Linking Seas and Lands in Medieval Geographic Thinking during the Crusades and the Discovery of the Atlantic World

Abstract. In keeping with the two-fold approach of this volume, this paper presents a pair of case studies that elaborate on the interplay between land and sea in the Middle Ages. The first case study focuses on crusade treatises from the thirteenth century, which reveal that, due to its location between the Mediterranean and the Red Sea (or Indian Ocean), Egypt was seen as the economic backbone of the Mamluk Empire. Thus, as suggested by the writings of William of Adam and Marino Sanudo, Egypt played a major role as a hub for trade with India. The second case study reflects on the notion that India was also reachable via the (Atlantic) Ocean (suggested, for example, by the thirteenth-century English Franciscan friar Roger Bacon). Although this idea of the Ocean as a connective seaway was, at first, only pursued theoretically, it nevertheless reveals that land and sea were perceived as interrelated spheres of communication and travel in the period. In 1492, Christopher Columbus's travels were seen to have made this theoretical connection a reality, as he initially believed that he had reached India via the Ocean.

In recent years, seascapes and maritime trade routes have been the subject of extensive study. Numerous analyses have identified seas and rivers as vital (maybe even decisive) factors of economic exchange and communication. Whereas most of these studies self-consciously adopt a modern interpretative position in relation to the economic importance of seas and rivers for the period, the aim of this article is to demonstrate that medieval authors were already thinking about these aspects of geography. This begs the question: if medieval writers understood the interplay between land and sea similar to modern research, what role did the complementary character of land and sea routes actually play in medieval geographic thinking? Which seas were seen as connected, and which lands were perceived as being enclosed between seas?

I will analyse two different examples in order to include the geographical settings outlined by the terms *entre mers* and *outremer*. Both cases analysed here are exemplary cases. They are by no means intended to address the topic comprehensively but rather to serve as case studies that elucidate a larger paradigm. The first focuses on one of the more striking examples of the passage and

transition zones between seas, namely Egypt, which is situated between the Mediterranean and the Red Sea (or Indian Ocean). Until now, medieval European connections to the region around the Indian Ocean have been analysed mainly with a focus on economic contexts.¹ Although crusade treatises form one specific textual genre that reflects on the geographic position of Egypt between the Mediterranean and the Indian Ocean, they have been largely neglected in this regard.² After the conquest of Acre by the Mamluks in 1291, many Christian writers called for a new crusade to reconquer the Holy Land. Most of these treatises proposed a campaign that would strike at the heart of the Mamluk Sultanate (i.e. Egypt).³ This popular approach led many individual authors to reflect upon the important geographical position held by Mamluk Egypt.

My second case study analyses the inverted model: the role that seas played as links between distant lands. The most obvious medieval example of this was the so-called Holy Land, which from a continental European point of

- 1 See for example Michel Mollat (ed.), Sociétés et compagnies de commerce en Orient et dans l'Océan Indien. Actes du 8. colloque international d'histoire maritime (Beyrouth, 5-10 Sept. 1966), Paris 1970. Pius Malekandathil, Maritime India. Trade, Religion and Polity in the Indian Ocean, Dehli 2010. Sebouh David Aslanian, From the Indian Ocean to the Mediterranean. The Global Trade Networks of Armenian Merchants from New Julfa (The California World History Library 17), Berkeley 2011. Antoni Picazo Muntaner, A Global Dream. The Indian Ocean in the European Trading Horizon, in: Oceans Connect. Reflections on Water Worlds across Time and Space, ed. Rila Mukherjee, Delhi 2013, 205-214. Michael Pearson, Trade, Circulation, and Flow in the Indian Ocean World, New York 2015. Federico De Romanis and Marco Maiuro (ed.), Across the Ocean. Nine Essays on Indo-Mediterranean Trade (Columbia Studies in the Classical Tradition 41), Leiden 2015. Michael Borgolte and Nikolas Jaspert (ed.), Maritimes Mittelalter. Meere als Kommunikationsräume (Vorträge und Forschungen 83), Ostfildern 2016. Friedrich Edelmayer and Gerhard Pfeisinger (ed.), Ozeane. Mythen, Interaktionen und Konflikte (Studien zur Geschichte und Kultur der iberischen und iberoamerikanischen Länder 16), Münster 2017.
- 2 For two notable exceptions, see Emmanuelle Vagnon, Géographie et stratégies dans les projets de croisade, XIIIe-XVe Siècle, in: Les projets de croisade. Géostratégie et diplomatie européenne du XIVe au XVIIE Siècle, ed. Jacques Paviot (Croisades tardives 1), Toulouse 2014, 125–150; and Patrick Gautier Dalché, Cartes, réflexion stratégique et projets de croisade à la fin du XIIIe et au début du XIVe siècle. Une initiative franciscaine?, in: Francia 37 (2010), 77–95.
- 3 See Jacques Paviot (ed.), Les projets de croisade. Géostratégie et diplomatie européenne du XIV^e au XVII^e (Croisades tardives, 1), Toulouse 2014. Antony Leopold, How to Recover the Holy Land. The Crusade Proposals of the Late Thirteenth and Early Fourteenth Centuries, Aldershot 2000. Norman Housley, The Later Crusades 1274–1580. From Lyons to Alcazar, Oxford 1992. Sylvia Schein, Fideles crucis. The Papacy, the West, and the Recovery of the Holy Land, Oxford 1991.

view was (and was actually called) *Outremer*—that is, the region on the far side of the Mediterranean.⁴ However, I want to focus here on another geographic question, namely that of the potential existence of a sea route to India via the (Atlantic) Ocean. Today, the crossing of the Atlantic Ocean is primarily connected to Christopher Columbus's voyages in the late fifteenth century. The question of a sea route to India not only played an established role in medieval geographical thinking, it also took a number of different forms in the period.

In both cases, my analysis underscores the perception of land and sea as interrelated spheres of communication and travel. As far as the Middle Ages are concerned, however, we must explore the degree to which interrelated landand seascapes were perceived or described as connective elements or—as this volume attempts to advance—if geographic thinkers even had an analytical model upon which to base these cases.

The case studies in question have one more thing in common: they both highlight the importance of India as the source and origin of expensive luxury goods that were sought after by Europeans. This aspect became ever more crucial with the establishment of the Mamluk Sultanate and the expansion of the early Ottomans, which made the land route to India increasingly inaccessible.⁵ As a consequence, the question of possible sea routes to the Indian Ocean became a subject of great importance, as did the need for reliable geographic information.⁶

In 1970, Jacques le Goff stated that the medieval Western world had no substantial knowledge about the 'realities' of the Indian Ocean. More precisely, he argued that it was only by 1415 that the Indian Ocean was perceived as an 'open sea' connected to other large waterbodies. Previously, Latin-Christian authors had depicted it as closed or landlocked. While most medieval world maps do not conform to modern notions of precision and accuracy, this does not mean that no precise information about trading routes and seaways to India were available. For example, several thirteenth-century world maps

- 4 See Alan Murray, Outremer, in: *The Crusades. An Encyclopedia*, ed. Alan Murray, 4 vol., Santa Barbara 2006, 910–912.
- 5 Barry Cunliffe, Facing the Ocean. The Atlantic and its Peoples, 8000 BC-AD 1500, Oxford 2001, 547–548.
- 6 On the landscape, see André Wink, From the Mediterranean to the Indian Ocean. Medieval History in Geographic Perspective, in: *Comparative Studies in Society and History* 44 (2002), 416–445.
- 7 Jacques Le Goff, L'Occident médiéval et l'Océan Indien. Un horizon onirique, in: *Un autre Moyen Âge*, ed. Jacques Le Goff, Paris 1999, 269–286, here 269.
- 8 Le Goff, L'Occident médiéval (cf. n. 7), 270-271.
- 9 Picazo Muntaner, Global Dream (cf. n. 1), 205f. and 209.

already depicted the Indian Ocean as connected to a larger Ocean that was believed to encompass the world. A closer look at travelogues and other texts reflecting the geographical knowledge of the period also demonstrates that from the fourteenth century onwards, this Ocean was no longer perceived as an unnavigable barrier that surrounded the known world. Quite the contrary, the Ocean and the seas were seen as forming a system of interconnected waterbodies. This knowledge resulted primarily from the "interplay between geographical thought and social (navigational, mercantile) practice. In the two following case studies, we shall explore how closely connected theoretical and practical geographical knowledge had actually become by the thirteenth century.

Egypt as a Land Entre Mers

The crusade treatises of the thirteenth and fourteenth century relied heavily on geographical knowledge. In 1274, the second Council of Lyon extended the privileges of the crusaders (the plenary indulgence) to everyone who could contribute valuable information. This request for (geographical) information on Palestine and the Near East was renewed by Pope Nicholas IV after the fall of Acre in 1291. In response, an impressive number of authors produced a series of treatises, each one proposing different strategies to reconquer the Holy Land. However, the geographical space they were interested in stretched far beyond

- 10 Marianne O'Doherty, A Peripheral Matter? Oceans in the East in Late-Medieval Thought, Report, and Cartography, in: *Bulletin of International Medieval Research* 16 (2011), 14–59.
- 11 Christoph Mauntel, Vom Ozean umfasst. Gewässer als konstitutives Element mittelalterlicher Weltordnungen, in: *Ozeane* (cf. n. 1), 57–74. Martin W. Lewis, Dividing the Ocean Sea, in: *Geographical Review* 89 (1999), 188–214, here 196–198. On the Indian Ocean in Arabic-islamic and Latin-christian geographic thought see Christoph Mauntel and Jenny Rahel Oesterle, Wasserwelten. Ozeane und Meere in der mittelalterlichen christlichen und arabischen Kosmographie, in: *Wasser in der mittelalterlichen Kultur / Water in Medieval Culture. Gebrauch Wahrnehmung Symbolik Uses, Perceptions, and Symbolism*, ed. Gerlinde Huber-Rebenich, Christian Rohr and Michael Stolz (Das Mittelalter, Beihefte 4), Berlin/Boston 2017, 59–77.
- 12 O'Doherty, A Peripheral Matter? (cf. n. 10), 15.
- 13 Antonio García Espada, The Geographical Enlargement of the Crusade Theory after 1291. Its Subaltern Roots, in: *Les Projets de Croisade. Géostratégie et Diplomatie européenne du XIV*[®] *au XVII*[®] *Siècle*, ed. Jacques Paviot (Croisades tardives 1), Toulouse 2014, 109–124, here 111–112.

the borders of Palestine and included regions such as Armenia, Egypt, Arabia, and even India. 14

I have chosen a few of the most prominent examples, which have been made more accessible by new editions lately. The authors of these treatises were well-educated men: the Franciscan friar Fidentius of Padova, for instance, was the vicar general of the Franciscan province of the Holy Land. Having attended the Second Council of Lyon, he travelled back to Tripoli, which was conquered by the Mamluks in 1289. Two years later, he presented his treatise, the Liber recuperationis Terrae Sanctae, to the pope. 15 Likewise, Pierre Dubois, the author of another treatise that was published in 1306 (*De recuperatione Terre* Sancte), studied at Paris and became advocate du roi of Philip IV in Normandy.¹⁶ William of Adam, a Dominican friar born in southwest France, seems to have travelled himself through Palestine and Constantinople before he wrote his Tractatus quomodo Sarraceni sunt expugnandi between 1314 and 1316.¹⁷ Throughout the entire work he emphasised his own experience and first-hand knowledge of the region.¹⁸ The last crusade treatise in my sample is the *Liber* Secretorum Fidelium Crucis (1312-1321) by Marino Sanudo, a Venetian merchant and publicist who was also widely travelled. In the dedication manuscripts of his work, Sanudo cooperated with the Italian cartographer Pietro Vesconte, who drafted a set of maps for the treatise. 19

- 14 García Espada, Geographical Enlargement (cf. n. 13); Gautier-Dalché (cf. n. 2), Cartes. 80.
- 15 Fidence de Padoue, Liber recuperationis Terre Sancte, in: *Projets de croisade (v.1290-v.1330)*, ed. Jacques Paviot (Documents relatifs à l'histoire des croisades 20), Paris 2008, 53–169. See Paolo Evangelisti, *Fidenzio da Padova e la Letteratura crociato-missionaria Minoritica. Strategie e Modelli francescani per il Dominio (XIII-XV sec.)*, Bologna 1998.
- 16 Pierre Dubois, *De recuperatione Terre Sancte. Traité de politique générale*, ed. Charles-Victor Langlois (Collection de Textes pour servir à l'Étude et à l'Enseignement de l'Histoire 9), Paris 1891.
- 17 William of Adam, *How to Defeat the Saracens*, ed. Giles Constable, Washington 2012.
- 18 William of Adam, How to Defeat (cf. n. 17), 54, 102-104, 114.
- 19 On their collaboration, see Edson, Evelyn, Reviving the Crusade. Sanudo's Schemes and Vesconte's Maps, in: *Eastward Bound. Travel and Travellers, 1050–1550*, ed. Rosamund Allen, Manchester 2004, 131–155. Stefan Schröder, Wissenstransfer und Kartieren von Herrschaft? Zum Verhältnis von Wissen und Macht bei al-Idrīsī und Marino Sanudo, in: *Herrschaft verorten. Politische Kartographie im Mittelalter und in der frühen Neuzeit*, ed. Ingrid Baumgärtner and Martina Stercken (Medienwandel Medienwechsel Medienwissen 19), Zurich 2012, 313–333. Christopher Tyerman, Marino Sanudo Torsello and the Lost Crusade. Lobbying in the Fourteenth Century, in: *Transactions of the Royal Historical Society London* 32 (1982), 57–73.

What the aforementioned treatises have in common is the representation of a new level of strategic thinking in planning a crusade.²⁰ In the eyes of their authors, geographical knowledge was clearly crucial for success, although the treatises differed on many points as regards content. Whereas Pierre Dubois focused mainly on inter-Christian problems and their possible solutions, Marino Sanudo took a far more economic approach to planning a crusade.²¹

Although it goes without saying that every author had his own agenda for promoting a crusade, nearly all authors focussed their attention on the political and economic strength of Egypt as the backbone of the Mamluk Sultanate.²² The reason was—and many treatises agree on this—that the majority of the routes to India passed through Egypt: "Spices and goods that originate (...) from India (...)," as Marino Sanudo put it, "are brought westwards across the sea of the Ocean and are transferred from one sea to the other."23 Egypt was situated at the end of this seaborne route, and, as William of Adam observed, it gained immense profits from trade with India.²⁴ To illustrate this advantage, he inserted detailed geographic observations in his text that outlined the geographic position and the most important ports of the Indian Ocean. According to William, the Indian Ocean constituted "a branch of the sea of the ocean," which was even larger than the Mediterranean. Furthermore, the Indian Ocean itself had many branches and gulfs, one of which stretched between the southern part of Arabia on one side and "true Ethiopia" (i.e. the African coast) on the other. At the end of this 'gulf' (the Arabian Sea) he located the port of Aden, which formed the gate to the Red Sea; and he explicitly pointed out that the two seas were connected. In short, William concluded that the immense benefit to Egypt that derived from trade with India was almost entirely due to its geographical position, "for all of the things that are sold in Egypt, such as pepper,

- 20 García Espada, Geographical Enlargement (cf. n. 13), 109-110.
- 21 See David Jacoby, Marino Sanudo Torsello on Trade Routes, Commodities, and Taxation, in: *Philanagnostes. Studi in Onore di Marino Zorzi*, ed. Chryssa Maltezou, Peter Schreiner, and Margherita Losacco, Venice 2008, 185–197.
- 22 García Espada, Geographical Enlargement (cf. n. 13), 118-119.
- 23 Quod magna pars honoris, reditus, prouentus & exaltationis Soldani & gentium illi subiectarum, est propter speciariam, & alia multa mercimonia quae omnia non nascuntur in terris & partibus Soldano subiectis; imo nascuntur in terris & partibus Indiae, & per mare Oceanum versus Occidentem; ab altero ipsius maris latere transferuntur. Marino Sanudo, Liber secretorum fidelium crucis super Terræ Sanctæ recuperatione et conservatione, ed. Joshua Prawer, Toronto 1972, 22. English translation: idem, The Book of Secrets of the Faithful of the Cross, ed. Peter Lock (Crusade Texts in Translation 21), Farnham 2011, 49. See also Dubois, De recuperatione Terre Sancte (cf. n. 16), 56 (§ 68).
- 24 Emolumentum ergo quale et quantum Sarracenis Egipti proueniat de partibus Indiarum hoc nullus dubitet (...). William of Adam, How to Defeat (cf. n. 17), 96.

ginger, and other spices; gold and precious stones; silk and those precious materials dyed with the colours of India; and all other precious things, are carried from India to Egypt."²⁵

This description of the Arabian Sea as a 'gulf' in the Indian Ocean and the contiguous Red Sea, which was reachable via the Gulf of Aden, is quite detailed and is consistent with the basic features in the maps of Pietro Vesconte (ca. 1321) or in the so-called Catalan World map (ca. 1450).²⁶ William's central argument that Egypt's wealth was based entirely on goods coming from India was itself founded on the fact that continuous waterbodies connected India and Egypt. Indeed, he states that if Egypt lost control of trade with India, it would become economically unviable due to a lack of its own natural resources.²⁷

Marino Sanudo not only offered a similar analysis, he also elaborated on William's ideas as far as concrete trade routes were concerned. Sanudo emphasised that there were two main ports in India: Malabar and Gujarat. From these ports the luxury goods were brought—over the Indian Ocean—mainly to four ports: Hormus, Kish, Basra, and Aden; the first three of these were controlled by the Mongols and were located in the Persian Gulf. However,

25 Et hoc ut melius cognoscatur presciendum est quod unum brachium maris occeani uersus meridiem terram diuidit, quod innumerabiles prouincias et ciuitates in suis littoribus habet et infra sinum suum ambit et continet paruas et magnas, mirabiles et miserabiles insulas infinitas. Et istud brachium mare Indicum appellatur. Quod maius esse quam istud nostrum Mediterraneum comprobatur. Brachium uero istud diuiditur in gulfos et portus plurimos et anfractus.

De quo inter alios unus magnus gulfus uersus occidentem regionis illius protenditur, qui ex uno latere uersus meridiem Arabie partem et Idumeam et ex altera montes maximos, preter multa que omitto in parte inaccessibiles. Vltra quos montes ueram Ethiopiam habet et in fine sinus sui est quedam ciuitas situata que Eden nuncupatur (...). Hec ciuitas ex una parte habet gulfum maris Indici et ex altera mare Rubrum, ad quod itur de predicta ciuitate per quoddam strictum quod est quasi alueus fluuius. Quod quidem strictum fluxu maris impletur et refluxu euacuatur et ex hoc bis in die naturali. Per hunc ergo modum, mare Indicum est contiguum mari Rubro. Hoc mare Rubrum et Nilum fluuium qui in Egiptum currit paruum terre spatium diuidit, ita de mari Rubro in Egiptum breuis et facilis sit ingressus. Habita igitur ista dispositione preambula, quilibet potest aduertere quod premisi, scilicet quod India omnium malorum que supra posui materia sit, non casualiter nec occasionaliter sed ueraciter effectiue.

Omnia enim que in Egipto uenduntur, ut piper, zinziber et alie species, aurum et lapides pretiosi, sericum et panni illi pretiosi, tincti Indie coloribus, et omnia alia pretiosa (...), apportantur de India in Egiptum. William of Adam, How to Defeat (cf. n. 17), 96–100.

- 26 On the importance of Aden, see Roxani Eleni Margariti, *Aden & the Indian Ocean Trade.* 150 Years in the Life of a Medieval Arabian Port, Chapel Hill 2007.
- 27 William of Adam, How to Defeat (cf. n. 17), 28–30. See also Marino Sanudo, Liber secretorum fidelium crucis (cf. n. 23), 24f. See García Espada, Geographical Enlargement (cf. n. 13), 113; Vagnon, Géographie et Stratégies (cf. n. 2), 125–126.

as Sanudo observes, in his days the 'Persian' ports were barely ever called at. Instead, the bulk of the goods from India was brought to Aden and then carried on to Egypt where the Mamluk Sultan collected the tolls that made him rich.²⁸ To Sanudo the conclusion seemed a fairly obvious one: in order to harm the Sultan, the flow of trade must be diverted. He illustrated this by way of a metaphor: "For just as water naturally settles in valleys, so can trade be relocated where it is sought after."²⁹

Based on a detailed analysis of trade routes, the projected crusades resembled economic warfare. In fact, whereas William of Adam and Marino Sanudo looked as far as India, Fidentius and others proposed a naval blockade of Egypt in the Mediterranean in order to prevent any Christian from buying goods from Egypt.³⁰ The strategy seemed to be clear: the war against the Mamluks had to be fought on the sea.³¹ By blocking Egypt, Fidentius also hoped to divert the flow of trade through the *sinus Persicus* and then via the Christian kingdom of Armenia.³²

- 28 Marino Sanudo, Liber secretorum fidelium crucis (cf. n. 23), 22.
- 29 Nam sicut aqua naturaliter labitur ad valles, sic mercimonia transferuntur ad loca, vbi magis requiruntur. Marino Sanudo, Liber secretorum fidelium crucis (cf. n. 23), 23. English translation: idem, The Book of Secrets (cf. n. 23), 50.
- 30 Quintum bonum galearum supradictarum est quia Sarracenis de Egipto non solum perdent theoloneum quod percipiunt a Cristianis qui portant merces suas in Egiptum, sed ipsi perdent etiam emolumentum quod ipsi a mercatoribus que de India per mare Rubrum portant piper et alias species in Egiptum. Si enim mercatores cristiani non emant piper et alias species que portantur de India, non erit qui emat; et sic frustra labora[re]nt mercatores venientes de India. Et ideo opportet quod illa via de India in Egiptum cessare debeat, sicut cessare debet via Cristianorum ad terram Egipti. Fidence de Padoue, Liber recuperationis (cf. n. 15), 140–141.
- 31 Primo dicamus de exercitu Cristianorum qui debet pugnare contra Sarracenos per mare, circa quod sciendum est quod primo opportet quod faciat banniri, per omnes civitates Cristianorum que sunt site super mare er per omnes portus marinos, quod nullus Cristianus naviget vel vadat in Egiptum vel ad aliquas terras, loca vel portus subjacentes soldano Babilonis; et quod nullo modo vadant vel mittant ad Sarracenos qui subiciuntur dicto soldano pro aliqua mercatione exercanda vel facienda cum eis. Fidence de Padoue, Liber recuperationis (cf. n. 15), 138; similar William of Adam, How to Defeat (cf. n. 17), 26.
- 32 Respondeo tibi quod piper et alie species non solum portantur per sinum Arabicum, id est per mare Rubrum, sed portantur per sinum Persicum et etiam aliud; sicut modo species portantur et diffunduntur per partes aquilonares et deferuntur in Armeniam ab India et non ab Egipto. Fidence de Padoue, Liber recuperationis (cf. n. 15), 141. See also Foulques de Villaret et alii, Coment la Terre sainte puet estre recouvree par les Crestiens (1307–1308), in: Les Projets de Croisade. Géostratégie et Diplomatie européenne du XIV^e au XVII^e Siècle, ed. Jacques Paviot (Croisades tardives 1), Toulouse 2014, 221–233, here 231: Et les marcheans indois, quant il ne trouveront a qui vendre leurs marcheandises ne acheter ce

William of Adam had much the same idea, but he pointed out its problems as well, namely the difficulties in uniting Christian kingdoms under the pope and equipping a fleet of galleys big enough to block access to Egypt. In order to realise this plan, Fidentius proposed equipping around 50 galleys.³³ However, William had another suggestion: instead of trying to control the whole Mediterranean coast of Egypt,³⁴ it was easier and more effective to block the narrow Gulf of Aden by means of only three or four galleys,³⁵ "so that the goods from the shores of the Indies cannot come through the Gulf of Aden to Egypt, since if this gulf is closed, there would be no other place or approach by which the Egyptians could obtain the goods for which our men sail to Alexandria."³⁶

Aden was the key to William's plan because, as he noted, "the route from India to Egypt is by way of this island";³⁷ thus, blocking this route would divert the flow of trade. In the eyes of William of Adam and Marino Sanudo, this 'logic' of the interplay between waterbodies and lands seemed to function organically. Indeed, both writers used an organic metaphor to illustrate the complex situation:³⁸ for Sanudo, the Mamluk Sultanate was a tree, its trunk was Egypt (as the most important province), and its branches the other regions (Palestine, among others). Describing this image, he argued that it was useless to cut the branches off the tree (i.e. by attacking Palestine) or to attack the trunk directly as it was too big. The solution could only be to cut at its roots, the channel for its water and food—in this case, the "goods from India." William of Adam, by contrast, used the metaphor of a body to illustrate the geographical setting:

que leur est besoing, si lairont ce chemin et iront vers Baldac [Bagdad] et les espices revendront par le royaume d'Ermenie.

- 33 William of Adam, How to Defeat (cf. n. 17), 34-38.
- 34 This was a proposition that Marino Sanudo elaborated on, see Marino Sanudo, Liber secretorum fidelium crucis (cf. n. 23), 27–29.
- 35 Ad quod autem complendum unicus est modus et facilis, ut scilicet alique galee in mari Indico ponantur, que passum illum predicti gulfi de Eden diligenter custodiant et impediant, ne de cetero aliquis portans predictas merces de India in Egiptum perinde tute ualeant nauigare, et ad hoc explendum tres uel quatuor galee sufficiunt habundanter. William of Adam, How to Defeat (cf. n. 17), 102. For a description of the Gulf see ibid., 112.
- 36 Vnde igitur malum prouenit ibi contra morbum remedium apponatur. Quod erit, si uia ista posset aliqualiter impediri, ne scilicet iste merces de maritimis finibus Indiarum possent per gulfum predictum Eden in Egiptum descendere, quia, clauso hoc gulfo, aliud hostium nee locus patet nec aditus unde possint Egiptii hoc habere, propter que per nostros, ut predicitur, in Alexandriam nauigatur. William of Adam, How to Defeat (cf. n. 17), 100.
- 37 ... que quidem insula est in medio gulfi predicti de Eden, per quem gulfum et per quam insulam est transitus de India in Egiptum. William of Adam, How to Defeat (cf. n. 17), 104.
- 38 See García Espada, Geographical Enlargement (cf. n. 13), 121–122.

"For as food goes from the head through the throat, and from the throat into the stomach, and from the stomach to other parts of the body, so the aforesaid precious goods originate from the Indian sea, as from the head, and are spread through the Gulf of Aden, as by the throat, from there by the Red Sea to Egypt, as to the stomach, and then, as to the parts of the body, to the other parts of the world. If someone were to cut off the head, therefore, the whole stomach would consequently suffer from lack of food, and the other members would perish."

William of Adam focussed on waterways: using the imagery of the (human) body, he stressed the connectivity between the Indian Sea, the Gulf of Aden, and the Red Sea, which in his view represented an organic structure. Based on this structure, the 'flow' of trade seemed to mirror the currents of the waterbodies. For Sanudo, on the other hand, Egypt, imagined as the stomach, was the centre of interest: enclosed by deserts in the west as well as in the south, "the land of Egypt," he declared, "is almost inaccessible apart from the sea."

From the perspective of continental Europe, Palestine was not just geographically 'beyond the sea' but also literally called *outremer* or *ultra mare* by Christians.⁴² In contrast, Egypt was perceived as being located *entre mers* and its strategic and economic importance was based on this geographical position.

- 39 Marino Sanudo, Liber secretorum fidelium crucis (cf. n. 23), 40–41 and 45–47, quote on p. 45. English translation: idem, The Book of Secrets (cf. n. 23), 77–79 and 83–86, quote on p. 84.
- 40 Nam sicut cibus a capite in gutture et a gutture in stomachum et de stomacho ad ceteras partes corporis se transfundit, ita predicte merces preciose a mari Indico quasi a capite ortum habent, et per predictum gulfum Eden quasi per guttur, dehinc in Egiptum per mare Rubrum quasi in stomachum, et deinde quasi ad partes corporis, ad ceteras mundi prouincias disperguntur. Qui ergo caput prescinderet, totus stomachus ex defectu nutrimenti tabescens per consequens et membra cetera deperirent. William of Adam, How to Defeat (cf. n. 17), 100.
- 41 Terra Aegypti aliunde quam a mari pene inaccessibilis est. Marino Sanudo, Liber secretorum fidelium crucis (cf. n. 23), 261. English translation: idem, The Book of Secrets (cf. n. 23), 415.
- 42 See for example Brocardus, Directorium ad passagium faciendum, in: Recueil des historiens des Croisades. Documents arméniens, 2 vol., Paris 1869–1906, vol. 2, 367–517, here 367, 368, 369, 379, 404 et passim (oultremer), see ibid. 404, 504 (ultra mare). For the related phrasing ystoriis ultramarinis, designating crusade stories, see ibid. 397, 439 and 510. Indeed, the term was used in both ways: inhabitants of the Levant, like Fulcher of Chartres or William of Tyre, used the notion transmarinus quite naturally to designate the Christian kingdoms in Europe, thereby showing how much the crusader states depended on the arrival of new pilgrims from over the sea: O tempora recordatione dignissima! saepe quidem contristabamur, cum de transmarinis nostris amicis nullum auxilium habere poteramus. Fulcher of Chartres, Historia hierosolymitana, ed. Heinrich Hagenmeyer, Heidelberg 1913, 390 (II,6,11). Turci autem versipelles, cum per II menses opportunitatem vel

Indeed, the crusade treatises sometimes seemed to focus more on Egypt and on economic aims than on the primary aim of reconquering Jerusalem and Palestine. Marino Sanudo, addressing the pope directly, even declared that once the pontiff established himself in Egypt, "he may send his ships to the Indian Ocean to control that sea and subjugate the islands and the coastlands of those parts." In other words, once Egypt was conquered, the European gaze would turn its attention to the riches of India in the east rather than to the sacred sites in Palestine

Excursus: The Importance of Maps for Medieval Geopolitics

In his dedication to Philip V of France, Marino Sanudo declared that the way to become one of the most powerful rulers of the world was laid out "in the books and *mappae mundi* mentioned above." ⁴⁴ As previously pointed out, albeit briefly, Sanudo produced several dedication manuscripts of his book, which he then sent as gifts to European rulers in hope of garnering support for his crusade plans. These manuscripts were supplemented with an elaborate collection of (often five) maps drawn by the Genoese cartographer Pietro Vesconte, which included a world map, portolan charts of the (eastern) Mediterranean (and sometimes the Black Sea), and maps of Palestine, Antioch, and Jerusalem. Nine of these manuscripts still survive today. ⁴⁵

dissipandi vel superandi nostros exspectassent nec potuissent, quia de transmarinis partibus, ut mos est, venientibus peregrinis, eo tempore diatim exercitus noster crescebat nec gens Antiochena abibat, secesserunt in partes Damascenorum. Fulcher of Chartres, Historia hierosolymitana (cf. n. 42), 575 (II,51,2). Erat quippe nostrorum populus exiguus nec de partibus transmarinis tute poterant in Orientem accedere, timentes hostium urbes maritimas, que a dextra levaque erant plurime. William of Tyre, Chronicon. Historia rerum in partibus transmarinis gestarum, ed. Robert Huygens, vol. 1 (Corpus Christianorum, Continuatio mediaevalis, 63 and 63A), Turnhout 1986, 478f. (X,20). verum et de regionibus transmarinis, siqua sunt que Egyptus non habet, navigio omnis opulentia ministratur, unde amplius qualibet urbe maritima omnibus commoditatibus dicitur habundare. William of Tyre, Chronicon (cf. n. 42), vol. 2, 903 (XIX,27).

- 43 Eodemque respectu, postquam Sanctitas vestra ex terra Aegyptia suum velle affuerit assecuta, in mare Indiae, nauigium poterit intromiti, quod dominabitur illi mari, & illarum partium Insulas subiugabit, ac in terra firma terras maritimas existentes. Marino Sanudo, Liber secretorum fidelium crucis (cf. n. 23), 94. English translation: idem, The Book of Secrets (cf. n. 23), 154.
- 44 Et par ceste voye pourrez vous conquester la Terre Saincte, & les autres terres circostans à icelle; & le remenant du monde ne se pourra defendre contre vostre haulte Seigneurie: selon ce que vous pourrez veoir, par les liures & mappemondes dessus dictes. Marino Sanudo, Liber secretorum fidelium crucis, 5. English translation: idem, The Book of Secrets (cf. n. 23), 26.

From a technical point of view, they represent the state of the art of European map-making in the period. The portolan charts, for instance, reflect the excellent knowledge obtained by Venetian merchants and sailors, and the world map is the first to include a reference to the Chinese Empire (while omitting traditionally important places such as Paradise). Like a portolan chart, Pietro Vesconte's world map is structured by the characteristic rhumb lines; since they do not have any practical function on this map, they may have been intended to signal that the map was 'modern.' With the exception of the short statement in the letter of dedication, the text of the *Liber secretorum* does not refer at all to the maps. This may indicate that they were of no immediate practical use for the reader but had a mere persuasive function: in other words, they were meant to support the argument and enhance the persuasive power of the treatise.

Indeed, many rulers in the late thirteenth or early fourteenth centuries had already realised the (primarily military) importance of maps.⁴⁷ For instance, Louis IX of France is reported to have used a portolan on his crusade in 1270.⁴⁸ At the same time, Giles of Rome highlighted the utility of maps in his *Mirror of Princes* (*De regimine principum*, ca. 1280), commenting that any army needed a drawn representation of the land "just as the mariners have maps of the sea where first and foremost the names of ports are drawn."

- 45 Cf. n. 19. See also Gautier Dalché, Cartes (cf. n. 2), 84–87. Two exemplars can be viewed online: Vatican, Biblioteca Apostolica Vaticana, Pal. lat. 1362 A, URL: http://digi.ub.uni-heidelberg.de/diglit/bav_pal_lat_1362a (accessed 20 January 2018). Vatican, Biblioteca Apostolica Vaticana, Lat. 2972, URL: http://digi.vatlib.it/view/MSS_Vat.lat.2972 (accessed 20 January 2018).
- 46 Ingrid Baumgärtner, Weltbild und Empirie. Die Erweiterung des kartographischen Weltbilds durch die Asienreisen des späten Mittelalters, in: *Journal of Medieval History* 23 (1997), 227–253, here 234–236.
- 47 Picazo Muntaner, A Global Dream (cf. n. 1), 205–206.
- 48 Super quo navis principes coram rege evocati, de loco ubi tunc aderant interrogati, sub dubio responderunt. Dixerunt enim, quod credebant esse prope terram, et multum mirabantur, quod tam tarde suis aspectibus appareret. Unde allata mappa mundi, regi situm terrae portus Callarici, et vicinitatem propinqui littoris ostenderunt. William of Nangis, Gesta S. Ludovici, ed. Martin Bouqet (Recueil des Historiens des Gaules et de la France, 20), Paris 1840, 444. See Anna-Dorothee von den Brincken, Kartographische Quellen. Welt-, Seeund Regionalkarten (Typologie des sources du Moyen Âge occidental 51), Turnhout 1988, 40; Gautier Dalché, Cartes (cf. n. 2), 77–79.
- 49 Sic etiam marinarii faciunt, qui videntes maris pericula, ne eorum naves patiantur naufragium, descripserunt maris mappam ubi portus marini, discrimina maris et cetera talia proportionaliter sunt descripta, qui marinarii intuentes, statim percipiunt qualiter debeant pergere et in quo loco existant et a quibus debeant se cavere. Aegidius Romanus,

As far as we know today, portolan charts had been in use since the end of the thirteenth century. Most of them depicted the coastlines of the Mediterranean, a reflection of the vital importance of this sea for trade and communication from a European perspective. In comparison to traditional medieval (world) maps, portolan charts are indeed noteworthy: whereas *mappaemundi* focussed on the land and shrank most seas to narrow passages, portolan charts were primarily concerned with representing the sea. Even the names of the numerous ports were inscribed towards the land at right angles from the coastline in order to leave the waterbody clearly visible. From the viewpoint of sailors and seamen, many seas were connective, navigable, and controllable. In the words of the fifteenth-century Portuguese chronicler Gomes Eanes de Zurara, portolan charts were the means "by which man controls every sea that is navigable." Seas were perceived as spaces of transition, and portolan charts were not just a valuable tool for navigating them, they were also a symbol of controllable seafaring.

India as a Region Outremer

Although it was seldom disputed in the Middle Ages that the earth was a globe, the idea that waterbodies could connect rather than separate was not self-evident.⁵³ This was particularly true for the Ocean, which was seen traditionally as boundless and unnavigable.⁵⁴ The Ocean was envisaged as encompassing the

De Regimine Principum, ed. Hieronymus Samaritanius, Rome 1607, 584 (III.3.3.11); see Emmanuelle Vagnon, Géographie et Stratégies (cf. n. 2), 125–126.

- 50 The oldest surviving chart is the so-called Pisa chart from the end of the thirteenth century: Paris, Bibliothèque nationale de France, Cartes et Plans, Res G B1118, URL: http://expositions.bnf.fr/marine/grand/por_007.htm (accessed 20 January 2018). See Tony Campbell, Portolan Charts from the Late Thirteenth Century to 1500, in: *Cartography in Prehistoric, Ancient, and Medieval Europe and the Mediterranean*, ed. John Harley and David Woodward (The History of Cartography 1), Chicago 1987, 371–463. Von den Brincken, Kartographische Quellen (cf. n. 48), 38–42.
- 51 Le Goff, L'Occident médiéval (cf. n. 7), 271; Campbell, Portolan Charts (cf. n. 50), 377.
- 52 E por certo nom foe a elles [the ancestors of the seamen, CM] o seu conhecimento de pequena escuridom, quando o nom souberom asseentar nas cartas, porque se regem todollos mares, per onde gentes podem navegar. Gomes Eanes de Zurara, Crónica dos Feitos de Guiné, ed. António Dias Dinis, Lisbon 1949, 49. See Toby Lester, The Fourth Part of the World. An Astonishing Epic of Global Discovery, imperial Ambition, and the Birth of America, New York 2009, 185–186.
- 53 "The use of the oceans as highways of communication, rather than as insurmountable barriers, was one of the preconditions for such an achievement." Amélia Polónia,

known world (oecumene) and separating it from the rest of the earth.⁵⁵ As a consequence, medieval scholars were fully aware that the oecumene only constituted a part of the earth. Hundreds of so-called TO-maps depict this geographical idea of the known world, consisting of three continents, bound by the Ocean. Based on this geographical conception, India—the origin of many luxury goods—could only be reached via Egypt (or the Near East).⁵⁶ However, since the earth was understood to be a globe, it was possible, at least theoretically, to reach the eastern end of the oecumene by sailing westwards.

In fact, a tenth-century map preserved in a miscellany manuscript at the Stiftsbibliothek in Einsiedeln can be seen to depict this very idea.⁵⁷ In the upper part of the map there is a traditional TO-map containing the three known continents, Asia, Europa, and Africa, encompassed by the Ocean. A legend explains the etymology of the name *Asia* (according to Isidore of Seville);⁵⁸ and the names of the sons of Noah, Japheth, and Cham are added to the legends of *Europa* and *Africa*. Deviating from the more common layout used in such maps, a semi-circle is added below the map that serves to enlarge it towards the west. David Woodward interpreted this addition as a reference to the fourth continent (or southern hemisphere).⁵⁹ The inscription, however, indicates something

Jumping Frontiers, Crossing Barriers. Transfers between Oceans: A Case Study of the Portuguese Overseas Expansion, 1400–1800, in: *Oceans Connect. Reflections on Water Worlds across Time and Space*, ed. Rila Mukherjee, Delhi 2013, 121–142, here 121.

- 54 See for example, Patrick Gautier Dalché, Comment penser l'Océan? Modes de Connaissance des Fines orbis terrarum du Nord-Ouest (de l'Antiquité au XIII^e Siècle), in: *L'Europe et l'océan au Moyen Âge. Contribution à l'histoire de la navigation* (Société des Historiens Médiévistes de l'Enseignement Supérieur), Paris 1988, 217–233.
- 55 See for example, Isidore of Seville, Traité de la Nature, ed. Jacques Fontaine (Bibliothèque de l'École des Hautes Études Hispaniques 28), Bordeaux 1960, 307–308. (XL,3), Oceani autem magnitudo incomparabilis et intransmeabilis latitudo perhibetur. Quod etiam Clemens discipulus apostolorum uisus est indicare cum dicit: oceanus intransmeabilis est hominibus, et hii qui ultra eum sunt mundi. Philosophi autem auiunt quod post oceanum terra nulla sit, sed solo denseo aere nubium contineatur mare sicut et terra subterius.
- 56 On India and luxury goods, see Paul Freedman, Out of the East. Spices and the Medieval Imagination, New Haven 2008.
- 57 Einsiedeln, Stiftsbibliothek, Ms 263 (973), fol.182^r. The map is reproduced in David Woodward, Medieval Mappaemundi, in: *Cartography in Prehistoric, Ancient, and Medieval Europe and the Mediterranean*, ed. John Harley and David Woodward (The History of Cartography 1), Chicago 1987, 286–370, here 303. It can also be viewed online here: (URL: http://cartographic-images.net/Cartographic_Images/205.1_Examples_of_T-O_maps_files/droppedImage_4.png) (accessed 20 January 2018).
- 58 See Isidore of Seville, *Etymologiae sive origines libri XX*, ed. Wallace Martin Lindsay. 2 vol. (Scriptorum classicorum bibliotheca Oxoniensis), Oxford 1911, XIV.3, 2–3.

different: it refers (again based on Isidore) to India, to its etymology, and to the number of provinces.⁶⁰ Furthermore, a legend reading *Paradysus* can be seen in the top right of the semi-circle. The "map" depicts the eastern part of Asia rather than an unknown part of the globe.⁶¹ It is remarkable that the writer placed it in the far west of the oecumene rather than in the east. Was he suggesting that Paradise—from a European perspective—was located just across the insurmountable Ocean?

It took an unconventional thinker like Roger Bacon to overcome this mental barrier theoretically. In his *Opus maius*, written in 1267, he re-examined ancient sources, including Aristotle's *De caelo* (On the Heavens), which was only translated into Latin during the second half of the twelfth century.⁶² His reading led Bacon to a re-evaluation of the proportions of land and water and thus to the simple conclusion that the extent of the ocean between Spain in the east and India in the west was not insuperably vast.⁶³ Bacon illustrated this in a rough sketch representing the Atlantic Ocean and the two poles as larger circles (with west on top). The Atlantic Ocean thus appears as a rather small barrier between India (*principium indie*) and Spain (*principium hispanie*). This suggests that, at least theoretically, India could be reached by sailing westwards from Spain.⁶⁴ The fact that Bacon explicitly referred to Seneca, who stated that the Ocean was navigable, suggests that his argument centred on navigation.⁶⁵

- 59 Woodward, Medieval Mappaemundi (cf. n. 57), 302–303. On the notion of the fourth continent, see Anna-Dorothee von den Brincken, *Fines terrae. Die Enden der Erde und der vierte Kontinent auf mittelalterlichen Weltkarten* (Schriften der Monumenta Germaniae historica 36), Hanover 1992.
- 60 See Isidore of Seville, Etymologiae (cf. n. 58), XIV.b3, 5 and 8.
- 61 See Brigitte Englisch, *Die Entdeckung Amerikas aus dem Weltbild des Mittelalters* (Paderborner Universitätsreden, 81), Paderborn 2002, 48–50.
- 62 The treatise was translated by Gerald of Cremona (d. 1187), see Edward Grant, De caelo, Commentaries on Aristotle's, in: *Encyclopedia of Medieval Philosophy*, ed. Henrik Lagerlund, 2 vol., Heidelberg 2011, 247–251, here 248. On the idea of a passage over the Atlantic Ocean, see William G. L. Randles, La Navigabilité de l'Atlantique au Moyen Âge selon les Universitaires et selon les Marins, in: *L'Europe et l'Océan au Moyen Âge*, (cf. n. 54), 211–216. On Roger Bacon see Amanda Power, The Cosmographical Imagination of Roger Bacon, in: *Mapping Medieval Geographies. Geographical Encounters in the Latin West and beyond*, 300–1600, ed. Keith Lilley, Cambridge 2013, 83–99.
- 63 ...et extenditur inter finem Hispaniae et inter principium Indiae non magnae latitudinis, et vocatur Oceanus; ut principium Indiae possit esse multum ultra medietatem aequinoctialis circuli sub terra accedens valde ad finem Hispaniae. Roger Bacon, Opus maius, ed. John Henry Bridges. 2 vol., Oxford 1897, I, 292. See also ibid. I, 290: Dicit Aristoteles quod mare parvum est inter finem Hispaniae a parte occidentis et inter principium Indiae a parte orientis. Et Seneca libro quinto Naturalium dicit quod mare hoc est navigabile in paucissimis diebus, si ventus sit conveniens.

By contrast, in his *Image du monde* (ca. 1246) the French encyclopaedist Gautier of Metz still imagined the Ocean and seas as barriers. For instance, in order to explain the spherical shape of the earth, he wrote that if there were no water or other barriers, a man could circle the earth on foot, just as a fly can circle an apple.⁶⁶ Stating this, Gautier seemed to perceive the Ocean as an unnavigable barrier that could be crossed only hypothetically.⁶⁷ On the other hand, Bacon's sketch, by focussing on the waterbody as a navigable link between distant lands, was based on the same concept as the portolans; according to Bacon, India was located over the Ocean.

At the end of the thirteenth century, India was still the longed-for destination of Christian Europe. However, with the fall of Antioch in 1268, of Tripoli in 1289, and finally of Acre in 1291, the land route to India seemed increasingly impassable. Coincidentally, it was also in 1291 that the Genoese brothers Vandino and Ugolino Vivaldi equipped two ships for an expedition "which no one up to that time had ever attempted." Unfortunately, there are only a few sources that mention their enterprise. One of the most detailed of these is by

- 64 Lester, The Fourth Part (cf. n. 52), 100–109, the diagram of Bacon is printed on p. 106 (London, British Library, Royal MS 7 F.VII, fol. 44^r). See also Mauntel, Vom Ozean umfasst (cf. n. 11) with reproduction of the diagram on p 72, and Vincent H. Cassidy, *The Sea around them. The Atlantic Ocean, A. D.* 1250, Baton Rouge 1968, 156.
- 65 See n. 63.
- 66 Se tele chose peüst avenir qu'il n'eüst riens seur terre, ne yaue, ne autre chose qui destornast la voie quel part que l'en alast, l'en pourroit aller environ toute la terre, ou homme, ou beste, sus et jus, quel part qu'il voudroit, aussi comme une mouche iroit entour une pomme reonde. L'image du monde de maître Gossouin. Rédaction en prose, ed. Olivier H. Prior, Lausanne 1913, 93 (XI).
- 67 John Mandeville caught this up in his famous (but fictitious) travelogue, written in the third quarter of the fourteenth century; he declared that one can travel around the world, si homme troveroit passage des niefs. Jean de Mandeville, Le livre des merveilles du monde, ed. Christiane Deluz (Sources d'histoire médiévale 31), Paris 2000, 331–341 (XX), here 333.
- 68 Annali Genovesi di Caffaro e de' suoi Continuatori dal MCCLXXX al MCCLXXXXIII, ed. Cesare Imperiali di Sant'Angelo et al., 5 vol. (Fonti per la Storia d'Italia 11–14ª), Rom 1890–1929, 124 (V). I will cite the short note in full: Eodem quippe anno, Thedisius Aurie, Ugolinus de Viualdo, et eius frater cum quibusdam aliis civibus Ianue, ceperunt facere quoddam uiagium, quod aliquis usque nunc facere minime attemptauit. nam armauerunt optime duas galeas, et uictualibus aqua et aliis necessariis eis impositis, miserunt eas de mense madii de uersus strictum Septe, ut per mare occeanum irent ad partes Indie mercimonia utilia inde deferentes. in quibus iuerunt dicti duo fratres de Viualdo personaliter, et duo fratres Minores; quod quidem mirabile fuit non solum uidentibus sed etiam audientibus. et postquam locum qui dicitur Gozora transierunt, aliqua certa noua non habuimus de eis. Dominus autem eos custodiat, et sanos et incolumes reducat ad propria. (The text is also printed as Cafari et continuatorum. Annales Ianuenses a. 1099–1294, in MGH SS 18, ed.

the Genoese Jacopo Doria, who included a brief note on the brothers in his chronicle (finished c. 1294). According to Doria, the brothers equipped two galleys in May 1291 and sailed to Gibraltar "in order that the galleys might sail through the ocean sea to India and return with useful merchandise." Jacopo Doria goes on to explain that the brothers joined the expedition along with two Franciscan friars. There is no way of knowing if the latter were familiar with the writings of their fellow Franciscan Roger Bacon; however, the Franciscans' exceptional geographic knowledge and their eagerness to put this into use for the expansion of Christendom (a tendency hinted at by Patrick Gautier Dalché) makes it possible that the Franciscans on board the Vivaldi ships were not just missionaries but also experts on geography.

Jacopo Doria ends his short note with a mention that the ships reached a place called Gozora, after which nothing more was heard of the Vivaldi brothers. According to Georg Heinrich Pertz, the name *Gozora* can be found on some fourteenth-century portolans and is identified today as Cape Iuby in Morocco. Thus, the evidence suggests that the Vivaldi brothers attempted to reach India by circumnavigating Africa rather than by crossing the Atlantic Ocean. Indeed, some later fourteenth- or fifteenth-century sources allude to the direction taken by the Vivaldi expedition. Two of these, the so-called *Libro del Conoscimiento* (ca. 1350–1385) written by an anonymous Spanish friar, and the famous letter written by the Genoese voyager Antonio Usodimare (1455), describe meetings with people believed to be descendants of the Vivaldi in the region of modern-day Guinea or Senegal. As these sources are known for their partly fantastical content and unreliable geography, however, the accounts can only be taken with a very large grain of salt. Furthermore, it is

Georg Heinrich Pertz, Hanover 1843, 335.) See Georg Heinrich Pertz, Der älteste Versuch zur Entdeckung des Seewegs nach Ostindien im Jahre 1291, Berlin 1859, 9–10. On the expedition, see also Jill Moore, The Expedition of the Brothers Vivaldi. New Archival Evidence, in: Spain, Portugal and the Atlantic Frontier of Medieval Europe, ed. José-Juan López-Portillo (The Expansion of Latin Europe 1000–1500 8), Farnham 2013, 1–18; Francis M. Rogers, The Vivaldi Expedition, in: Annual Report of the Dante Society 73 (1955), 31–45; Richard Henry Major, The Life of Prince Henry of Portugal, Surnamed the Navigator, and its Results. Comprising the Discovery, within one Century, of Half the World, London 1868, 99–106; Marie Armand Pascal d'Avezac, L'Expédition génoise des frères Vivaldi à la découverte de la route maritime des Indes Orientales au XIII^{ee} siècle, Paris 1859.

- 69 Annali Genovesi di Caffaro e de' suoi Continuatori (cf. n. 68), 124 (V).
- 70 This was suggested by Jean Gimpel, *The Medieval Machine. The Industrial Revolution of the Middle Ages*, New York 1977, 196.
- 71 Gautier Dalché, Cartes (cf. n. 2).
- 72 N 27° 95, W 12° 91, see Pertz, Der älteste Versuch (cf. n. 68), 11–12.
- 73 See Rogers, The Vivaldi Expedition (cf. n. 68), 38–39.

worth noting that Antonio Usodimare's account seems to retell the story of the earlier *Libro*, surely a further indication that this source is not wholly reliable.⁷⁶

Nevertheless, the thirteenth-century aims of the Vivaldi brothers continued to be relevant ones for future travellers: as early as in the second half of the fifteenth century, the chronicler Gomes Eanes de Zurara praised Henry the Navigator († 1460) who "joined the East with the West" through his travels (or rather the travels he ordered). Vasco da Gama, who circumnavigated Africa in the service of the Portuguese king in order to reach India via the Ocean in 1479–1498, achieved what the Portuguese had been attempting for decades: all the spices and luxury goods commonly associated with the 'east' were finally accessible via the 'west'. 78

In spite of the Vivaldis' failure, Roger Bacon's idea of sailing westwards became very influential in the late Middle Ages. In the early fifteenth century, the French theologian Pierre d'Ailly enthusiastically built on Bacon's ideas in his *Imago mundi* (1410). According to Ailly, Asia was (because of the immense size of India) far bigger than commonly thought and extended further into the east. Based on this conviction, he argued that the waterbody between India in the east and Spain and Africa in the west must be smaller than was believed.⁷⁹ The Genoese navigator Christopher Columbus was a fervent reader of Pierre

- 74 Et dixeron me en esta çibdat de Grançiona que fueron y traidos los ginoveses que escaparon de la galea que se quebró en Amenuan, et de la otra galea que escape nunca sopieron qué se fizo. El Libro del conoscimiento de todos los reinos. The Book of Knowledge of All Kingdoms, ed. Nancy Marino (Medieval and Renaissance Texts and Studies 198), Tempe, AZ 1999, 60–62. The letter of A. Usodimare is printed in: Giacomo Gråberg (ed.), Annali di Geografia e di Statistica, 2 vol., Genoa 1802, 290–291 (II, no. 6). See also Pertz, Der älteste Versuch (cf. n. 68).
- 75 Nancy Marino, Introduction (cf. n. 74), XI-LVII.
- 76 Gråberg (ed.), Annali di Geografia e di Statistica (cf. n. 74), 290–291 (II, no. 6). See Pertz, Der älteste Versuch (cf. n. 68), 5–7.
- 77 Pollo qual conheço que as terras e os mares som cheos de teus louvores, ca tu per continuadas passagees fizeste ajuntar o levante com o poente, por que as gentes aprendessem a comudar as riquezas. Gomes Eanes de Zurara, Crónica (cf. n. 52), 39 (VI).
- 78 In a 1474 letter to Fernam Martins de Roriz, confessor of the Portuguese King, Alfonso V, the Florentine mathematician and cartographer Paolo dal Pozzo Toscanelli expressed the confusion this idea had already created: Et non miremini si voco occidentales partes vbi sunt aromata cum communiter dicantur orientales quia nauigantibus ad occidentem semper ille partes inueniuntur per subterraneas nauigaciones. Si enim per terram et per superiora itinera ad orientem senper [sic] Henry Vignaud, Toscanelli and Columbus. The Letter and Chart of Toscanelli. A Critical Study, London 1902, 296. On Toscanelli's map, India and China were supposedly located below the equator.
- 79 Dico igit[ur] q[uod] frons Indie meridianus pellitur ad tropicum Capricorni propter regionem Pathalis et terrarum vicinarum quas ambit brachiu[m] maris magnu[m] descen-

d'Ailly, and he underlined many passages concerning the sea route to India in his own copy of the *Imago mundi*.⁸⁰ Many scholars at the royal court disputed Columbus's views, and it took him years to convince the Spanish kings to support his ambitious plans.⁸¹ It was only in April 1492 that Ferdinand and Isabella finally furnished him with everything necessary to sail "over the ocean sea, to India," as was proclaimed in their charter of protection.⁸²

In 1500, the Spanish navigator and cartographer Juan de la Cosa drew up the first map to include the islands reached by Christopher Columbus on his first voyages. Indeed, as the captain of the *Santa María*, de la Cosa was an eyewitness to these events.⁸³ His map depicts the three known continents of Africa, Asia, and Europe as well as the newly "discovered" islands in the west, which he depicted as being partly surrounded by a huge land mass (coloured in green). Off the coast of modern-day Brazil an inscription identifies an Ysla descubierta por Portugal, presumably referring to the land found by Pedro Álvares Cabral in 1500.

In the far east of de la Cosa's map, the Asian land mass was not delimited by any waterbody on its eastern side, just as the green land mass had no dis-

dens a mari oceano q[u]o[d] est inter Indiam et Hyspaniam inferiorem seu Africa[m] de quo supra tactum est. Pierre d'Ailly, Ymago mundi. Texte latin et Traduction française des quatre Traités cosmographiques de d'Ailly et des Notes marginales de Christophe Colomb, ed. Edmond Buron. 3 vol., Paris 1930, 260–262 (I).

- 80 See Frauke Gewecke, *Christoph Kolumbus*. *Leben, Werk, Wirkung*, Frankfurt am Main 2006. The notes and remarks in Columbus's manuscript of Pierre d'Ailly are edited by Buron (cf. n. 79).
- 81 See William Randles, The Evaluation of Columbus' 'India' Project by Portuguese and Spanish Cosmographers in the Light of the Geographical Science of the Period, in: *Imago Mundi* 42 (1990), 50–64.
- 82 per maria oçeana ad partes Indie. Charter of protection, 17.04.1492, printed in: Antonia Rumeu de Armas, Nueva Luz sobre las Capitulaciones de Santa Fe de 1492 concertadas entre los Reyes Católicos y Cristobal Colon. Estudio institucional y diplomático, Madrid 1985, 94.
- 83 The map is preserved in the Museo Naval de Madrid. It can be viewed online: Map of Juan de la Cosa, URL: https://en.wikipedia.org/wiki/Map_of_Juan_de_la_Cosa (accessed 20 January 2018). See David Buisseret, Early European Cartography of the New World, in: La Cartografia europea tra primo Rinascimento e fine dell'Illuminismo. Atti del Convegno Internazionale "The Making of European Cartography" (Firenze, BNEF-EUI, 13–15 dicembre 2001), ed. Diogo Ramada Curto, Angelo Cattaneo and André Ferrand Almeida (Accademia toscana di Scienze e Lettere La Columbaria Studi 213). Florence 2003, 95–107, here 98. James Smith, Europe's Confused Transmutation. The Realignment of Moral Cartography in Juan de la Cosa's Mappa Mundi (1500), in: European Review of History 21 (2014), 799–816. Arthur Davies, The Date of Juan de la Cosa's World Map and Its Implications for American Discovery, in: The Geographical Journal 142 (1976), 111–116.

cernable end to the west. Since the cartographer had no information about whether or not there was a passage to the Indian Ocean west of the Caribbean islands, he covered this region with a large vignette of Saint Christopher.

With this map, Juan de la Cosa expanded the traditional focus of world maps further to the west. On traditional medieval *mappae mundi* a narrow Ocean belt surrounded the known world; but it is important to note that this does not necessarily mean that cartographers really conceived of the Ocean as a small belt girding the land, just that there was simply no need to extend its width on these maps.⁸⁴ All this changed with la Cosa's map, where a huge waterbody was depicted extending between the islands in the west and Europe — making the Atlantic Ocean a sea route to India, and thus India itself a region *outremer*.

Conclusion

Jacques Le Goff's belief in the geographic 'ignorance' of the 'medieval West' regarding the Indian Ocean must now be considered outdated. So On the basis of the evidence presented in this paper, one might even say that there was no region more in the sights of late medieval European merchants, travellers, and missionaries than India—and possibly also China. In both the cases presented here, India formed the centre and focal point of interest. In the eyes of European Christians, India and the Indian Ocean were both parts of complex and interrelated geographic settings with links that reached as far as Europe. The geographic ideas behind these concepts quite naturally entailed an awareness of the interplay between land and sea: on the one hand, many crusade treatises explicitly described the position of Egypt as a link between the Mediterranean and the Red Sea (or Indian Ocean). On the other hand, the Atlantic Ocean was seen, since at least the thirteenth century, as a sea route to India. At first this was only a theoretical notion, but after the voyages of Christopher Columbus it became a tangible one. Whereas Roger Bacon's work proposed a theoretical

⁸⁴ See Francesc Relaño, *The Shaping of Africa. Cosmographic Discourse and Cartographic Science in Late Medieval and Early Modern Europe*, Aldershot 2002, 117–18. Martin Lewis, Dividing the Ocean Sea, in: *Geographical Review* 89 (1999), 188–214, here 194–196.

⁸⁵ Cf. n. 7. See Picazo Muntaner, A Global Dream (cf. n. 1), 209.

⁸⁶ See Marianne O'Doherty, *The Indies and the Medieval West. Thought, Report, Imagination* (Medieval Voyaging 1), Turnhout 2013. Folker Reichert, *Begegnungen mit China. Die Entdeckung Ostasiens im Mittelalter* (Beiträge zur Geschichte und Quellenkunde des Mittelalters 15), Sigmaringen 1992.

crossing of the Atlantic Ocean to reach India, the first physical expeditions attempted instead to circumnavigate Africa. We can assume that this was due to traditional geographical conceptions, which saw the Ocean as an unnavigable barrier surrounding the known world; in this light, a voyage across it would have seemed far too hazardous an undertaking. The work of Roger Bacon and Pierre d'Ailly made this mental and nautical barrier seem increasingly surmountable, and it was eventually overcome by Christopher Columbus. After his travels, the Atlantic Ocean rapidly became a navigable passage connecting Europe and the lands thought to be parts of Asia.

Medieval scholars, geographers, or seamen were well aware of the connective function of oceans and seas. However, the sources explored in this article do not necessarily reflect on this geographical setting conceptually. The first reason for this is that in both cases the sources clearly focussed on an individual situation and not on geography in a more general sense. Second, the driving forces behind both sources were primarily economic ones (even in the case of the crusade treatises). From this perspective, practical analyses of specific trade routes and important ports were more useful than abstract reflections on land—sea relations.

Apart from theoretical reflections, the two case studies clearly show that in the later Middle Ages trade and geographical knowledge were deeply connected.⁸⁷ The crusade treatises of Marino Sanudo and William of Adam included quite precise information about trade routes and the origin and availability of goods in specific regions, mainly India. The quest for a sea route to India (either around Africa or across the Atlantic) was also driven by economic concerns. One might even argue that the focus on land and sea as interrelated spheres was of importance first and foremost within economic contexts. The excursus on the importance of maps partly supports this thesis: the development of the portolan maps in the late thirteenth century mirrors the period's economic perspective on interconnected sea- and landscapes, although the historiographical evidence shows that they were also of interest within a political milieu. To sum up, the two geographical settings comprised by the terms *entre mers* and *outremer* reflect the awareness of many late medieval authors and cartographers that land and sea were deeply intertwined spaces.

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