as ship's chaplain. These consisted of holding mass, preaching and comforting the sailors, and consoling the sick and dying.³⁸ On board the ship, the chaplain held an anomalous position: although educated and considered equivalent to commissioned officers, he had to eat and live among his social inferiors in the gunroom. His parish was made up of lower-deck sailors, but social hierarchies never allowed him to fully mingle with the crew.³⁹ De Febure formed an important part of the seamen's religious culture, providing a land-based infusion of religious elements into a culture shaped by the environment of the sea and the constrained space of the ship itself.⁴⁰ As such, chaplains provided comforting traditions and protective rites to the sailors, who saw themselves confronted with the perils of the sea.⁴¹ In De Febure's journal, we see this expressed most clearly when his perception of the natural environment went hand in hand with his role as the provider of protective rites. On the return journey, past Madagascar, when the ship faced a heavy nightly storm and was in danger of breaking, De Febure performed an exorcism across the whole ship:

33 Cabantous, *Le ciel dans la mer*, 218.

34 Cabantous, *Le ciel dans la mer*, 398.

35 Shapin and Schaffer, *Leviathan and the Air-Pump*, 303, 57. For the ship as a 'mobile site of scientific inquiry', see also Livingstone, *Putting Science in its Place*, 82.

36 Shapin and Schaffer, *Leviathan and the Air-Pump*, 14-15.

37 According to Shapin and Schaffer, *Leviathan and the Air-Pump*, 69, the third component of science consisted in publishing his writings, and engaging in a debate or conversation.

38 Cabantous, *Le ciel dans la mer*, 219.

39 Blake, *Evangelicals in the Royal Navy*, 25-26.

40 Patarino, 'Religious Shipboard Culture', 144-148.

41 Cabantous, *Le ciel dans la mer*, 10.

The night watch and captain-lieutenant believed that the ship was damaged by thunder or lightning, and that the great mast had been wrung from its place. Our eyesight was as if forced by the sharp rays of lightning, so that we were all in twilight. I performed the exorcism of our Holy Mother Church, sprinkling all the masts, the rigging, and the whole ship as best as possible with holy water, and after saying the prayers, praise be to God, we found the ship to be undamaged.⁴²

De Febure thus held complementary roles onboard the *Sint-Pieter*: as a collector of knowledge interested in *naturalia*, and as a chaplain performing his professional duties. Despite combining these roles, his logbook suggests that he did not connect his measurements and observations of *naturalia* with any religious views or functions, instead switching between his practical activities as provider of shipboard rites, as keeper of the logbook, and as producer of knowledge.

Wondrous Fish and Birds as Naturalia of the Sea

As soon as he reached unknown waters, De Febure showed an increased interest in the *naturalia* of the sea: from the Canary Islands onwards he coupled his observations on fish with measurements of the seawater temperature. On 22 June 1721 he wrote that ‘near three miles from us is the Island Palma being one of the Canary Islands. Today I have seen a Shark of remarkable size close to the ship.’⁴³ The next day he saw a whale, which the sailors referred to as a ‘Noort Caeper’ (*Eubalaena glacialis*), of three to four tons and thirty to forty feet long, which made a blowing noise outside of the water, like a mooing cow. This entry is immediately followed by the observation that his thermometer revealed a heat of 5,5 degrees in those waters.⁴⁴

In addition to fish De Febure showed an interest in birds: near Cabo Verde, he notes that the ship’s crew spotted a northern gannet bird, which some sailors called Endelmoco and others ‘Jan de ghent’, and compared this observation to European birds he was familiar with.⁴⁵ This indicates how, in his observations, De Febure relied on knowledge of the familiar world as well as on the oral culture of sailors, who gave various names and designations to marine fauna. Usually such observations were coupled to the ship’s position, as they could be an indicator of land. For instance, the journal of captain Laurens Meynne, who was on a mercantile voyage from Ostend to Bengal on board the ship *Carolus Sextus* in 1727, mentions similar birds when approaching Cabo Verde.⁴⁶ Meynne had no further

42 UBG, HS 0929, Le Febure, Logboek, fol. 28: ‘De wacht met hunnen Capt. Lut. Meynden dat het schip door den donder oft blixem beschadight was, hij meynde dat den grooten mast winuyt ghevrongen uyt syne plaetse, ons ghesicht was als geforceert door de schirpighe straelen van den blixem, soo dat wij al schemelden. Ick ded stracks de Exorcisme van onse moeder de H kerke, besproyende alle de masten, het ghewant, immers het heel Schip, soo wel het mogelijk was met ghewijt water, en naer het Eyndighen van gebeden vonden wij, Laus Deo, het schip onbeschadigt.’

43 UBG, HS 0929, De Febure, Logboek, fol. 2: ‘Omtrent drij mijlen van ons het Eylant Palma sijnde een van de Canarische Eylanden. Heden ghesien een Haye van merkelike grootte dicht aen het schip.’

44 UBG, HS 0929, De Febure, Logboek, fol. 2.

45 UBG, HS 0929, De Febure, Logboek, fol. 2v.

46 UBG, BHS 1843, Meynne, Fragment, fol. 6.

interest in describing the birds' appearance, however: all unknown birds were referred to as 'tropical'.⁴⁷

Wonder played a continuous role in De Febure's observations of marine life, as he recurrently notes observing 'fish of a wondrous kind', including a porpoise, which the sailors tried to harpoon for food and pastime:

Close to our ship a wondrous kind of a fish, measuring only eight to nine feet in length, and about four to five feet in width, without a tail, about as wide behind as in the middle, with two very great eyes in its head, a very brown skin. It was harpooned three or four times, but the harpoon ricocheted, and the fish flung itself upwards out of the water.⁴⁸

He also noted how the sailors dealt with other remarkable *naturalia* at sea. On 7 September 1721, near the Tristan da Cunha islands in the Atlantic Ocean, De Febure marvelled at the different kinds of birds he saw, as well as some yellow weeds called trumpets, which the sailors considered a sign of approaching the Cape of Good Hope.⁴⁹ On 20 September 1721, by a thermometer measurement of four degrees, De Febure observed the yellow weeds or floating trumpets in greater quantity, and mentions how the ship's trumpeters attempted to break them and use them as trumpets.⁵⁰ In this case, too, sailors were preying on the natural environment as a pastime or out of curiosity. De Febure was observing and describing the peculiar ways in which the sailors handled these *naturalia*, as well as their remarkable and exotic properties themselves, the sensual exotic nature of which he compared to more familiar European objects:

Today we saw many trumpets floating, called such because they are hollow on the inside with a length of thirty to forty feet. The width grows narrower along its length: first it is very narrow and the end it has a width of 1,5 quarter around. [...] They float on the water with the two exterior ends above water. They are so tough and yielding that they allow themselves to be folded like the hose brandy distillers use. Our trumpeters broke them into trumpets like hunting horns and blew on them, which was quite similar, but after three to four days they became like eel skins or rotting rushes.⁵¹

Reaching the equatorial line, De Febure recorded how the sailors relied on their knowledge of *naturalia* as signs, noting that 'it is a common observation of sailors that when the sun comes in the line, one has to endure a rough sea or tempest [...] Until now, praise be

47 UBG, BHS 1843, Meynne, Fragment, fol. 11: 'een tropicq voogel'.

48 UBG, HS 0929, De Febure, Logboek, fol. 32: 'Dicht aen ons schip een wonder fatzoen van eenen vis, hebbende maer de lenghte van 8 a 9 voeten, en de breete van ontrent 4 a 5 voeten sonder stert synde ontrent soo breed van Achter als in het midden, hebbende 2 seer groote Oogen in den Cop, heel bruyn van Huyt daer wiert 3 a 4 mael met de Apoen opgheschoten maer de Apoen botsde daer af, en den visch rechte sigh recht buyten het waeter.'

49 UBG, HS 0929, De Febure, Logboek, fol. 7v.

50 UBG, HS 0929, De Febure, Logboek, crew list, fol. 1.

51 UBG, HS 0929, De Febure, Logboek, fol. 8v: 'Heden zagen wij veel trompetten drijven zo genoemd omdat zij van binnen hol zijn met ene lengte van 30 tot 40 voet, de dikte is allenskens afnemende, eerst heel nauw en het einde hebbende een dikte van 1 ½ vierendeel rondom. [...] Zij drijven op het water met de twee uiterste einden boven water. Zij zijn zo taai en gevoegzaam dat zij zich laten plooiën als een slang die brandewijnstokers gebruiken. Onze trompetters kraakten daar trompetten van gelijk een jachthoorn, en bleezen erop hetgeen er tamelijk op geleek, maar na 3 tot 4 dagen werden zij als vellen van palingen of rotte biezen.'

to God, we still have calm weather, which is quite remarkable since we are now in such a great ocean, it must be the greatest of all the navigable sea.⁵²

De Febure was experiencing what Adamowsky has described as ‘the seas as treasure’.⁵³ He deemed it important to write down as much as possible about the *naturalia* he encountered. Using his knowledge about fishes and birds, perhaps acquired from books or fellow travellers, he described and identified what he saw. For De Febure, the seas were an unknown space concealing wonders of the natural world, which he wanted to know, record, and collect information on. Early modern natural philosophers often interpreted such observations as evidence of God’s omnipotence in the natural world.⁵⁴ For instance, the seventeenth-century French traveller François Leguat depicted brightly coloured sea-shells from the Indian Ocean as works of an exceptional Creator.⁵⁵ In the Dutch Republic, scholars also studied nature as a means of getting closer to God, considering the natural world as a second revelation in addition to the Bible, which could be read as ‘the book of nature’. Within this view, the miraculous and the marvellous were seen as a particularly striking examples of God’s omnipotence.⁵⁶ Due to his function as chaplain, one might expect a similar attitude in De Febure’s work, yet his manuscripts merely record marine *naturalia* as he encountered and observed them. His observations are qualified as remarkable, noteworthy, beautiful, or wondrous, but never explicitly interpreted as wonders of God’s creation. He only invokes the supernatural when using expressions such as *Laus Deo* (praise be to God) and *Ad maiorem Dei gloriam* (For the greater glory of God), at times when the ship and its crew safely arrive or escape danger.⁵⁷ Instead of offering religious interpretations, De Febure’s observations were primarily the product of direct encounters with the environment, influenced by the style of travelogues and shipboard practices.

Naturalia of the Sea as a Food Source for Sailors

Throughout his logbook, De Febure makes it clear that the crew’s observations of marine fauna were closely tied to their use of the marine environment as a food source. Their perceptions of unknown fauna were often accompanied by remarks on its nutritional value, for instance when De Febure noted how a sailor caught a seagull in the night: ‘It is a bird with a sharp beak like a stork, but the beak is white and ashen with white and grey feathers and legs like a duck or a goose’, adding that ‘they are also eaten, but taste rough. [...] The captain lieutenant continuously shot the flying birds.’⁵⁸ As they passed the Maldives, De

52 UBG, HS 0929, De Febure, Logboek, fol. 8v: ‘Het een gewone waarneming is bij zeevaarders dat als de zon in de linie komt dat men dan zware zee of tempeest te verduren krijgt [...] Tot nu toe hebben wij laus Deo nog stil weer wat zeer verwonderlijk is daar wij nu zijn in zo een grote oceaan, wel de grootste van heel de bevaarbare zee.’

53 Adamowsky, *The Mysterious Science of the Sea*, 18.

54 Shapin and Schaffer, *Leviathan and the Air-Pump*, 319-340.

55 Leguat and Paul Benelle, *Gevaarlyke en zeldzame reyzen*, 9.

56 Jorink, *Het ‘Boeck der Natuere’*, 9, 17-18.

57 UBG, HS 0929, De Febure, Logboek, passim.

58 UBG, HS 0929, De Febure, Logboek, fol. 11: ‘Het is eenen voghel lang van beck en scherp van beck als eenen hovaerts, maer den beck is wit en aschgrauw, is veel minder al seen Hovaert, en hadde witte en grauwe plumagie,

Febure also noted how a bonito was caught, reporting not only on its physical characteristics, but also comparing its taste to that of sturgeon and veal.⁵⁹

These culinary remarks were another unusual feature of De Febure's journal, as other Ostend logbooks usually do not mention the taste or appearance of caught fish. De Febure's descriptions have more in common here with early modern travellers' chronicles.⁶⁰ For example, the sixteenth-century Florentine merchant and maritime traveller Francesco Carletti wrote how he found himself stranded with Dutch sailors at the Fernando de Noronha islands, where he caught a large quantity of seabirds. Although the crew only had some rice and mouldy biscuits left, they were apprehensive to eat the birds, because they were troubled by their overwhelmingly fishy taste. Carletti showed the sailors how to prepare the birds by cooking them in seawater, finely cutting their livers, and frying them in salted butter. Mixed in a marinade with spices and vinegar, Carletti managed to prepare a delicious meal.⁶¹

Naturalia of the sea often proved to be a useful source for supplementing the shipboard diet, as food provisioning formed a recurring problem on early modern expeditions to Asia, due to long-distance traveling, unforeseen timing, and scarcity.⁶² The main cause of illness among early modern European sailors was a defective and monotonous diet, which relied heavily on staple foods such as salted beef, stockfish, biscuits, gruel, cheese, and beer, and which caused nutritional deficiencies.⁶³ The logbooks of the Ostend Company reveal that many of its ships that sailed for Asia faced similar problems: captain Laurens Meynne noted for example that on Friday 28 February 1727, his crew found 'that our bread from Hamburg was not suitable for feeding humans, so that the same was destined for the animals, as was the better part of our Ostend bread, which was full of worms'.⁶⁴ A similar fate befell the *Sint-Pieter*, for as the ship voyaged further, food stocks began to run dangerously low, threatening the expedition's success. De Febure reported: 'We yearn for fresh food. Every day many men go to their beds, sick with scurvy and other diseases, so that more than a third of the crew are incapable of working.'⁶⁵ The problem of inadequate provisions reared its head more than once during the journey, which meant that shipboard food was supplemented by whatever could be sourced from the marine environment, including dolphins and other marine animals.⁶⁶ On 23 June 1722, the crew caught and prepared sea

de pooten waeren ghelyck aen die van Henden oft gansen, maer an vooren met dry lanckwerpighe en scherpe naegels. Sij worden oock gheEeten, maer smaeken seer Reuws. [...] Den Capt Luitenant schoot en doode ghedurigh van de vliegende vogels.'

⁵⁹ UBG, HS 0929, De Febure, Logboek, fol. 11v.

⁶⁰ See for example François Leguat's *Gevaarlyke en zeldzame reyzen*, 5, which mentions the horrible taste of 'zeezwynen'.

⁶¹ Carletti and Carile, *Voyage autour du monde*, 280-281.

⁶² Bruijn, *Zeegang*, 74-76.

⁶³ Fury, 'Health and Healthcare at Sea', 194.

⁶⁴ UBG, HS 1843, Meynne, Fragment, fol. 5: 'Dat ons hamborgs broot niet bequam aen menschen t Eeten te geven was, soo dat tselve door de beesten gedestineert wiert beneevens een goet gedeelte van ons oostensch broodt dat vol wormen was.'

⁶⁵ UBG, HS 0929, De Febure, Logboek, fol. 11v: 'Wij krijghen daeghelijcx veele sicken in de koye soo van scheurbuyk als andersins, soo datter meer als 1/3 onbequam syn tot werken.'

⁶⁶ UBG, HS 0929, De Febure, Logboek, fol. 37.

turtles in the bay of Ascension island, in the southern Atlantic Ocean: 'Our sloop came aboard, carrying two beautiful living and heavy turtles, each one weighed about two to three hundred pounds. They also caught three small young turtles, each only the size of a small sea crab.'⁶⁷ The next day, the crew caught more sea turtles at Ascension. De Febure graphically described the 'wondrous ways' in which these were dissected, as well as the crew's ingenuity in finding different ways of cooking them, which merits quoting in full:

This morning a turtle was killed and prepared as food. It is a miraculous animal on the inside, with an exceptional amount of blood. There were more than two hundred beautiful egg yolks and they even brought twenty-five eggs, which these animals had just laid on the beach. The shells of these eggs are very thin, so that if one pushes just a little with a finger, a deep hole emerges. These animals have three hearts, one like humans, one like birds, and one like fish. The intestines were all cut open and eaten, except some which were used in blood sausages made from the blood of these animals; we all supped on this food for our noontime meal. [...] We had prepared this food in four ways: in a soup with leafy vegetables and sausages, stewed in a stew, in ragout, and a piece roasted with the egg yolks of these animals poured over. The stew was sinewy and comparable to the shanks of our beef.⁶⁸

In these cases, marine animals were used as a food source for humans. The turtles' presence on the island, and their choice of breeding ground, allowed the sailors to prey on them as a food source and adapt their diet. Other interactions with marine fauna also proved to be of a predatory nature, by focussing on their use value as a pastime. From his notes, we can conclude that De Febure was very aware of the importance of noting down the edible resources that the sea offered and that could be accessed shipboard. Regarding his reasons for doing so, we may notice his recurrent emphasis on the remarkable nature of such resources as part of his journal or travelogue, and his consistent comparison of exotic *naturalia* as food items with more familiar tastes from Europe, such as those of ragout, soup, sausages, veal, or sturgeon.

De Febure's Logbook as an Early Modern Travelogue

Once the *Sint-Pieter* reached Asia, De Febure's interests and observations went beyond his perception of the marine environment. He began to describe landmarks in detail, and

67 UBG, HS 0929, De Febure, Logboek, fol. 33: 'Quam onse sloop aen het boort medebrenghende 2 schoone levende schilpadden en swear van ider woegh wel 200 a 300 pont. Sy hadden oock dry kleine jonghe schilpaden, synde maer de groote van eene kleynne zee-krabbe.'

68 UBG, HS 0929, De Febure, Logboek, fol. 33: 'Desen voormiddagh wirt daer eene schilpadde ghedoot en tot spijse bereyt. Het is een wonder ghedirte van binnen hebbende uytnemende veel bloet. Daer waeren meer als 200 schoone doyers van Eyers an sij brachten noch wel 25 Eyers mede, die van ditto beesten noch maer en waren geleyt de schaelen van ditto Eyers syn seer duyn, soodanigh als men daer op met den vingher wat pranckt of duyet, datter eene diepte oft put incomt. Ditto beesten hebben 3 Herten, een ghelyck aen het menschen een aen het ghevoghelte en eene aen den visch. De Dermen warden alle goet open ghesneden en opghefreet, bealvent eenighe die ghebruyckt warden in bloet dermen van het bloet der selve beesten, maer sy borsten al wij hielen ons middagh mael met ditto spys [...] Wij hadde ditto spys op 4 manieren gheprepareert, een deel in een soupe met porcelyne en frikadellen, ghestoft in huyspot, een in Ragou, en een stuck ghebraeden en overgoten met de doerens van de Eyers van ditto beesten. Den Huspot was senuachtigh en ghelyck aen eene schynkel van ons rentvlesch.'

eventually even land-based society. De Febure's logbook closely resembles early modern European travel literature, rather than the usual format of ship logbooks, which scarcely describe their final destinations, since navigational routes and cargo transfers were their main focus. In contrast, De Febure provides extensive descriptions of places, customs, and people. This is most notable in his explicit reference to the travelogue of the seventeenth-century Frenchman Jean-Baptiste Tavernier when describing the sea-port of Surat:

It is important to note the description of the city of Zurata [Surat], done by Sir Jean-Baptiste Tavernier in the first part of his *Great Travels*, where he describes this city as very small. [...] It looks very different now, namely this city is in a more advantageous state, as rye bread compared to wheat bread.⁶⁹

This reference shows that De Febure had closely read the works of Tavernier, which influenced his own geographic observations.

De Febure also made ethnographic descriptions of the local population. As soon as he anchored at Colachel, between Travancore and Cape Comorin on the Malabar Coast, De Febure's journal transformed from a logbook into a travel diary, in which he reports in great detail on local society. He describes the local inhabitants as poor and bad people, almost entirely naked and repulsive rather than attractive.⁷⁰ He also dealt with local sailors and their 'heathen captain', as well as Muslim merchants peddling their wares.⁷¹ His description of the people of Malabar is similar to the observations of other travellers, such as those of the Ostend Company's ambassador Cobbé about the Bengali people.⁷² Both writers may have written their strongly biased reports as extensions of their descriptions of an exotic natural world, pervaded with shared tropes and assumptions concerning 'natives' and 'heathens', which were typical of European colonial attitudes at the time.⁷³ As a chaplain he was not involved in missionary endeavours himself, but at Calicut De Febure did criticise the Portuguese missionaries for not converting and instructing the local population thoroughly enough, again referring to them as 'heathens'.⁷⁴

Besides citing Tavernier's *Six Voyages*, De Febure also referred to other travelogues on the Surat region, writing in his journal that his observations were 'not according to my own judgment, but that of knowledgeable people: what I have read in books – that the Baians are a nation of deceivers – I have now confirmed myself.'⁷⁵ As scholars have shown, early modern travelogues formed a shared discourse to which other travellers referred in order to enforce their own authority claims.⁷⁶ Benjamin Schmidt has argued that this

69 UBG, HS 0929, De Febure, Logboek, fol. 22: 'Merkelyck is te noteren de bescreyvinghe van de stad Zurata ghedaen door Hr Jan Bapte Tavernier heeft ghedaen in syn Eerste deel van syne Grote Reyssen tot alwaer hy ditto stat seer is kleynachtigh bescreyven soo aengaende de westen, huysen, etc. het weten nu soo veel verschilt, te weten dat ditto stat nu voordeeligher in staet is, als rogen broot by het terwen broot vergeheleken.'

70 UBG, HS 0929, De Febure, Logboek, fol. 13v.

71 UBG, HS 0929, De Febure, Logboek, fol. 14.

72 SAA, GIC 5772, Cobbé, 7bre 1723 pres de Hugly 'letter to Marquis de Prié', fol. 7.

73 Rubiés, *Travellers and Cosmographers*, 273-277.

74 UBG, HS 0929, De Febure, Logboek, fol. 16.

75 UBG, HS 0929, De Febure, Logboek, fol. 1: 'Niet volgens myn Oordeel, maer volgens personen die daer van onderwinghe hebben: mer het gonne ick voor desen in boeken hebbe ghelesen, dat de Baianen een natie is vol bedrygers hebbe nu by onderwinghe vastghestelt.'

76 Versteeg, 'Bronnen voor de beschrijving van Turkije', 74-78.

‘pre-Saïdian’ discourse of orientalism – what he calls ‘the invention of exoticism’ – had its roots in the early modern Low Countries, where travelogues were highly influential in print culture.⁷⁷ At least since the seventeenth century, Dutch printed travel journals were indeed popular in scholarly circles and also found a wider readership, covering a mix of history, exploration, politics, topography, and ethnography.⁷⁸

De Febure was no exception: ambassador Cobbé’s personal library in Bengal also included travelogues of seventeenth-century travellers, such as François Bernier’s *Travels in the Mogul Empire*, De Bruijn’s *Travels in the Principal Parts of Asia Minor*, François Leguat’s *Voyage et aventures en deux isles désertes des Indes Orientales*, and a *Recueil des voyages des Indes Orientales*, probably De Renneville’s French adaptation of Isaac Commelin’s *Begin ende voortganch van de Vereenighde Nederlandsche Geoctroyeerde Oost-Indische Compagnie*.⁷⁹ On their travels to Asia, both Cobbé and De Febure would have found shared references in these travelogues, from which they appropriated criteria of judgment concerning the inhabitants of India and their observations on nature.

Early modern travelogues were also central to the European Republic of Letters: as Joan-Pau Rubiés has noted, collectors of such literature ‘were motivated by a passion – possibly a passion to collect, and certainly a passion to learn about the world and its peoples’.⁸⁰ This passion is clearly reflected in De Febure journal, as he keenly recorded natural observations and scientific measurements. Indeed, according to De Febure, one of the main motives for writing his journal was ‘curiosity’, which is a recurrent trope in early modern travelogues: authors often professed a desire to understand or make foreign people and countries known through exact observation.⁸¹ According to Stephan Halikowski-Smith, the notion of curiosity in European perceptions of Indian nature is situated at a critical juncture between the two paradigms of scientific experience and lived experience. He traces back the tropes of exuberance, abundance, and luxury to the European imaginary from Antiquity onwards, via the medieval genre of *mirabilia* to the world of early modern travelogues.⁸² Accordingly, De Febure’s repeated mentions of curiosity and ‘the remarkable’ may be situated in-between these two paradigms of scientific and lived experience.

Although De Febure may have been influenced by proto-Orientalist and exotic notions, he did not contribute to this body of literature himself by publishing his own travelogue. Instead, his practice of writing his logbook and journal may be considered as an act of self-fashioning, by which he inscribed himself within the style, lineage, and tradition of preceding European travellers to India.⁸³ Unfortunately, we lack further evidence on the afterlife of De Febure’s texts. How he used his writings after his return to the Low Countries remains unknown: as they were written before the official formation of the Ostend

77 Schmidt, *Inventing Exoticism*, 16.

78 Pettegree and Der Weduwen, *The Bookshop of the World*, 108-115.

79 SAA, GIC 5772, Papieren en Brieven Cobbé, ‘list of books and effects belonging to the late Mr. Cobbé’, fol. 1-4.

80 Rubiés, ‘History of Travayle’, 35-36. See also Friedrich’s contribution to this special issue, indicating Rumphius as a scholar belonging to the Republic of Letters.

81 Drijvers, *Ik hadde de Nieuwsgierigheid*.

82 Halikowski-Smith, ‘Perceptions of Nature’, 17-20.

83 Greenblatt, *Renaissance self-fashioning*.

Company, it was not kept in its archives but remained in private hands. We do know how the manuscript came to Ghent, however, because an annotation on the first page of his logbook notes that the manuscript was ‘gifted by the most notable Sir Fr. Vergauwen, senator, at Ghent on 12 may 1849’.⁸⁴ François Vergauwen was a Ghent senator, bibliophile, and collector with an impressive book collection; he must have acquired the manuscript in the nineteenth century before it was donated to the Ghent University archives.⁸⁵

Conclusion

De Febure’s logbook demonstrates that the sea formed an essential context for the study of *naturalia*, and that ships should be considered as spaces for knowledge production on marine *naturalia* in the early modern world. His knowledge production emerged from the confluence of different streams of knowledge: the influence or agency of nature itself, the influence of early modern European travelogues, and the shipboard as a shared space of practical environmental knowledge. Marcus Rediker has noted that the distribution of such knowledge on board the ship was learned through observation of the daily work routine.⁸⁶ In this system, the experience of older seamen often provided the measure for understanding events, as they ‘could read the signs of nature and were well-acquainted with the methods of maritime labour’.⁸⁷ Through his direct connection with the crew in their shared shipboard living conditions, De Febure observed and learned about these signs. As a result, his knowledge production was not an exclusively scholarly endeavour, as he reveals how the expertise of sailors helped shape his own: De Febure’s journal mentions how sailors caught birds or how the crew experimented in discovering numerous ways of cooking sea turtles.

De Febure’s shipboard knowledge production is an excellent example of the approach to environmental knowledge as described by Florike Egmond and Peter Mason in their work on Adriaen Coenen’s sixteenth-century *Visboeck* (Book of fish). They argue that ‘the expanding knowledge of the world was invented, received and reinvented by a category of people who seem to have occupied a position somewhere between “popular” and “learned” culture’.⁸⁸ People often associated with ‘popular culture’ came up with startling contributions, as precursors of the Gramscian ‘organic intellectuals’.⁸⁹ In fact, Egmond and Mason reject a clear dichotomy between popular and learned culture, situating Coenen in-between the common folk and the Republic of Letters, in an area where such distinctions were completely blurred.⁹⁰ De Febure occupied a very similar position. He was a chaplain

84 ‘UBG, HS 0929, De Febure, Logboek, unfoliated: ‘Dit handschrift is my geschonken geweest door den weledelen heer F. Vergauwen, senateur, te Gent den 12 mei 1849.’

85 Vergauwen, *Catalogue de la bibliothèque*.

86 Rediker, *Between the Devil and the Deep Blue Sea*, 87.

87 Rediker, *Between the Devil and the Deep Blue Sea*, 157–158.

88 Egmond and Mason, “‘These are people who eat raw fish’”, 312.

89 Egmond, and Mason, ‘Skeletons on Show’, 93.

90 Egmond and Mason, ‘Skeletons on Show’, 110.

as well as a keen observer of the natural world, finding himself in-between the bookish culture of travelogues – whose style he appropriated for recording his own observations – and the practical knowledge of sailors' technical traditions. In addition, human-animal studies remind us that the agency and presence of animals could influence sailors' practical knowledge, as well as De Febure's observations.

A shared notion among collectors of *naturalia* as luxurious objects and De Febure's marine observations is that of curiosity and wonder. In his journal, he repeatedly expresses his amazement at the surrounding ecosystem, just as Ostend Company ambassadors collected the most wondrous living fauna for their aviaries or *naturalia* for their curiosity cabinets. Indeed, early modern European voyages tapped into a fascination for the wonderful and marvelous properties of *naturalia*, prompting a reconsideration of how nature should be explored.⁹¹ Florike Egmond has also noted the prevalence of such key terms as wonder, curiosity, and rarity in the early modern appraisal of exotic objects and animals.⁹² Likewise, Eric Jorink has argued that belief and reason merged when studying nature as a carrier of meaning.⁹³

Despite his role as a chaplain, however, De Febure's writings do not betray any strong religious interpretations of marine *naturalia*: his observations are devoid of metaphysical and religious arguments. Instead, his writings show him to have been a curious lover of nature, who kept a meticulous account of the *naturalia* he encountered and accurately observed in their original context. Yet he was also marked by a culture of reading and the social world of sailors engaging with *naturalia* in a practical way. This made his interpretations of *naturalia*, and his writings as a whole, into distinctly hybrid products of shipboard knowledge and early modern culture. De Febure should therefore be situated in-between the knowledge provided by the bookish culture of travelogues on the one hand, and by empirical observations within a practical and oral shipboard culture approaching the environment as a 'sentient ecology' on the other. The act of writing his journal was De Febure's way of relating to the environment, just as his descriptions allowed him to construct this lifeworld. This makes his journal into an atypical and exceptional account, written at the confluence of knowledge streams and shaping knowledge production at sea. It also invites future study of maritime knowledge production beyond the Southern-Netherlandish context.

Bibliography

- Adamowsky, Natascha, *The Mysterious Science of the Sea, 1775-1943* (London 2015).
 Baars, Rosanne, *Het Journaal van Joannes Veltkamp (1759-1764)* (Amsterdam 2014).
 Blake, Richard, *Evangelicals in the Royal Navy 1775-1815. Blue Lights & Psalm-Singers* (Suffolk 2008).
 Bruijn, Jaap R., *Zeevang. Zeevarend Nederland in de achttiende eeuw* (Zutphen 2016).
 Cabantous, Alain, *Le ciel dans la mer. Christianisme et civilisation maritime, xve-xixe siècle* (Paris 1990).

⁹¹ Daston and Park, *Wonders and the Order of Nature*, 147-148; Adamowsky, *The Mysterious Science of the Sea*, 8.

⁹² Egmond, 'Precious Nature', 51-54.

⁹³ Jorink, *Het 'Boeck der Natuere'*, 42.

- Buchet, Christian, and Gérard Le Bouëdec (eds.), *The Sea in History. The Early Modern World* (Woodbridge 2017).
- Carletti, Francesco, and Paolo Carile, *Voyage autour du monde de Francesco Carletti (1594-1606)* (Paris 1999).
- Daston, Lorraine, and Katharine Park, *Wonders and the Order of Nature, 1150-1750* (New York 1998).
- Davids, Karel, 'Sources of Knowledge. Journals, Logs and Travel Accounts', in John Hattendorf (ed.), *Maritime History*, 2 vols. (Malabar 1997) ii, 79-85.
- De Mello, Margo, *Animals and Society. An Introduction to Human-Animal Studies* (New York 2012).
- Drijvers, Jan Willem, *Ik hadde de Nieuwgierigheid. De Reizen door het Nabije Oosten van Cornelis de Bruijn (ca. 1652-1727)* (Leiden 1997).
- Egmond, Florike, 'On Northern Shores: Sixteenth-Century Observations of Fish and Seabirds (North Sea and North Atlantic)', in Arthur MacGregor (ed.), *Naturalists in the Field. Collecting, Recording and Preserving the Natural World from the Fifteenth to the Twenty-First Century* (Leiden 2018) 129-148.
- Egmond, Florike, 'Precious Nature. Rare *Naturalia* as Collectors' Items and Gifts in Early Modern Europe', in Rengenier C. Rittersma (ed.), *Luxury in the Low Countries. Miscellaneous Reflections on Netherlandish Material Culture, 1500 to the Present* (Brussels 2010) 47-66.
- Egmond, Florike, and Peter Mason, 'Skeletons on Show. Learned Entertainment and Popular Knowledge', *History Workshop Journal* 41 (1996) 92-116.
- Egmond, Florike, and Peter Mason, "'These are the people who eat raw fish". Contours of the ethnographic imagination in the sixteenth century', *Viator* 31 (2000) 311-360.
- Fury, Cheryl A., 'Health and Healthcare at Sea', in Cheryl A. Fury (ed.), *The Social History of English Seamen, 1485-1649* (Woodbridge 2012) 193-228.
- García-Herrera, Ricardo, C. Wilkinson, F.B. Koek, M.R. Prieto, N. Calvo, and E. Hernandez, 'Description and General background to Ships' Logbooks as a source of Climatic Data', *Climatic Change* 73 (2005) 13-63.
- Greenblatt, Stephen Jay, *Renaissance Self-Fashioning. From More to Shakespeare* (Chicago 2005).
- Halikowski-Smith, Stefan, 'Perceptions of Nature in Early Modern Portuguese India', *Itinerario* 31 (2007/2) 17-49.
- Harlaftis, Gelina, 'Maritime History or the History of 'Thalassa'', in Gelina Harlaftis, Nikos Karapidakis, Kostas Sbonias, and Vaios Vaiopoulos (eds.), *The New Ways of History. Developments in Historiography* (London 2009) 211-238.
- Ingold, Tim, *The Perception of the Environment. Essays on Livelihood, Dwelling and Skill* (London 2000).
- Jorink, Eric, *Het 'Boeck der Natuere'. Nederlandse geleerden en de wonderen van Gods schlepping 1575-1715* (Leiden 2006).
- Koninckx, Christiaan, 'Temperatuurmetingen op zee in de 18de eeuw', in Christiaan Koninckx (ed.), *Wetenschap op zee* (Brussel 2004) 25-66.
- Krüger, Gesine, 'Das koloniale Tier. Natur – Kultur – Geschichte', in Thomas Forrer and Angelika Linke (eds.), *Wo ist Kultur? Perspektiven der Kulturanalyse* (Zürich 2014) 73-93.
- Leguat, François, Maximilien Misson, and Paul Benelle, *De gevaarlyke en zeldzame Reyzen van den heere François Leguat met zyn byhebbend Gezelschap naar twee Onbewoonde Oostindische Eylanden* (Utrecht: Willem Broedelet, 1708).
- Linschoten, Jan Huygen Van, *Reys-Gheschrift vande Navigatien der Portugaloyzers in Orienten* (Amsterdam: Everhardt Cloppenburg, 1644).
- Livingstone, David N., *Putting Science in its Place. Geographies of Scientific Knowledge* (Chicago 2013).
- Macgregor, Arthur, 'Introduction', in Arthur Macgregor (ed.), *Naturalists in the Field. Collecting, Recording and Preserving the Natural World from the Fifteenth to the Twenty-First century*. (Leiden 2018) 1-39.
- Parmentier, Jan, *Oostende & Co. Het verhaal van de Zuid-Nederlandse Oost-Indiëvaart 1715-1735* (Gent 2002).
- Patarino Jr., Vincent V., 'The Religious Shipboard Culture of Sixteenth and Seventeenth-Century English Sailors', in Cheryl A. Fury (ed.), *The Social History of English Seamen 1485-1649* (Woodbridge 2012) 141-192.

- Pettegree, Andrew, and Arthur der Weduwen, *The Bookshop of the World. Making and Trading Books in the Dutch Golden Age* (London 2019).
- Rediker, Marcus, *Between the Devil and the Deep Blue Sea. Merchant Seamen, Pirates, and the Anglo-American Maritime World, 1700-1750* (Cambridge 1987).
- Rediker, Marcus, *Outlaws of the Atlantic. Sailors, Pirates and Motley Crews in the Age of Sail* (Boston 2014).
- Rubiés, Joan-Pau, *Travellers and Cosmographers. Studies in the History of Early Modern Travel and Ethnology* (Farnham 2007).
- Rubiés, Joan-Pau, 'From the 'History of Travayle' to the History of Travel Collections. The Rise of an Early Modern Genre', in Daniel Carey and Claire Jowitt (eds.), *Richard Hakluyt and Travel Writing in Early Modern Europe* (London 2012) 25-41.
- Schmidt, Benjamin, *Inventing Exoticism. Geography, Globalism and Europe's Early Modern World* (Philadelphia 2015).
- Shapin, Steven, and Simon Schaffer, *Leviathan and the Air-Pump. Hobbes, Boyle, and the Experimental Life* (New Jersey 2011).
- Steinbrecher, Aline, 'Zugriffe ("Tiere und Geschichte")', in Roland Borgards (ed.), *Tiere. Kulturwissenschaftliches Handbuch* (Berlin 2016) 7-16.
- Sunderman, Isaacus, *De werken. Zyne tweemalige Reysen naar Oost-Indiën. Het Eerste Deel.* (Batavia: Gedrukt voor den Autheur, 1711).
- Tavernier, Jean-Baptiste, and Jan Hendrik Glazemaker, *De Zes Reizen Van De Heer J. Bapt. Tavernier, Baron van Aubonne, die hy, gedurende de tijd van veertig jaren, in Turkijen, Persiën, en in d'Indiën, langs alle de wegen, die derwaarts strekken, gedaan heeft* (Amsterdam: Weduwe Johannes van Someren, 1682).
- Van Gelder, Roelof, *Het Oost-Indisch avontuur. Duitsers in dienst van de voc (1600-1800)*. (Nijmegen 1997).
- Van Wesemael, Maurits, 'De benauwende wereldreis van een schuchtere Gentenaar', *Ghendtsche Tydinghen* 10 (1981/3) 134-156.
- Vergauwen, François, *Catalogue de la bibliothèque de Feu Fr. Vergauwen* (Brussels 1884).
- Versteeg, Annemieke, "'Zich te bedienen van den arbeid van anderen". Bronnen voor de beschrijving van Turkije', in Jan Willem Drijvers (ed.), *Ik hadde de nieuwsgierigheid. De reizen door het Nabije Oosten van Cornelis de Bruijn (ca. 1652-1727)* (Leiden 1997), 71-82.
- Williams, Glyn, *Naturalists at Sea. Scientific travellers from Dampier to Darwin* (London 2013).